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Glossary

**Anerbenrecht**  The peasant law of entailment

**Fideikommiss**  *Fideicommissum* the aristocratic law of entailment

**Gesindeordnung**  Servants Ordinance, 1810, which regulated the relationship between estate-owners and their workers

**Gutsbezirk**  Independent estate district: a unit of local government in East Elbia based on an estate, on which jurisdiction was exercised by the estate owners (*Junker*)

**Heuerling**  Cottagers or small peasants available for agricultural work

**Einlieger**  Agricultural workers lodging in a peasant household

**Instismann**  A type of cotter: agricultural workers on East Elbian estates, living in their own households, and occasionally housed in barracks. Paid in money and fixed share of the harvest. Subject to the Servants Ordinance (*Gesindeordnung*)

**Mark**  The Mark community of peasants, centred on the common pasture (*Allmend*) waste and woodland

**(genossenschaft)**

**Sachsengängerei**  Migration of workers to Saxony for the sugar-beet harvest
Translator's Note

This edition is the first English translation of the complete 1899 Dietz Verlag edition of Die Agrarfrage, which was republished in 1966 with an introduction by Ernst Schraepler. Kautsky did not provide a bibliography of the works cited in the text: this has been remedied here; in just a few cases it has not been possible to ascertain publication dates.

A number of the tables in the German edition contained errors, some of which were due to typographical errors and some to errors of calculation. These have been amended where the original mistake could be traced.

I would like to thank Ben Fowkes for his constructive and critical observations on the draft translation.

Pete Burgess
London 1988
'Kautsky's book is the most important event in present-day economic literature since the third volume of *Capital*. Until now Marxism has lacked a systematic study of capitalism and agriculture. Kautsky has filled this gap.' Lenin could not have praised Kautsky's *The Agrarian Question* more highly, ranking it after the great work of the founder of Marxism himself. Kautsky's study appeared in 1899. At the time Lenin had himself just completed a study of the impact of capitalism on Russian agriculture which formed the first part of his book on *The Development of Capitalism in Russia*. In a postscript to it Lenin expressed regrets that he got Kautsky's book too late to make use of it to illuminate his own work. The dissimilarities as well as similarities of context and argument between these two major contributors to Marxist analyses of the impact of capital on agriculture and rural societies offer valuable insights into their respective analytical and political positions at the turn of the century. They also provide an important point of entry into the issue of and their bearing on similar issues today, notably in the 'developing' societies.

In view of the acclaim with which Kautsky's work on *The Agrarian Question* was greeted by his contemporaries, as well as the vigorous controversies that it sparked off, it is extraordinary to see how much the work has been neglected by twentieth-century theorists not only in the context of European rural history but also, and especially, in that of changes in the contemporary peasant societies of the Third World. Part of the reason for that neglect might lie simply in the fact that knowledge of the German language, which for much of the nineteenth century was an indispensable mark of scholarship in Europe, was soon displaced by English; and it is only now, after a staggering delay of 90 years, that this first English translation is at last being offered. Nor was *The Agrarian Question* available in other West European languages until quite recently, for the first Italian translation appeared only in 1959, a Spanish one in 1970, while the French edition of 1900 was quickly out of print, to be renewed only in 1970.

The main explanation for the neglect must lie, however, not in the linguistic barriers but in the general disenchantment with Marxism of
The Second International, a positivistic, deterministic and evolutionist Marxism which was epitomised in the work of Karl Kautsky. Much of this was reincarnated in the ideological forms of Stalin's Marxism, thereby surviving for much longer than might be inferred from the infrequency of later references to Kautsky. It has survived also as a stereotype of Marxism in the works of its opponents. But the actual writings of those progenitors of 'orthodox Marxism' were mostly relegated to oblivion by official spokesmen of the renewed Marxist orthodoxy of the Third International. As a US communist of long standing said to one of the writers of this introduction: 'It took me 40 years to discover that Karl and not Renegade was Kautsky's given first name.' In Germany, Kautsky's opposition to the Bolshevik revolution set the seal on his post-1914 status as an ideological pariah in the eyes of revolutionary Marxists. He was equally unacceptable to the SPD majority because of his refusal to go along with the policy of the leadership to give total support to the war and to exchange Marxism as he understood it for their own brand of postwar 'pragmatism'. His decision to leave Germany in 1924 was an admission of his growing isolation.

With the upsurge of Marxist scholarship in the 1960s and 1970s and the recent reconstruction of the history of German socialism, closer attention is now being given to the work and the role of Karl Kautsky. Much has been written about the Marxism of the Second International and what Lichtheim has called the conceptual 'drift towards positivism and scientism which accelerated after Marx's death and [was] formalised by Kautsky [as] a cast-iron system of "laws". We would accept such a critique of Kautsky's Marxism, but we do not therefore conclude that Kautsky's work is barren and should be discarded. Nor do we accept the somewhat naive attempts to re-legitimise the pre-1914 Kautsky by making a Leninist out of him. Kautsky's work on The Agrarian Question in particular does not fit such dismissive or subsuming categorisations. Much of Kautsky's analytical achievement is particular to him. Much of it is also relevant to contemporary analysis. Amongst the most interesting and theoretically fruitful aspects of his work are those that have to do with the transformation of peasant economies by capital. In order to see this work in perspective it may be helpful if we begin by identifying five principal points of analysis which characterise his study.

Peasants: Processes, Perspectives and Prescriptions

The first point concerns the impact of capital on the class differentiation of rural society. Kautsky's arguments in this connection are often
misread. Moreover, having started with certain preconceptions, Kautsky modifies his views quite radically in the course of the work, in the light of his findings as the analysis progresses.

Kautsky's initial presumption was that just as the tendency towards concentration and centralisation of production that is set in motion by the dynamics of capital accumulation eliminated petty commodity production in manufacturing, likewise, in the field of agriculture it would result in the dissolution of the peasantry and a polarisation of rural society into two classes: the rural proletariat and capitalist farmers. In so far as the rural censuses of Germany did not show progressive concentration of land in fewer hands, increasing levels of intensification of capital investment and wage labour in some forms could still lead to the emergence of capitalist enterprises in agriculture culminating in the demise of the peasantry (potentially so, at least, as Kautsky did not find sufficient evidence that this was happening either). Theoretically, the existing peasantry is subsumed under the residual category of petty commodity producers, destined to disappear under capitalism. As Kautsky proceeds with his analysis, however, he defines with increasing clarity the significant structural differences between the conditions of peasant production and petty commodity production in manufacturing, so that the assimilation of the peasantry becomes problematic.

This becomes clear by Chapter 7, where Kautsky's analysis nearly turns full circle. Having started with a presumption of a general tendency on the part of capitalist development to dissolve and eliminate the peasantry, he finds himself explaining the opposite, namely why such a tendency does not prevail; why the peasantry may even persist within the general framework of capitalism. At first he merely qualifies the operation of the presumed law of evolution. Later he points out (in the section of Chapter 7 entitled 'Statistical Data') that in Europe 'the small farm has not lost ground to the large since the 1850s. In fact, in terms of overall acreage, small farms seem to be growing in some areas.' He then considers, in the section entitled 'The Limited Nature of the Soil', factors that retard centralisation and concentration in agriculture where, he argues, they operate more slowly than in industry – the difference between the dissolution of petty commodity production and of the peasantry by capitalism is merely a matter of difference in the relative speed of the process. By the time Kautsky gets to the section on 'The Shortage of Labour Power', however, we find him pointing out the functional role of small farms as 'production sites' for labour-power needed by the capitalist large farms and industry. The growth in the number of large farms curtails the supply of rural

labour-power while, at the same time, increasing the demand for it. That contradiction limits the scope for wholesale displacement of small farms by large. Kautsky therefore concludes that 'This in itself is sufficient to ensure that despite its technical superiority, the large farm can never completely prevail in any given country. As long as the capitalist mode of production continues there is no more reason to expect the end of the large-scale agricultural enterprise than that of the small.' More than direct production for profit is at stake, however, for the peasant family farms are also ideal 'production sites' for army recruits - plentiful and conservative in their outlook (Chapter 8, first section: 'The Tendency Towards the Dismemberment of the Land'). Kautsky argues that there are built-in economic tendencies as well as sources of effective political pressure for state intervention, with the blessing of large landowners, which ensure the continued existence of small family farms. To see what that means one may best compare this to Lenin's unconditional statement in 1899 that

The old peasantry is not only differentiating, it is being completely dissolved, it is ceasing to exist, it is being ousted by absolutely new types of rural inhabitants. These types are the rural bourgeoisie (chiefly petty bourgeoisie) and the rural proletariat - a class of commodity-producers and a class of agricultural wage workers. 4

The thesis that the peasantry was inexorably being eliminated in the course of capitalist development was argued most strongly by the young Lenin in Development of Capitalism in Russia, where he not only predicted a necessary process of 'depeasantisation', but also defined rural Russia of the day (in 1899, or even by the late 1880s) as already having undergone this process. He was later to modify that evaluation in the light of the experience of the 1905 revolution, when he made a fresh assessment of the political role of the peasantry. To wit, 'the contemporary manorial economy of Russia is based on an enserfing rather than capitalist economy. Those who deny it cannot explain the current breadth and depth of revolutionary peasant movement in Russia.' 5 It is Lenin's early, unrevised 'model' of the 1890s which is often presented as his definitive view. But even his revised view of 1905–6 was still based on the 'classical' notion of the eventual and inevitable transformation of rural Russia through polarisation, a process akin in its totality to a force of nature and tempered only by Russia's economic backwardness. Kautsky's 1899 perception of the change in rural society as a consequence of the impact of capital and of progress is significantly different.

The next question posed by Kautsky's analysis, and a most relevant
contribution to the understanding of the world we live in, concerns his conceptualisation of peasant production as an integral part of capitalist economy and society. He begins with the recognition that peasant production, understood as one essentially based on the family farm and family labour, is not specific to any particular historically given mode of production. Peasants were the basis of 'archaic' societies organised communally, where each family farm was a primary unit of the organisation of economic activities, although some of these activities were organised on the basis of wider social units. Peasants, free or unfree, were also a part of feudal societies where a tribute in labour, kind or cash was extracted by the dominant class. With the development of capitalism the peasantry is incorporated as such into the capitalist mode of production and its structure and dynamics cannot be understood except in those terms. Kautsky's analysis of the interaction between the peasantry and the industrial and urban-centred capitalist economy can shed light on a variety of contemporary conditions which did not exist when his book was written.

We must begin by recognising the complexity of a subject in which partly contradictory tendencies coexist. We need to take account simultaneously of the particular nature of peasant production, based on the family farm, and of the broader context of the capitalist economic system within which it operates. Kautsky emphasises two peculiarities concerning peasant family farms within the framework of capitalism. One concerns the character of land as a non-reproducible means of production. He points out the peculiar difficulties and contradictions associated with the concentration of land in the process of capitalist development as against the capacity of peasants to hold on to it. The other aspect is that a significant part of peasant production that provides for subsistence is not valorised through the market; nor are many of the inputs. These features distinguish peasant production from petty commodity production in manufacturing, a further reason why peasant production may persist within the capitalist mode of production in a form that integrates it into the capitalist economy without its dissolution. The foundation is laid for an explanation of family farms as a particular category within the capitalist mode of production.

The third principal feature of Kautsky's analysis is the explanation of peasant farming in terms of over-exploitation of peasant labour-power: the lower-than-average price of labour-power that is realised in agriculture reinforces its functional significance for capitalism. For Kautsky, economies of scale and more advanced technology made large-scale agriculture necessarily more effective than peasant farming. But peasants survived all the same and even outbid
capitalists for the purchase of land, while tenants often produced more profit for the landlord than direct capitalist farming. In Kautsky's view this happens because peasants are ready to accept 'underconsumption' and 'excessive labour', underselling permanent wage workers, caught in what Lenin was later to refer to as the 'plunder of labour' of the peasants and which formed a part of Chayanov's concept of 'self-exploitation'. What it means for the 'national' political economy is a flow of extra surplus-value extracted from impoverished peasants unable to resist the forces that dominate them. The peasant sector of the capitalist political economy is therefore a source of continuous 'primitive accumulation'.

Kautsky's reply to those who celebrate the seemingly eternal nature of the peasantry, and use this against Marxist analytical predictions, was to insist on the historical nature of the peasantry. He refuted E. David's argument that larger units could not win against the small where more intensive agriculture is concerned. Kautsky responded to the mistaken view that small farms were necessarily more effective than large agricultural enterprises with an equally debatable assertion that to enlarge is to improve. The possibility of exploited yet highly productive and relatively prosperous family farmers in a capitalist world of mechanised enterprises was dismissed too lightly by Kautsky, for in his conception progress was unchallengeably related to size. Kautsky made the same assumption when he took issue with those who insisted that the survival of the peasantry was desirable. Family farming under capitalism was to him necessarily a poverty trap, surviving because it could contribute labour-power to large-scale farming and capitalist industry, and because the non-waged 'middle peasants' suffered more impoverishment, child labour, premature ageing and other disabilities than other exploited sections of the population. There could be little else to explain peasants' continuity as long as the economies of scale were held absolute.

The fourth aspect of Kautsky's writing is his work on the impact of capitalism on peasant agriculture during what he considered to be a period of 'run-up' towards the socialist revolution. By then the proletariat would be massive, superbly organised and fully conscious of its role, dominating the political scene in the revolutionary task of dismantling the whole system of class society. Industrial capitalism and large-scale agriculture would represent the prevalent forms of production. Peasants might have disappeared by that time but that did not have to happen prior to the socialist revolution. The end of the peasantry would come about as a result of technological progress rather than from the impact of capitalism as such or, indeed, of socialism. As to
the intermediate period Kautsky anticipated a political economy in which agriculture, and peasant agriculture in particular, would be increasingly overtaken by technologically advanced capitalist, or later socialist, industry. That is why the peasantry could be discounted economically as well as politically when the grand historiographic scenario of the future was being unfolded. The stagnant side-streams of the economy and in particular the peasantry must eventually be swept away by the mighty torrent of progress. To conclude, the possibility that the peasants might survive is conceded, explained and then politically and economically disregarded in so far as the dynamics of change are concerned. This brings us to the issue of SPD's agrarian programme.

The fifth and last major characteristic of Kautsky's work represents his political conclusions - a party strategy concerning peasants that he outlines in the second part of the work. In a sense, these conclusions contradict the sophisticated analysis of Part I of The Agrarian Question. They seem to follow, rather, from an over-generalised conception of the historical process in which 'progress' is inevitably defined by the 'forces of production' and by a mechanistic interpretation of the laws of capitalist development, by virtue of which industrial capital has innate supremacy and only the industrial proletariat was to play the revolutionary role dictated to it by the forces of history. This order and hierarchy are central to Kautsky's position when he declared that 'social development stands higher than the interest of the proletariat and of Social Democracy'. Progress comes before the proletariat and/or the party, let alone any of the other participants in the struggle for the realisation of socialism!

Kautsky deals with the agrarian policy of the SPD in Part II of his book, already certain that the peasantry as a class might not disappear even at the most advanced stages of capitalism, but he is nevertheless convinced that their significance for the socialist movement is either negligible or negative, for the peasantry (and even agriculture) are a conservative and not a progressive force. He sets out to lay the basis of a scientifically valid political strategy with the words: 'If there is any clear conclusion to be drawn from the developments in Part I, it is that industry will become the determining force in society as a whole; that agriculture will lose its significance relative to industry.' He qualifies this statement at once by saying that the SPD could not ignore agrarian issues. But he adds, in genuine bewilderment: 'It is a curious phenomenon that agriculture's political significance is in inverse proportion to its economic significance.'

By virtue of the fundamental process of social transformation the peasantry would not be eliminated. But it was being marginalised. The
main forces of the future were to be found in capitalist industry, against which peasants were an irrelevance, an anachronism. As to the coming class confrontation of capitalists with the proletariat, the peasants could prove to be a liability or even a potential danger, for peasants in uniform might be used against revolutionaries, as had happened in 1848. There are, however, 'two souls in the breast of the peasant': the peasant is not necessarily a class enemy of the proletariat. Peasants would express a petty bourgeois ambivalence in the face of a confrontation between the main classes of capitalism. Peasants were not wholly and necessarily hostile to socialists and a few of them might even join the SPD in anticipation of their own future proletarianisation. The political conclusion for socialists was to neutralise the peasantry rather than mobilise it. No active role could be assigned to it in the forthcoming socialist revolution.

Once again, a comparison with Lenin makes Kautsky stand out in marked contrast. There are parallels between their analyses of the process of capitalist development in relation to the peasantry, but their respective conceptions of the revolutionary potential of the peasantry are very different. Following the 1902 peasant rebellion in the Ukraine, and especially the 1905–7 revolution, both Kautsky and Lenin accepted the revolutionary elan of the Russian peasants, rejected before by the 'orthodox' Marxists. Both explained it by the backward state of the Russian economy, in which a pre-capitalist class was engaging in a pre-socialist revolution. This similarity of assumptions and consequent strategy disappeared fully in the face of the Russian civil war which was to Lenin, at least since 1919, a socialist revolution supported and dependent on the peasant majority, while to Kautsky it was an aberration explained in part by the peasantry's conservative nature. Even the similarities did not preclude major differences of opinion signalled by the different accentuation of revolutionary strategy and political will. The lessons of the 1905–7 revolution made the political mobilisation of peasants, on the side of the socialists, Lenin's main concern.9

Let us recapitulate. Kautsky's study was accepted at the turn of the century by the orthodox Marxists of the Second International as the most authoritative extension of Das Kapital itself to the analysis of the peasantry – a majority of mankind and even of the Europeans of the day. For reasons that have little to do with the book's virtues or limitations, Kautsky's work was nevertheless forgotten within barely a decade. At most, its existence has been acknowledged at second hand and often not very reliably by those who have not read the original.10 Kautsky's analysis is premised on the decisive nature, but also the contradictory
impact and effects, of capitalist penetration into peasant agriculture. Other major elements of his analysis involve the conditionality of rural class differentiation (with a variety of possible outcomes); a structural explanation of the particularity of the peasant economy under capitalism which stresses over-exploitation and the functionality of the peasant economy for capital; a prognosis of the eventual de-peasantisation as a result of technological progress rather than transformation of the social relations of production; and finally, a political strategy by socialists to neutralise the peasantry rather than mobilise them in the battle for power. Before relating Kautsky's contribution to the understanding of the world he lived in, and that we ourselves confront, let us look at the man and his immediate and most significant political environment - the Social Democratic Workers Party of Germany, the SPD.

A Man and a Party: Theory versus Politics

Karl Kautsky was born in 1854 in Prague in a comfortable professional middle-class family which soon moved to Vienna. At Vienna University Karl studied history, economics and philosophy. He was the son of a Czech father and a German mother and for a while he moved in Czech nationalist circles. In 1875 he joined the Austrian Social Democratic Party which had been founded the year before. His biographer, Steenson, comments that

Kautsky's role in the Austrian Party was a model for all his later participation in the German and international socialist movements. He took no part in administration or organisation, either of the party or the trade unions; he neither held nor ran for public or party offices; he was exclusively a propagandist, teacher and very occasional speaker. Though he frequently attended meetings of the party leadership ... he very rarely contributed ...

The ideas of young Kautsky were influenced first by the romantic radicalism then prevailing among Czech nationalists. The heroic but tragic fate of the Paris Commune encouraged his interest in socialism and in the aspirations of the working class. That interest was fed by the ideas of Ferdinand Lassalle and French socialists, notably Louis Blanc. His encounter with Marxism was brief at this stage. Kautsky was soon to come under the spell of positivist thought with its overwhelming acceptance of the models and methods of natural sciences - a dominating force in the intellectual climate of the late nineteenth century. Darwin
was another major influence. As Colletti notes, 'only a slight knowledge of his [Kautsky's] work is sufficient to see that Marxism always appears in it as an extension of Darwinism; both are then seen as two particular moments of the genus "evolution"'. Kautsky did not deny the evolutionist cast of his thought or his fascination with Darwin. During the first years of *Neue Zeit*, the authoritative theoretical journal of the German Social Democrats edited by Kautsky, much space was devoted to Darwin's relevance to social evolution. 'Marx and Darwin were to be the twin pillars on which the *Neue Zeit* rested, and Kautsky obviously saw the two as a natural pair.'

In 1880, at the age of 26, Kautsky moved to Zurich. He was to work closely with Eduard Bernstein. He also embarked on a systematic study of Marxism. In 1881 he visited London briefly, hoping to study under the direct guidance of Marx and Engels. He saw little of Marx, who clearly did not take to what he described as the young man's 'pedantry'. Kautsky returned to London in 1885, by which time Marx was dead, and established a lasting intellectual and personal relationship with Engels. Kautsky was soon to acquire a reputation as a major Marxist theoretician in his own right. After Engels' death in 1895 Kautsky took over the task of editing Marx's literary estate, a high point in his literary career. In fact he had already done some work on it, for in 1889 Engels had entrusted him with the work of editing Marx's *Theories of Surplus Value*, the projected fourth volume of *Capital*. Kautsky's authorship of the theoretical section of the new programme of the SPD, the 1891 Erfurt Programme (its tactics and programmatic section were written by Bebel and Bernstein), set the seal on his status as the principal theoretician of the party.

It was as the editor of the influential *Neue Zeit* that Kautsky established himself as the arbiter of Marxist orthodoxy. He edited it from its inception in 1883 until 1917, when he was removed from the position. The journal dominated Marxist theoretical debate of the period throughout Europe. Apart from the editorial privilege, which gave him the power to pick and choose contributors, Kautsky was himself a prolific and erudite writer and his works covered a wide range of themes.

Before the First World War Kautsky was not only the main theoretician of his party (and of the Second International, set up in 1879) but represented a specific tendency there. From the start there was evidence of a rift between the radical wing of the SPD, led by the towering and charismatic figure of Bebel, and an opposing faction whom Kautsky was to describe as upholders of 'petit bourgeois socialism'. He spearheaded the theoretical attack against them. Kautsky's ability to theorise was
a particular asset to the SPD leader Bebel, legitimising the latter's political and tactical position. At the same time Kautsky, with little knowledge of organisational questions, depended heavily on Bebel for his bearings on practical political matters and was happy to be guided by him. Kautsky's biographer concluded that:

the two men co-operated out of shared interests and conviction, but they worked on different levels. What influence Kautsky did have usually came from his usefulness to SPD policy makers, especially August Bebel [who] frequently used Kautsky's writings to bludgeon party opponents. But the relationship between Kautsky's theory and Bebel's practice was neither crude nor exploitative; Kautsky was rarely if ever manipulated by Bebel.15

It would be difficult to understand fully the role and importance of Kautsky, and his disorientation after the death of Bebel in 1913, without understanding this relationship.

August Bebel, the practical politician and the SPD's undisputed leader, came from a very different background.16 He was born poor and was orphaned at the age of four. His early life was a constant struggle for survival; his education was perfunctory. He found employment as a turner, and experienced for himself the exploitation and persecution of journeymen as he moved from city to city. He finally came to Leipzig, where his political genius was to have full play. Within five years he had become the main figure in the Saxon workers' movement. Together with Wilhelm Liebknecht he led the Eisenacher Social Democrats, who united in 1875 with the ADAV initiated by Lassalle to establish the SPO. With Lassalle dead the Eisenacharian tendency, which considered itself the Marxist and more radical wing of the SPD, came to dominate the party high command. Bebel's leadership of the SPD was linked to his leadership of the Eisenacharians and later of the 'orthodox' majority faction which supported to the full an undiluted version of the Marxist party programme – the Erfurt Programme accepted in 1891. But Bebel was not a theoretician. Installing Kautsky as editor of Neue Zeit suited him admirably.

The SPD's internal ideological battles focused then on the issue of 'Revolution or Reform'. Until 1914 the political position taken by the majority of the party members and functionaries was one of non-collaboration with the government, limited only to participation in parliamentary life and refusal to enter any political coalitions, in anticipation of the impending proletarian revolution that would be secured by the inevitable growth of the working class and its socialist
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consciousness. That position was rooted in an apocalyptic vision of the working of inexorable social laws, presumed to have been defined by Karl Marx. The party minority which challenged this 'general line' was a diverse group representing a variety of political stances, assumptions and goals: trade union functionaries keen on 'pragmatism', party officials who saw themselves as 'practical' men, Southern German SPD parliamentarians concerned above all with winning elections, and some theorists who wanted to use 'new economic findings' to revise their party's programmatic assumptions. Contemporary historians have argued extensively about the reasons for the SPD majority's Marxist revolutionary self-image and the abandonment of it in 1914–19.17 In particular they point to the impact of the heroic and exclusivist subculture established by the clandestine party organisation during the period of the Anti-Socialist Law, 1878–90, as well as the political context of the authoritarian and repressive state and what they describe as the consequent 'absence of opportunity for reformism'.18 These are ex post factum explanations. In the period discussed, the debate about reformism was a matter of deadly seriousness for the participants because for them it concerned issues that would decide the prospects of the realisation of socialism, which was expected in their own lifetime. This gave a keen edge to internal party debates about the reformist or revolutionary paths to socialism, although as yet the party was united by a common goal.

These ideological tensions came to a head when the reformist factions of the SPD found an articulate theoretical expression in the works of Eduard Bernstein – a leading SPD figure who had been befriended by Engels, Bebel and Kautsky. Bernstein's call for 'Evolutionary Socialism' provided rationalisation and legitimation for the political positions of the reformist wing. His views came to define the core of revisionism – a call for the revision of some of Marx's basic assumptions and of the 'orthodox' Erfurt Programme of the SPD.

Bernstein repudiated historical materialism as a mechanistic philosophy, a criticism which, given the form in which it was presented by Kautsky, was not far off the mark. But unlike the theoretical critiques and political practice of later critics of Kautsky's version of Marxism on the left of the SPD, such as Rosa Luxemburg, Parvus or Karl Liebknecht, Bernstein did not move towards a philosophy of purposive organised action of the working class and its revolutionary intervention to transform society. He argued rather that capitalism had changed by virtue of the spread of share ownership of corporate capital in this he prefigured later arguments about separation of ownership and control and the emergence of a
post-capitalist society. The working class itself, Bernstein argued, was
coming stratified - society could no longer be seen as divided into two
antagonistic classes. Capitalist development did not entail its necessary
collapse. Parliamentary democracy, on the other hand, could go a long
way towards improving the conditions of workers within the framework
of capitalism, through trade union struggle.

The trade unions are the democratic element in industry. Their
tendency is to destroy the absolutism of capital and to procure for the
worker a direct influence in the management of an industry
Democracy is in principle the supersession of class government, though
it is not yet the actual supersession of classes.\(^{19}\)

While socialism still remained the declared goal, gradualism was
Bernstein's slogan, proclaiming that: 'movement is all, the final goal
nothing.' In retrospect it is clear that Bernstein had made explicit what
was already the dominant practice in the SPD, notwithstanding the
verbal rhetoric about commitment to proletarian revolution. In the eyes
of some SPD leaders, Bernstein's sin lay in making explicit what they
would much rather have left unsaid. A letter from the SPD party
secretary Ignaz Auer to Bernstein made just that point: 'My dear Eddy,
that is something which one does, but does not say.'

Kautsky seemed reluctant to take up the cudgels against Bernstein.
(Bebel wrote to him angrily: 'What sort of devil is riding you that you
make so many concessions to Ede [Bernstein]? You really spit in my soup ... ')
With Bebel at his back Kautsky eventually published a more biting
critique entitled 'Bernstein and the Social Democratic Programme: An
Anti-Critic'. Kautsky argued that the course of capitalist development
had not superseded in any substantive way the predictions of Marxist
analysis. The growth of joint stock capital was not its diffusion but,
rather, its in-gathering under more concentrated control. Some
immediate gains by the proletariat were due to its growing organised
power. That did not make the ultimate goal of socialism any less
relevant. Bernstein's proposals would undermine the political struggle
of the proletariat by its transformation from a party of revolution into a
reformist party which would put into jeopardy even those gains that the
proletariat had achieved. Kautsky then proceeded to explain the rise
of Revisionism itself as an example of a 'renaissance of bourgeois
radicalism'. Given Kautsky's cast of mind, it is no surprise that he
considered Bernstein's position to be an 'historically necessary
manifestation' for German capitalist society at that particular stage of
its development.
As to political strategy, for many in the SPD the state was a 'national' agency capable of rising above conflicts of class and class interests. Vollmar, who led the powerful Bavarian section of the SPD, was particularly attracted by the paternalism of Bismarck's 'state socialism', a view which mirrored that of Lassalle. His 1891 'Eldorado speeches' were a clear affirmation of reformism, rightly described later as an 'apologia for a predominantly legalist, collaborationist, political tactic'.

The majority in the SPD, however, rejected conceptions of a paternalist state and were opposed to class collaboration and the concepts of 'national unity'. As to the road to socialism, Kautsky, speaking for them, characterised their party as 'revolutionary but not revolution making', emphasising the objective conditions of the inexorable march of history that would transform society and the state and dismissing conscious and forceful intervention in the revolutionary process by an organised proletariat as 'putschist'.

The Russian Revolution of 1905–7 had a considerable radicalising impact in Germany and elsewhere. Kautsky supported it and took a position closer to Lenin's than those of his less radical comrades inside Russian Social Democracy. In Germany and the rest of Europe a wave of strikes broke out. That gave rise to a debate about the use of the general strike as a political weapon of the working class. This debate gave focus to a new internal challenge to the official positions of the SPD leadership from the left. This issue was to outweigh earlier debates about Revisionism in its practical political significance and long-term implications for the SPD and the European socialist movement. It entailed new alignments, a cleavage between those who were exclusively parliamentarian and the radicals like Rosa Luxemburg and Karl Liebknecht who supported direct action and the mass strike, anticipating the struggle between the Second and the Third International in the post-1917 era. In that division the trade union hierarchy was firmly on the side of exclusively parliamentary struggle and against political strikes; they even sought to ban discussion of the issue. Kautsky was ambivalent, the beginning of what was later described as his 'centrism'. On the one hand he criticised 'parliamentary cretinism' and acknowledged, in principle, the weapon of mass strike. But he hedged it in with conditions that virtually ruled it out. About Kautsky's *Road to Power*, written in 1909, Lenin was to comment that Kautsky's pamphlet, devoted to an analysis of political revolution, good as it was in sharp rejection of gradualism, evaded the question of state power. This was so, and remained a major weakness in Kautsky's political analysis. Kautsky was ambivalent on the colonial
question, likewise, for he declared that the rising colonial struggles, while weakening capitalism, were themselves necessarily bourgeois, attempting only to substitute external capitalism with national capitalism, and hostile to workers and socialists. He therefore called for an unreservedly critical attitude to 'non-European enemies' of European capitalism. 21

The First World War marked a watershed in Kautsky's career and brought to an end his influential role as the grand theoretician of European Marxism. There was a rapid polarisation of forces in the political arena in which Kautsky's assumption of a 'centrist' position marginalised him. His friend and guide, Bebel, had died in 1913. (On Bebel's death Kautsky wrote to Adler 'The feeling depresses me not a little that I must now employ in practical politics without being able to follow a leader.') After supporting the 1914 Reichstag vote for military budgets out of party loyalty, in 1915 Kautsky participated in the international socialist conference in Zimmerwald, in Switzerland, which challenged the SPD leadership, where he voted for the 'centrist' resolution which called for a peace without annexations. (It was opposed there by Lenin and his allies, who called for the transformation of the World War into a revolutionary civil war.) As time progressed the political inadequacies of Kautsky came to play an increasing role. His biographer summed it up thus:

Without Bebel Kautsky felt uncertain and he regretted his own confusion at the outbreak of the war ... In retrospect Kautsky lost the basis for his historical importance on 4 August 1914 ... The war and the rise of the Bolsheviks changed the main thrust of Marxism in such a way that Kautsky became a peripheral figure, at first viciously attacked and subjected to ridicule and scorn but finally merely rejected. 22

Central to Kautsky's reaction to the October Revolution in Russia was his outrage at the unscientific character of Bolshevism. Russia's lack of economic development did not permit the direct transition to socialism, but in April 1917 the Bolsheviks had proclaimed just that to be their aim. The savagery of the Russian civil war 1918–21 and the Soviet authorities' repression of many of Kautsky's political friends infuriated him. So did Lenin's personal attack on Kautsky, which did everything possible to demolish the prestige of the erstwhile 'pope' of pre-war Marxism, who now opposed the European revolution which was thought to be indispensable for the survival and success of the Bolshevik revolution. For Kautsky, the socialist revolution was premature, a
putschist act of a revolutionary sect which imposed itself on the masses, including the proletariat, a revolution out of turn. For him it was a new version of the Asiatic despotism as against those European socialists and Marxists who represented civilisation at its most advanced stage. Bolshevik rule, he was convinced, must collapse and lead to a bonapartist military dictatorship of the right. Faced with it the European working class must recover from its nationalist fever and regain its centrality in the struggle for progress and a socialist future. In his twilight years, in the 1920s and 1930s, he stayed consistent to this outlook, as political events increasingly passed him by.

The Agrarian Question

Kautsky's dependence on Bebel for guidance through the minefield of German politics from the 1890s to 1913 did not mean that he followed Bebel's dictates slavishly and it was on the 'agrarian problem' that they had their most celebrated clash. In 1894 the SPD congress decided to consider its position vis-à-vis the peasantry. Suggestions for an agrarian programme came up before the party's congress at Breslau in 1895. There Kautsky led the forces which attacked the recommendations. Engels supported Kautsky by contributing an article in which he argued that the SPD should not engage in promises to smallholders who 'like every other survival of a past mode of production [are] hopelessly doomed'. The antagonists in this particular confrontation did not follow the usual pattern of factional divisions in the party. Kautsky's supporters consisted of many on the party's left wing, together with some followers of Lassalle and many trade union bosses from the SPD's right wing, who were united in opposing any attempt 'to dilute' the party's proletarian character by 'pandering to peasants'. (It was Lassalle who first described all social classes other than the proletariat as 'one reactionary mass' and suggested that his party membership must be restricted to wage-workers only.) On the other hand Bebel argued against Kautsky's stand on the issue and found himself and some of his closest allies, especially Wilhelm Liebknecht, aligned with many of the SPD reformists, led by Vollmar. The political goals of the supporters of an agrarian programme for the SPD differed. Vollmar's position was influenced by his wish to increase electoral support in regions like Bavaria, his own region, while his conception of the way in which the problems of the peasantry were to be tackled was limited to what a benevolent state might do for them. Bebel viewed the proposal to mobilise the peasantry as part of his 'orthodox and revolutionary' strategy.
As to the theoretical debate a specific set of assumptions concerning the fundamental stability of smallholders' farming was injected into the Revisionist position by the agrarian analysis of E. David and a few others like F. Hertz and used against the supporters of the Erfurt Programme to prove the incompleteness of Marx's analysis. At the centre of David's argument was a systematic exposition of what he considered to be the particular conditions of agricultural production, which were determined by nature and therefore not amenable to change, in contrast to the conditions of manufacturing. In his view, intensive family farms would eventually win out in competition against large agricultural enterprises. The evidence of the 1895 rural census indicating the stability and even the advance of smallholders was presented as an immutable economic law.25

At the SPD Congress of 1895 at Breslau, Kautsky's view prevailed. The agrarian programme was rejected by a two-thirds majority. This was one of the rare cases when Bebel found himself outvoted on the party platform. (In a letter to Adler written in October 1895 he was to comment that his opponents had 'thrown out what should never have been thrown out sealed the path for years will make the worst possible impression in the countryside.' He added 'The worst thing, however, was the motivation ... which ... amounted to a dismissal of all demands which would benefit peasants, even those which would not cost us anything.') The Congress decided to ask party analysts for a full study of this question before any steps were considered. Kautsky took this call seriously; his researches culminated in 1899 in the present work. But as Bebel understood only too well, for the majority of party leaders the call 'to study' was simply a device to bury the issue.

Kautsky's initial view of the 'agrarian question' was a simple deduction from the position that had already been taken in his exposition of the SPD programme, his best-known and most translated work: *The Class Struggle: The Erfurt Programme*. That pamphlet was intended to provide a systematic presentation of Marxist revolutionary theory, as Kautsky understood it, and as the SPD majority accepted it, i.e. what was defined as 'orthodox Marxism'. Kautsky expounded a model of capitalist development, beginning with the dissolution of petty commodity production, polarisation of society into two main classes, the proletariat and the capitalists, and the sharpening of class struggle. The proletariat was to liberate not only itself but all of humanity. The absence of any specific reference to the peasant question was remarkable, although it was already a contentious issue in the SPD. It was dealt with only indirectly, and dismissed in the few paragraphs dealing with petty commodity production in general, which was
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destined (with the peasants among the petty bourgeoisie) to disappear in the wake of capitalist development. 26 Kautsky did not then recognise any structural differences between peasant production and other kinds of petty commodity production, as he was to do later.

Kautsky's views on the subject were soon to alter considerably and he was explicit as to what caused this change: 'On one major point we must change our outlook. The peasant does not disappear as rapidly as we expected. During the last decades he only very slowly lost his position, if at all.' 27 The evidence of the rural censuses was clearly taken on board. Consequently at the 1895 Congress Kautsky recognised the particularities of agricultural development under capitalism. This he was to explore at length in The Agrarian Question. Yet, while his analysis advanced and his view of the impact of capital on the peasantry was transformed, no new political conclusions were drawn. Kautsky insisted that as the party of the proletariat the SPD would not be true to itself if it offered a particular political programme for the peasants. He seemed to have moved further in this direction by declaring in 1909 that by then the [Lassallean] 'concept of a single "reactionary mass" had become a reality', and that the peasantry as well as the other petty bourgeois allies had 'turned into [the] most violent enemies' of the proletariat. 28 The proletariat and the SPD could rely only on themselves – a fully-fledged conception of proletarian exclusivity in revolutionary struggle. 29

It is against this background, conceptual, historical and biographical, that we may attempt to evaluate Kautsky's contribution to the 'agrarian question' in the light of subsequent knowledge of the arguments raised and the problems encountered or remaining unresolved in our own time. Within the confines of a preface we shall limit our comments to two main issues concerning German peasants at the turn of the century and Marxist analyses of smallholders' agriculture under contemporary capitalism.

German Peasants and the Socialist Movement

The widely-held stereotype of the German peasantry at the time was that it was impervious to radical appeals, inherently passive and socially conservative, that it constituted a solid and unshakeable base for the traditional social order that was dominated in Prussia by the Junkers. The Junkers as a class, who as cereal producers were threatened economically by cheap grain imports, especially from the New World, responded to the loss of their economic power by organising politically to dominate the state. They used their command over state power to
secure economic and fiscal concessions and privileges, among them higher grain tariffs on imports. To achieve that, it was believed, they naturally harnessed the resentments of the peasantry against those liberals and socialists who threatened their economic position by advocacy of free trade, large-scale production and statist solutions, compounded by the socialist threat of 'abolishment of all property'. A corresponding component of that consensual view was the deeply held belief in the SPD that the only issue for the peasantry was their attachment to property and that this would turn out to be a principal obstacle to socialism if the peasantry acquired an influential position in the party. It is a reflection on the SPD leadership and a mark of its isolation from the peasantry that they were unable to recognise what was happening at the time, for the decades of the 1880s and 1890s were a period of great ferment, releasing new forces in German rural society which the party failed to harness or even perceive.

In recent years important new work by German historians has demolished old myths about a passive and immobile Junker-dominated and deferential German peasantry. The new historians, their vision enriched by sociological insights, have shifted their focus from the grand council chambers of Berlin and the big cities to the actual ground on which the peasant stood. In doing so they have revealed and analysed a whole new world of peasant militancy in Germany in the closing decades of the nineteenth century. At the economic level they have pointed out that the issue of grain tariffs was by no means the only important one, for the area of large cereal-producing estates was in the North East. For small peasants who predominated in other parts of the country, especially in the South and the West, the main sources of discontent were different. This is too large a topic to summarise here, except to point out that the landlord-centred reading of the situation that has generally prevailed is misleading in any attempt to grasp the agrarian problem. What is central to our present purposes is the picture that we now have of forceful expressions of grievance on the part of peasants that arose out of the transformation of the German peasant economy in the second half of the nineteenth century. Kautsky analysed these economic changes but failed to see their political consequences.

With the incorporation of the peasant economy within the capitalist system, it was firmly locked into a market economy and the peasants found themselves in the grip of new and unfamiliar forces over which they felt they had no direct control, and which they often felt were more relentless than capricious nature and the oppressive landlords with whom they had coped over the millennia. Depressed and unpredictable prices, rising costs, higher taxes and mounting burdens of
debt were all new threats or, at any rate, threats that they had not encountered before on such a scale. That produced within the peasantry a new demonology and a rash of independent peasant movements, small and large. Without any leadership to articulate such grievances as a matter of prime concern of the socialist movement, peasant unrest took on a variety of nationalist and reactionary forms, such as an anti-semitism that made the Jew a symbol of the anti-peasant establishment, alongside the official, the banker, the lawyer and even the traditional notables together with the highly suspect urban political leadership and intellectuals. The Bavarian Peasant League, for example, fought the 1893 elections on the slogan of 'No aristocrats, no priests, no doctors, no professors – only peasants for the representation of peasant interests.' Their leaders resorted to vigorous anti-semitic rhetoric. If it was unfortunate that that the political vigour of the peasantry was channelled in those directions, it was not inevitable that it should have been so.

Mobilisation of the already militant peasantry by the socialist movement could have broken the mould of German politics of the day. But, as Blackbourn points out

The grievances and aspirations of rural communities were refracted through the prism of conservative politics. There is no doubt that in the process they were distorted and caricatured. Conservative and Centre Party demagogues encouraged the peasantry to attack symbolic but empty targets, like the Jew or the stock exchange, rather than the structural basis of their exploitation.

The SPD leadership betrayed a singular inability to understand what really moved the peasantry at the grass roots and how their energies might contribute to a struggle for socialism. The ideological legacy of Lassalle and Dühring facilitated anti-peasantism. The reformist wing of the SPD was too dominated by statist and paternalistic ideas to capture the resonance of peasant radical aspirations. An ideology of proletarian exclusivism in the socialist struggle dominated both the revolutionary wing of the SPD, and its trade unions.

The SPD leaders hostile to peasant mobilisation invoked the authority of Engels, who was persuaded to contribute his well-known article on 'The Peasant Question in France and Germany', published by Kautsky in *Neue Zeit*, in which he supported the Kautsky position. But if authorities are to be invoked, it must be recalled that Marx himself emphatically took an opposite view, notably in his critique of the Lassallean ideas that had impregnated the 1881 Gotha Programme of
the SPD. In his critique of the Gotha Programme he challenged the Lassallean formula that: 'The emancipation of labour must be the work of the working class, relatively to which all other classes are one reactionary mass.' Answering this Marx asked rhetorically: 'Has one proclaimed to the artisans, small manufacturers and peasants [emphasis in the original] during the last elections: Relatively to us you, together with the bourgeoisie and feudal lords, form one reactionary mass?'

Elsewhere in the same document Marx reminded those to whom his critique was addressed: 'In the first place, the majority of the "toiling people" in Germany consists of peasants and not of proletarians.' In his notes in 1881 he also expressed the view that the Russian peasants and their organisations might play a major autonomous role in the socialist transformation of their society. Neither Kautsky, the 'orthodox Marxist', nor the Revisionist leaders of SPD were to grasp this insight or to follow its broader implications. Kautsky's political programme and strategy concerning the place of peasants in struggles for socialism was to be repudiated in practice by the subsequent history of revolutionary experience. But this orthodoxy was to survive to haunt numerous Marxist movements, in the Li Li San strategy in China, the Bulgarian internal wars of the 1920s, or Russian collectivisation of the 1930s and so on until the generation of today.

**Marxism and Agrarian Capitalism**

Kautsky's enduring contribution to the 'agrarian question' does not lie in his political position on the role of the peasantry in the socialist movement. Rather, his achievement lies in illuminating the different ways in which capital makes its impact on the peasantry. Contemporary debates have followed many of these analytical insights. By now the globality and historicity of the transformation of rural production, its economic logic, processes and social organisation, as well as the different forms which capitalist extraction of surplus-value may take - features that Kautsky highlighted and examined - are often taken for granted. The influence of international markets for foodstuff, as shown by Kautsky, can be seen to reach into every village and farm, transforming them and redefining the way in which they function. Kautsky also traced the regularities and stages through which peasant family farms were transformed under the impact of capital: the agriculturalisation of the peasant, i.e. the increase of farming activity as against the self-supporting crafts; the commercialisation and monetisation of their economic activities; and the increasing engagement in extra-farm wage-labour, providing for the possible re-stabilisation of
the farm, but linking it increasingly into the capitalist mode of production. Peasant farms have survived through the millennia by functioning within different types of socio-economic formations and they must be understood in each case in the context of the structures of the broader society and economy. Those elements of Kautsky's explanation are still with us, being built into the general analysis of contemporary rural societies particularly in the 'developing societies'.

The most significant point in terms of contemporary relevance was Kautsky's explanation of the incorporation of peasant family farms within the capitalist mode of production, providing for their continuity under capital that dominates them and exploits them without dissolving them absolutely. The classical conception of capitalist social relations of production is premised on the separation of the producer from the means of production, resulting in the division of society into a class of free but propertyless producers and a class of non-producers who own and control access to the means of production. Peasant production does not fit neatly into such a definition of capitalist production. The development of capitalism in agriculture has therefore been ordinarily deduced as a process of depeasantisation, the family farms being doomed, like all petty commodity production, to extinction. Kautsky learned from his analysis of European agriculture at the turn of the century (and others have learned since) that this is by no means the whole story. In so far as the actual facts did not fit the preconceived trend, he accepted the facts and advanced an explanation, even though he seemed to be troubled by the ambiguity of a phenomenon which was part of capitalism without being fully capitalist. Nevertheless he drew the right conclusions, in the light of subsequent experience, by leaving aside both of the opposing 'essentialist' notions, namely that of peasants who never change and that of capitalism which takes only one possible form. He recognised the specific manner in which peasant production was transformed and became an integral part of a capitalist economy.

In the last few decades it has been increasingly recognised that we have two alternative forms of agricultural production under capitalism, namely farming based on wage-labour and secondly, a form of organisation of production based on the family farm which is incorporated into the capitalist mode of production without losing some of its substantive particularities. Keeping Kautsky's frame of reference in mind we may recognise the condition of separation of the producers from the means of production as one type of agriculture in a capitalist mode of production, say type A. But given the dominance of the capitalist mode of production, there is a further possibility of a type B
form of subsumption of peasant production under capital, without the separation of the producer from the means of production, which is therefore distinct in reality and particular in its analytical implications. The peasant economy is structurally integrated within the capitalist mode of production. The peasant’s labour is objectified in his product, for which he is paid less than full value by virtue of unequal exchange. Surplus-value thus extracted from the peasant through the agency of commercial capital and credit institutions is appropriated by capital as a whole and contributes to capital accumulation – but outside the peasant economy from which it is drawn. Peasants are integrated into the circuit of generalised commodity production of global capitalism. The growing impact and explicit intervention of capital via technological packages, credits and contracts as well as the controls of modern storage, transport and consumers outlets have been changing the nature of family farming, providing for its ever deeper insertion into capitalist political economy. But the failure to recognise the distinctiveness of the type B mode of its subsumption and the universalisation of type A as the only way in which capital incorporates agricultural production, obscures a crucial aspect of the dynamics of contemporary agriculture and its relationship with the wider economy.

Kautsky’s analysis lays important foundations for the understanding of the impact of capital on agriculture and of family farm production as a particular yet integral part of the capitalist mode of production, not its negation. This part of his work also offers analytical 'openings' to other contemporary problems which were not on Kautsky’s agenda, namely questions about the integration of the peasantry into the political economies of post-revolutionary societies with extensive and/or advancing state ownership or direct control of the means of production and a state monopoly of international trade. The significance of the family plot in a Soviet Kolkhoz, the surprises and successes of the combination of family-scale and collective-scale agriculture in Hungary and the recent developments in China can be better understood if we keep Kautsky’s analysis in mind. This also accentuates the moment when Kautsky’s work becomes inadequate or, putting it differently, where the further experience of nearly a century has left Kautsky behind. This concerns particularly three issues, namely the assumptions about the inevitability of rural misery, about the advantages of large-scale technology, and the possible Marxist designation of the difference between peasants as conventionally understood and the highly capital-intensive family farmers in North America, Western Europe or elsewhere.

In his early days Kautsky assumed a general law of increasing misery
that was presumed to operate under capitalism as one of its necessary consequences. This element of what was once considered to be an axiom of 'orthodox' Marxism was eventually discarded in its more general form by Kautsky himself, but it lingered on in his view of family farmers as a pre-capitalist survival within the capitalist world. In this view peasants survive in the face of triumphant capitalist entrepreneurship, and the dominant use of wage-labour, only by virtue of the over-exploitation of their own family labour and by their 'artistic capacity for going hungry'. The evidence has since taught us a much more complex lesson. There is neither any inevitability of family farmers experiencing exceptional misery under the capitalism of today nor a guarantee of their wellbeing. There is evidence not only from Holland and Austria but also from Turkey, Egypt, Venezuela or Indian Punjab, of smallholders farming successfully and avidly absorbing new technology, adjusting to contemporary markets and securing a livelihood which is as good or better than that of the local wage-labourers or of the clerical salariat. But such agriculture is also much exposed to the heavy weather of capitalist economic cycles resulting in bankruptcies and social attrition through selective village-to-town migration of the young, the bright and the best educated. On the other hand there are those family farmers of 'developing societies' whose farming has not moved into the new era, whose poverty makes them indeed the lowest of the low even in an impoverished society and whose growing destitution and 'involution' would well qualify them as carriers of 'increasing misery' and marginalisation. They appear in the focus of international attention only when yet another famine relief operation fails to save a million human beings. But this is by no means the universal picture of family farmers under capitalism.

This brings us to the next and linked issue of the contemporary stage of technological transformation in crop and animal farming. Kautsky's images of technological advance, derived mainly from the type of equipment manufactured in his day, was that of the application of large-scale machinery operated by large numbers of manual labourers. Modern agricultural technologies – mechanical, chemical and biological – are much more divisible. This has made further advances in farming possible, by way of a new division of labour, new types of services and new skills. All this has altered the criteria of optimal size of the labour team, lowering it for some branches of contemporary agriculture. A family farm is not necessarily at any advantage over a large enterprise, but nor is it debarred from utilising new technology. Subject to that and given the right combination of productive activities, flexible use of family labour and cooperation through the social networks of a rural
neighbourhood, it is often more effective and stable than a parallel large enterprise based on wage labour. Subsumed under capitalism as the dominant mode of production, it can secure higher or safer profits for agribusiness while at the same time providing an improved livelihood to its own members – an equation which facilitates the continuation of family farms as a social form, at least for a time.

Thirdly, moving further from Kautsky's initial preoccupation with peasant farming in Germany in the 1890s, is the problem of a Marxist conceptualisation of the transformation of the peasant into a 'farmer'. Kautsky visualised the pauperisation of a peasant into a peasant-worker, increasingly involved through wage work in capitalist production of surplus-value, with some peasants becoming rural capitalist entrepreneurs operating mainly with wage-labour. His family-farming alternative was equated with survival in misery on the margins of capitalist advance, as islands of technological backwardness. This did not allow for the emergence of highly capital-intensive farming based on family labour, which has escaped theoretical specification, becoming a blind spot. A conceptual step forward within a Marxist frame of reference has been recently suggested in this connection by a Soviet scholar, V. P. Danilov. In Danilov's view the distinction based on the respective relations of production which delimits family labour from wage-labour under capitalism, must be supplemented by a further distinction based on qualitative differences in the forces of production deployed. Peasant production is family agriculture where natural forces of production, land and labour predominate. Farmers, on the other hand, represent family farms in which the man-made forces of production, mostly industrial in origin, come to play a decisive role. The particularity of family farming as a form of organisation of production does not disappear thereby, but the characteristics of its two different types can be distinguished more clearly. The issue is certainly a live one and other approaches to this problem have recently been attempted by some Western Marxists.

The state of theorising about the place of the peasantry in contemporary societies, especially those of the Third World, and of its future, is in considerable disarray. Most non-Marxist approaches seem to be unable to go much beyond the market model search for technological solutions and legitimate concerns about ecological issues in considering the implications of capitalist development for peasant societies. The mainstream of Marxist thought, on the other hand, has branched out in two rather different directions. One characterises peasants as pre-capitalist and, given the manner in which peasant societies subserve the purposes of the wider capitalist economy, the relationship between the
two is represented as the non-contradictory articulation of two modes of
production, one pre-capitalist and the other capitalist. The other
approach follows an older orthodoxy, one which Kautsky himself began
with when he embarked on his major study, by virtue of which peasant
production is no more (or less) than petty commodity production in
general and, like the latter, doomed to extinction with the advance of
capitalism. Both of these views are constrained by a common assumption
that the concept of capitalism cannot accommodate any form of
production other than that based on the separation of the producer from
the means of production. Capitalism in agriculture, for both these
alternative approaches, can mean only one thing, namely the emergence
of a rural capitalist entrepreneur employing wage-labour. Peasant
production is excluded from capitalism as a matter of definition. Kautsky's seminal analysis of this question invites us to reconsider these
assumptions.

In the course of his analysis Kautsky moved beyond his own initial
pre-suppositions to recognise ways in which peasant production, whilst
retaining its particular character of the family farm was, nevertheless,
radically transformed by the impact of capital. Its new features could no
longer be explained within the conceptual framework of a pre-capitalist
economy; it is structurally integrated into the wider, global, capitalist
economy. Nor could the peasant economy be characterised as one more
example of petty commodity production in general. Kautsky demon­
strates a variety of ways in which the peasant economy differs from
petty commodity production in manufacture. As a consequence, and in the
context of capitalist development, the dynamics of the two are
different. What we have is the specific case of peasant economies
transformed and subordinated under capital, whose dynamics and future
must be considered both in terms of their specific structural conditions as
well as those of the conditions and contradictions of capitalist
development in general.

It remains true that Kautsky's general conception of capitalist
development, of historical materialism, was substantively reductionist,
a deterministic and linear vision in which the economic logic of capital
accumulation moved inexorably to the final goal of socialism. Human
agency and questions about organised political intervention were
devalued in that vision, for politics, ideology and culture were merely
epiphenomenal superstructures that were but a reflection of the economic
base whose logic unfolds with inevitable necessity. Kautsky's politics
too remained ambivalent and, after the death of Bebel, rudderless. His
last years were to be ones of bitter isolation, for he outraged
revolutionary Marxists by his opposition to the Bolshevik revolution
and was shunned by the right wing of the SPD for 'still' being a Marxist. Today, however, Kautsky's politics or his general interpretation are not the issue. More relevant are questions concerning the contemporary peasantry and rural societies – the agrarian question. In the continuing debates about this issue the appearance at long last of this translation of his seminal work in English will make its mark.

Acknowledgement
The authors are grateful for comment and advice offered by many friends and colleagues but particularly by Geoff Eley, E. Taylor and John Kautsky. The usual disclaimer about responsibility for the arguments expounded applies.

Notes
5. Ibid., vol. 10, p. 177 (translation of the first sentence amended on the basis of the Russian original).
6. Ibid., vol. 16, p. 445 (the expression 'squandering of labour' is used in this translation). Chayanov's concept of 'self-exploitation' was broader in context, assuming the possibility of some advantages of family economy over capitalist production. For discussion see A. Chayanov, *Theory of Peasant Economy* (Madison, 1986) Ch. 2 and the Introductions.
7. E. David, *Sozialismus und Landwirtschaft* (Berlin, 1902) and the shorter version of his argument in *Sotsializm i sel'skoe khozyaistvo* (St Petersburg, 1906) (especially Ch. 5).
10. Most of those who have referred to Kautsky's *Agrarian Question* since the late 1970s have actually used only its summation by J. Banaji in *Economy and Society* (1976) vol. 5, no. 1 which is problematic in its selection.
The Agrarian Question


17. For sources and an excellent review see G. Eley, 'Combining Two Histories: The SPD and the German Working Class before 1914' in Radical History Review 1984, nos. 28–30.

18. Ibid., p. 25.


20. Maehl, August Bebel, p. 179.


23. In particular Kautsky's Terrorism or Communism (London, 1920) and his discussion of the Georgian Mensheviks' rule as an alternative to Bolshevism in Georgia (London, 1921).


25. David, Sozialismus; see also F. Hertz, Die agrarischen Fragen in Verhältnis zum Sozialismus (Wien, 1899) etc. For a pertinent discussion of the argument and its context see A. Gerschenkron, Bread and Democracy in Germany (Berkeley, 1943).


27. 'Sozialismus und Landwirtschaft', Die Neue Zeit (1903), vol. 21, book 1, p. 685.


29. By 1919 Kautsky came to regard The Agrarian Question as outdated because of the changes in the conditions of agriculture, especially the upturn in the prices of foodstuffs. He insisted, however, rightly in our view, that his substantive viewpoint and analytical approach remained unchanged. See Die Sozialisierung der Landwirtschaft (Berlin, 1921) pp. 8–9.

30. David Blackbourn and Geoff Eley, The Peculiarities of German History (Oxford, 1984); David Blackbourn, Class, Religion and Local Politics in Wilhemine Germany (New Haven, 1980); Geoff Eley, Reshaping the
German Right: Radical Nationalism and Political Change After Bismark
(New Haven, 1980) to which an extensive list of German texts can be added.


32. At a later date it was the most significant leader of SPD's left wing, Rosa
Luxemburg, who was to express extraordinary unease with the peasant
component of the Russian Revolution. See her The Russian Revolution


34. In a remarkably apt anticipation of the different results of different ways
towards collectivisation adopted by the twentieth-century socialists, Marx
defined also the conditions under which peasant support of socialist
revolution can be secured, i.e. revolutionary context and the systematic
transfer of resources of society to the peasant communes, i.e. the reverse
of the 'primitive accumulation' once those who are socialists lead the
social transformation. See T. Shanin, Late Marx and the Russian Road

35. Arghiri, Emanuelt Unequal Exchange: A Study of the Imperialism of

36. For further discussion and contemporary evidence see note 6 above. Also
see the contribution of J. Harriss, H. Friedmann, A. de Janvry and E.
Taylor in the revised edition of T. Shanin, Peasants and Peasant Societies
(Oxford, 1986). Historically the issue first came to light in the European
cooperative movements of family farmers at the turn of the century,
especially the Danish one.

37. N. Swain, Collective Farms.

38. For a little known yet excellent discussion of the differences between
fundamental levels/forms of production, i.e. gathering, husbandry and
manufacturing see M. Malita, 'Agriculture in the Year 2000', Sociologia
Ruralis (1971) vol. XI.

39. V. P. Danilov et al., 'Osnovnye etapy razvitiya krest' yanskogo khozyaistva',
in Agrarnye Structury Stran Vostoka (Moscow, 1977). For a short
discussion in English, see O. Figes, 'V.P. Danilov on the Analytical
Distinction between Peasants and Farmers' in T. Shanin, Peasants and
The Agrarian Question
Volume 1
The present work was prompted by the debates surrounding the agrarian programme called for by the Frankfurt Congress of German Social Democracy, but subsequently rejected by the Breslau Congress. Irrespective of one's own views about these debates, it is quite apparent that opinions as to what constitute the tendencies of modern agrarian development diverge widely - both within German Social Democracy and internationally. In fact Social Democracy is not yet in possession of an agreed basis on which to formulate a policy for agriculture.

The Breslau Congress was unanimous on the need for a thorough study of agrarian conditions, and resolved actively to promote such an investigation.

This resolution was not, however, the sole reason for my personal interest in the agrarian question. I had taken a keen interest in it in my early days in the party, and in 1878 - while still publishing under the pseudonym of 'Symmachos' - I had drafted a series of articles in the Vienna Sozialist on 'Peasants and Socialism' which I planned to publish as an agitational brochure, but which was then seized and confiscated in its entirety. In 1879 I completed my text Einfluss der Volksvermehrung auf den Fortschritt der Gesellschaft (The Influence of Population Growth on Social Progress), in which the question of food production played a large part; in 1880 Richtersches Jahrbuch published my article on political agitation amongst the peasantry, and in 1881 I discussed the issue of overseas food competition in Staatswirtschaftlichen Abhandlungen. In addition, I also prepared a number of broadsheets intended for peasant-reading, including Der Onkel aus Amerika.

The emergence of the agrarian question as a central issue within the European socialist parties therefore simply meant renewing an old acquaintanceship - in fact, one I had never really wholly abandoned: moreover, with age it had grown in both theoretical and practical importance. With the growth of our party, and the crisis in agriculture, it has now become one of the most important practical questions with which Social Democracy currently has to deal. The intervening period has also seen Marxism emerge as the basis for the socialist movement everywhere: and Volume III of Capital, with its brilliant treatment of
2 The Agrarian Question

ground-rent, has also now been published. However, agricultural development has given rise to phenomena which do not appear to be reconcilable with Marxist theories. The agrarian question has also, therefore, become a central problem of theory.

I did not anticipate running into any major problems in a field in which I already had some experience. In addition, the fact that this was not simply an academic issue, but a practical matter of great current relevance made me appreciate the importance of putting my work before the public at the earliest opportunity. Nevertheless, three years elapsed before its publication: in part this is attributable to the interruptions occasioned by my own work, involvement with day-to-day matters, and my responsibilities for the publication of that share of Marx's literary estate which fell to me on Engels' death. But I also wanted to base these studies on the most recent statistics available – those prepared by the English Royal Commission on Agriculture (1897), the third volume of the US Census of 1890, which dealt with agriculture, the French Enquête of 1892, and the German agricultural, farm and occupational statistics for 1895, none of which were published before 1897, and which in some cases remained unavailable until 1898.

On top of this, I began to realise during the course of the work that the brochure originally conceived could not possibly do the job required of it. My own opinion is that adding yet another specimen to the vast pile of monographs and inquiries is not what is required at present. Praiseworthy as these may be, there is hardly a current shortage of conclusions as to the state of agriculture. Year in, year out, governments, the sciences and ruling-class journalism continue to batter the public with a crushing volume of such studies. No. What is needed is an expose of the central thread running through this plethora of facts – an investigation into the fundamental tendencies which, although operating below, nevertheless determine how the observable phenomena appear to us. Instead of examining the various individual aspects of the agrarian question in isolation – the conventional current practice – we have to look at the relationship between these aspects: between the large and the small farm, indebtedness, the law of inheritance, the shortage of labour, foreign competition and so on – considered as individual manifestations of one overall process.

The task is a difficult one, the subject immense. To my knowledge, the field has not yet been given a satisfactory treatment from a modern socialist viewpoint. Not unnaturally, Social Democratic theoreticians have devoted most of their research efforts to industrial development. And although Marx and Engels, especially Marx, had important things to say about agriculture, these are found in the form of scattered remarks
or short articles. The section on ground-rent in Volume III of *Capital* represents an exception – but was never completely finished. Marx died without completing his life's work: but even had he done so, he would not have supplied us with all the explanations we now seek. According to his own plans, Marx only proposed dealing with capitalist agriculture. Our main concern here is with the role of pre-capitalist and non-capitalist forms of agriculture within capitalist society.

None the less, *Capital* is of inestimable value, not simply because of its specific conclusions but also because of its method, which allows us to continue with fruitful work in fields extending beyond its original scope. Whatever success I may have in developing new and productive ideas in this work is due, primarily, to the efforts of my two great mentors. I want to emphasise this point in particular, as recently voices have been heard – even in socialist circles – claiming that Marx and Engels' position is obsolete, and that although they achieved much of value in their own time, and still offer a number of rich insights, the present-day student must advance beyond their conceptions. This is held to be the only path to a higher level of understanding: failure to do so will spell condemnation to an ossified dogmatism. In fact, so the argument runs, this is prescribed by Marx's own dialectic, according to which there are no eternal truths and all development springs from the negation of what exists.

This seems very philosophical – but in fact merely leads to the stunning conclusion that Marx is wrong because he is right: that the dialectic must be false, because it is correct – a conclusion which proves one undeniable fact at least: the incorrectness of the dialectic – but not Marx's.

In *Anti-Dühring*, Engels pointed out the stupidity of regarding a negation which merely utterly cancels out what went before as an element of the dialectical process. Development via negation does not imply the negation of *everything* that exists; in fact, it requires the continued existence of whatever is to develop. The negation of capitalist society through socialism does not mean the elimination of human society but rather the supersession of certain aspects of one of its phases of development. This does not imply the supersession of every aspect which differentiates capitalist society from the form of society which preceded it. If capitalist property is the negation of individual property, then socialism is the 'negation of the negation'. It does not re-establish individual property, but it does indeed establish individual property *on the basis of the achievements of the capitalist era* (Marx, *Capital*, I, p. 929).

Development is therefore only progress when it does not merely negate
and supersede, but also conserves — when, aside from what deserves to perish, it also unearths what is worth keeping. In this sense progress consists of an accumulation of the achievements of the previous phases of development. The development of organisms is not only the product of adaptation but also of inheritance: class struggles, which develop human society, are not simply directed at destruction and starting afresh, but also at the conquest — the capturing and conservation — of what currently exists. Progress in science requires both the transmission of earlier achievements as well as their criticism. Progress in art is not merely the outcome of original genius bursting through the confines of tradition, but also of an understanding of the great works of its forerunners.

Knowledge of what to discard and what to retain can only come from the study of reality; dialectics cannot be used as a pre-conceived model to avoid undertaking this work. It is merely a means for giving research a more systematic structure, for concentrating the gaze of the researcher. This — not trying to prove ready-made results — is its greatest value.

The idea that Marx's theory generates the necessity for its own supersession from within itself is therefore based on a completely false understanding of the dialectic. Whether, and to what extent, Marx's theory is erroneous, and to what extent it is a κηνία ες αει — a lasting possession and an enduring gain of science — cannot be determined by invoking the dialectic, but only by studying the facts. In my view, the facts do not, so far, lend weight to the case for a 'negation' of Marxism. Although I see doubts and reservations, I have not yet witnessed any new truths destined to supersede Marxism. Mere reservations and doubts, however, do not constitute a dialectical negation, nor imply a development beyond already existing knowledge, nor represent a supersession of this knowledge.

The roots of these doubts seem to lie more in the personalities of the doubters than in the theory they are doubting. Such a conclusion is not merely the product of a study of the results of such reservations, but also of reflection on my own experience.

Initially, my sympathies lay with socialism, not Marxism. I was just as critical and sceptical as any of those who now look down on my doctrinal fanaticism with such contempt. I became a Marxist against my will. But then, as later, whenever I began to experience doubts on a fundamental issue, I always subsequently discovered that the fault lay on my side, not that of my mentors, and that a deeper consideration of the issue in question eventually forced me to acknowledge that their standpoint was indeed the correct one. Every re-examination, every attempt at revision has simply renewed my confidence and reinforced
my belief in the theory – the dissemination and application of which has become my life's work.

The facts of agricultural development have prompted the gravest doubts about Marx's 'dogma'. To examine how far these doubts are justified is the task of this book.

Berlin-Friedenau
December 1898
Part I

The Development of Agriculture in Capitalist Society
Contemporary society is ruled by the capitalist mode of production. Its distinctive character – and the moving force of our age – comes from the antithesis between the capitalist class and the wage-proletariat. However, the capitalist mode of production is not the only form of production in contemporary society; it exists alongside the remains of pre-capitalist modes of production, which have maintained themselves into the present day. The germs of new, higher modes of production can also be detected in some of the forms of state or municipal economic activity, and in the cooperative system. Moreover, the antithesis between the capitalist class and the wage-proletariat is not the only social antagonism of our age.

Numerous other classes exist alongside and between these two, taking in both the cream and the dregs of society: monarchs with their courtiers at one extreme, and the diverse varieties of lumpenproletarian at the other – classes in part produced by pre-capitalist social forms, and in part created, or at least fostered, to meet capitalism's needs. It is these multifarious classes, in part ascending, in part sinking, with their diverse and constantly changing interests – sometimes intersecting or embracing the interests of the capitalists, and sometimes those of the proletariat, without ever completely corresponding to either – which give contemporary political struggles their irregular and occasionally extraordinary and surprising character.

The theorist faced with the task of studying the basic laws governing the life of contemporary society should not be deflected or distracted by the luxuriance of these phenomena. The task of the theorist is to investigate the specifics of the capitalist mode of production in its classical form, isolated from the surrounding remains and germs of other modes of production. In contrast, practical politicians would be committing a terrible mistake if they tried to act as if capitalists and proletarians really were the sole determining factors in contemporary society, and ignored everyone else.

Marx's *Capital* deals exclusively with capitalists and proletarians. In contrast, the *Eighteenth Brumaire* and *Revolution and Counter-Revolution in Germany* consider the role played by monarchs and
lumpenproletarians, peasants and petit bourgeois, bureaucrats and soldiers, professors and students, as well as capitalists and proletarians.

Of these intermediary strata, the peasantry – until recently the largest portion of the population of our nations – has always aroused a particular interest within the democratic and revolutionary parties of this century. For these products of the towns, the peasant was a mystical, incomprehensible and perhaps even sinister being. Once the most militant opponent of the Church, the monarchy and the aristocracy, the peasants seemed to have become their most tenacious supporters, often harnessing the same vigour used by other classes for their emancipation in the cause of their own exploiters. The weapons supplied by democracy seemed all too frequently to be turned back on it.

At first the peasantry did not cause Social Democracy too many headaches. Ours is not a popular democratic party in the bourgeois sense of the term, not a universal benefactor endeavouring to do justice to the interests of all social classes, irrespective of how mutually antagonistic they might be: it is a party of class struggle. The first years of its existence were fully taken up with organising the urban proletariat. And it expected that economic development would carry out exactly the same preparatory work on its behalf in the country as had taken place in the towns – with the struggle between small and large establishments leading to the elimination of the former, leaving the easy task of winning over the mass of the rural population as a purely proletarian party.

Social Democracy has grown so enormously that it has outgrown the towns. Yet as soon as it takes to the countryside it runs head on into the same mysterious force which had previously prepared such surprises for earlier democratic-revolutionary parties. Far from making a rapid exit from the rural scene, small farms continue to exist. And the advance of large farms is a slow one – sometimes even reversing entirely. The whole economic edifice on which Social Democracy has based itself, and on which it relies, seems to go awry the moment it tries to apply it to agriculture. The inapplicability of the theory to agriculture would not only demand a complete transformation of Social Democracy's tactics, however: it would require a transformation of its most fundamental principles. Werner Sombart has recently given some consideration to this question. He notes,

What if I encounter areas of economic life which are not subject to the process of socialisation because under certain circumstances the small enterprise is more important, and more efficient, than the large – what then? This is the nub of the problem which is presently
confronting Social Democracy in the form of the agrarian question. Is it necessary to revise the collective ideal, based on the large establishment – and the programme founded on this – in the face of the peasantry? And if the conclusion is reached that there is no tendency towards the large establishment in agrarian development and that the large establishment is by no means universally the highest form of economic organisation, then one arrives at the crucial question: Should we be democratic in the sense that we embrace any and every small farm and change our programme, distance ourselves from the collectivist goal – or shall we remain proletarian, retain the collectivist ideal and goal, and exclude these other elements from our movement?

I have to use 'if' and 'when' here because, as far as I know, no one has yet established what the developmental tendencies of agriculture are, nor which form of organisation – if any specific one at all – is the superior in agrarian production. But from what I can see, Marx's system seems to fall down here; as far as I can see Marx's deductions cannot simply be transposed into the agrarian field. He did have things of significance to say about agrarian matters, but his theory of development, which is based on a growth in large establishments and a proletarianisation of the masses – and from which socialism is deduced as a necessity – is only evident for the development of industry. It is not so for agrarian development and it seems to me that only scientific research can fill the gaps which exist. (Sombart, Sozialismus und Soziale Bewegung, p. 111)

Our fear is simply that we may have to wait a long time. Economists have been preoccupied with the issue of whether the large or small holding is the most efficient for more than a century – and no end to this dispute is yet in sight. This theoretical controversy has not, however, proved any kind of an obstacle to the obvious, indisputable and enormous development through which agriculture has passed. Appreciating this nevertheless involves going beyond the obsession with the struggle between large and small holdings, beyond looking at agriculture in isolation, segregated from the overall functioning of social production.

Agriculture does not develop according to the pattern traced by industry: it follows its own laws. Of this there can be no doubt, and we take it as proven from the outset. This does not mean that the development of agriculture and industry are opposed and irreconcilable. As long as they are regarded as common elements in one overall process, and not existing in mutual isolation, both can be shown to be advancing toward the same end.
The Marxist theory of the capitalist mode of production does not merely consist in reducing development to the formula 'elimination of the small establishment by the large', allowing anyone who manages to learn it off by heart to have guaranteed access to the key to the entirety of modern economics.

An investigation into the agrarian question which purports to follow Marx's method cannot simply focus on the question as to whether the smallholding has a future. Rather, it has to consider all the changes through which agriculture has passed over the course of the capitalist mode of production: whether, and how, capital is seizing hold of agriculture, revolutionising it, making old forms of production and property untenable and creating the necessity for new ones.

Once we have answered these questions, we can then proceed to see whether Marx's theory is applicable to agriculture, or not. And whether the supersession of private property in the means of production will have to come to a stop at precisely the most primary of all the means of production – the land and soil.

Our way ahead is therefore clear.
The Peasant and Industry

With the exception of a few colonies, the capitalist mode of production generally begins its development in towns, in industry, leaving agriculture largely undisturbed initially. But the development of industry in itself soon begins to affect the character of agricultural production.

The medieval peasant family was a totally, or virtually totally, self-sufficient economic cooperative, which not only produced its own food, but also built its own house, made its own furniture and household implements, and even constructed most of its own crude tools, tanned its own leather, worked flax and wool and made its own clothing. Although the peasants went to market, this was merely to sell any surplus and with the exception of iron — used as sparingly as possible — they only bought non-essential items. What happened in the marketplace only impinged on the peasants' comforts and luxuries — not their very existence.

This self-sufficient cooperative was indestructible. The worst that could befall it were bad harvests, fires or invasion by a hostile army. Even these blows of fate would only represent a passing privation — they did not cut off the sources of life itself. Plentiful stores provided insurance against poor harvests; cattle gave milk and meat; forests and rivers contributed to the peasant family's table. The forest supplied timber for replacing a burnt-down house, and also afforded a place of refuge from the enemy — from where the peasants could return with their evacuated chattels and livestock once the danger had passed. And although tillage, pasture-land and forest — the foundations of peasant existence — may have been ravaged, the enemy could not actually destroy them. Given the necessary labour, and an intact and uninjured stock of people and cattle, any damage could swiftly be put to rights. In our own century, the conservative economist Sismondi has provided us with a vivid description of the agreeable position of the independent peasantry, which for him represented an ideal.

That rural good fortune and happiness portrayed in the history of the glorious age of Greece and Rome is not unknown in our own century. Everywhere where we find peasant holdings in land, we also find
that wellbeing, faith in the future and independence which simulta-
neously guarantee happiness and virtue. The peasant who undertakes
all the work on his small inheritance on his own, together with his
children, who has to pay neither rent to someone over him nor wages
to someone below, who directs his production in accordance with the
requirements of his own consumption, who eats his own grain, drinks
his own wine, dresses in his own flax and wool, is little worried by
market prices, since he has little to buy or sell, and he is never ruined
by a crisis in trade. Far from fearing the future, his expectations
embellish it, since he uses every minute not demanded by the work of
that season in the interests of his children, in fact, of the coming
centuries. It takes little of his time to plant the seed which a century
later will become a mighty tree; to make the ditches which will
always drain his fields; to lay the pipes which carry water from the
spring; to improve every type of surrounding plant and animal through
untiring, repeated efforts stolen from his idle moments. His small plot
is a true savings bank, always ready to take in his small profits, and
repay his moments of leisure. The constantly active power of nature
fertilises it, and rewards it one hundredfold. The peasant experiences
the happiness associated with his property in the most vivid way
possible. (Sismondi, 1837-8, Etudes sur l'économie politique, pp. 170-1)

Such an image of peasant prosperity could still inspire one of the
leading economists of our time to a such vividly colourful description as
little as 60 years ago. The picture may have been painted a little too
rosily; it certainly would not have been true of the overall situation of
the peasantry. What Sismondi had mostly in mind was the situation in
Switzerland and some parts of Northern Italy. But nevertheless it was
not sheer fantasy, rather a picture taken from life by an acute observer.

Compare this picture with the present situation of the peasantry in
Europe as a whole, including Switzerland: it is impossible to conceal the
enormous economic revolution which has taken place in the intervening
period.

The first step in this revolution was the dissolution of peasant
handicrafts through urban industry and commerce.

The peasant family only provided limited scope for a division of
labour – which as a rule did not go beyond the division of labour between
husband and wife. Not surprisingly urban industry was soon able to
outstrip peasant handicrafts, and manufacture the implements and tools
for the peasant which the latter could not produce as well, and often not
produce at all.
The development of industry and commerce also produced new needs in the towns which – like the new improved tools – spread out into the countryside the more rapidly commerce between town and country intensified, needs which peasant industry could not satisfy. The linen smock and the pelt gave way to clothes made of cotton, and clogs to leather boots. Militarism, which drew peasant sons into the towns and kitted them out with urban tastes, made a major contribution to this development: it certainly provides the main explanation for the spread of tobacco and brandy consumption. Lastly, the superiority of urban industry was so great in certain spheres that peasant products became luxury articles, which the thrifty peasant could no longer afford to consume – and which they therefore ceased to make. The development of the cotton industry, for example, allowed such cheap calicoes to be made that flax cultivation for the peasant's own use declined everywhere, and in many areas died out completely.

Self-sufficient peasant industry had already begun to break up in the Middle Ages with the rise of the urban craft industries. But their advance into the countryside was slow, and they remained confined to the immediate vicinity of the towns, barely impinging on peasant life at all. At the same time as Sismondi was lauding the peasant's good fortune, Immerman was able to draw a portrait of a village mayor (in 'Miinchhausen'), a Westphalian peasant with a large holding – a man who thought a fool to be 'someone who gave up to the blacksmith what he could earn for himself', and who undertook 'all his own repairs to his doors, door posts and steps, his boxes and crates, and if he was fortunate could cut new ones. If he wanted he could also be a cabinet-maker and make up a proper cupboard.' In Iceland there is still no separate craft industry to speak of and peasants are still their own craft workers.

The source of self-sufficient peasant industry's rapid demise is the power of capitalist industry. Combined with the capitalist system of communications with its railways, post and newspapers, it transports urban ideas and urban products into the remotest corners of the countryside, encompassing the entire rural population – not merely that close to the towns – in its grasp.

The more this process forges ahead, and the more native peasant domestic industry breaks up, the greater the peasant's need for money – not just for supplementary, non-essential items, but for necessities, the indispensable elements of life. Peasant economic existence, and with it peasant life in general, becomes impossible without money.

The development of the peasants' need for cash was accompanied by a parallel development and growth in the need for money on the part of their exploiters – the feudal lords and aristocracy, and other holders of
The natural services rendered by the peasant were transformed into money payments, as is well known; but the process also prompted the desire for higher and higher payments. Not unnaturally, this further increased the peasant's need for money.

The only method by which peasants could acquire money was to turn their products into commodities, to take them to market and sell them. These were not, of course, the products of the peasants' own industry — the ones they would have preferred to sell — but those things not supplied by urban industry. And so the peasant was forced to become what we now customarily think of as a peasant — a mere farmer. And the more the peasant assumed this role, the wider the gulf between agriculture and industry, the quicker the independence, security and comfort of peasant life vanished, a life which Sismondi could still find here and there amongst some free peasants.

The peasant was now dependent on the market, which proved to be even more moody and unpredictable than the weather. At least the weather's perfidiousness could be prepared for. Ditches could mitigate the effects of a particularly wet summer, and irrigation could counter the consequences of a drought; smoking fires could protect vines from spring frosts and so on. But the peasant had no means of arresting a collapse in prices, or of selling unsaleable corn. What was once a blessing — a good harvest — became a curse. This was especially apparent at the beginning of the nineteenth century when agricultural production in Europe had generally already taken on the character of commodity production, but before transport systems were sufficiently developed to balance out local surpluses and shortages. Just as poor harvests raised prices, good harvests made them fall. In France, for example, wheat harvests produced the following return:

<table>
<thead>
<tr>
<th>Average yield per hectare (hectolitres)</th>
<th>Price per hectare (francs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1816</td>
<td>9.73</td>
</tr>
<tr>
<td></td>
<td>28.31</td>
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<tr>
<td>1817</td>
<td>36.16</td>
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<td>1821</td>
<td>12.25</td>
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<td>17.79</td>
</tr>
<tr>
<td>1822</td>
<td>15.49</td>
</tr>
</tbody>
</table>

An increase in yields of a third in 1821/22 gave the French farmer an income of only around 200 francs per hectare — a third less than in 1816/17. No wonder the King of France expressed regret that there was no law able to 'obviate the disagreeable consequences of a bounteous harvest'.
The increasing commodity-character of agricultural production rendered the primitive stage of direct sale from producer to consumer less and less feasible. The more distant and extended the markets for which the country dweller produced, the more impossible it became for sales to be made directly to consumers – and the greater the need for an intermediary. The merchants sit between the producers and consumers: their better grasp of what is taking place on the market, and to some extent their ability to manipulate it, offers ample scope for taking advantage of the peasant.

Dealers in grain and cattle are soon joined by the usurer, if these different roles are not already embodied in one and the same person. In bad years the peasants' receipts do not cover their outgoings: the only alternative is to raise a loan, with the land as security. A new servitude is created, along with a new exploitation – that of usurer's capital – which the peasant can only shake off with the greatest of difficulty. Sometimes the burden is simply too much, and the freehold has to be sold off to appease the usurer, and often the tax collector as well.

The vagaries of the grain and cattle markets now manage to accomplish what poor harvests, fire and sword could never achieve: not merely temporary privation, but the alienation and ultimately the complete separation of the peasants from the source of their life and livelihood, the land, and their transformation into proletarians. The dissolution of peasant domestic industry for consumption by the peasant's own family and the imposition of ever more burdensome money-taxes marks the end of the road for the well-being, independence and security of the free peasant.

On top of this, the development of urban industry also sows the seeds of the dissolution of the traditional peasant family. Originally a peasant holding consisted of as many fields as were needed to feed the family, and where necessary to provide a tribute to a feudal lord. With growing dependence on the market, and the accompanying need for more cash, the volume of surplus which had to be grown and sold also increased: with unchanging relations of production, the family therefore needed more land to meet its own needs. The peasants could not change the given mode of production or extend their holdings simply at will. The only alternative was to reduce the size of the family, and ship off any surplus hands away from the ancestral farmstead into alien service as farmhands, soldiers or town-dwelling proletarians, or to America to establish a new homestead. The peasant family was cut down to the minimum.

An additional factor worked in the same direction. Agriculture is not an activity which requires a constant input of human labour-power.
throughout the year. Large numbers of hands are needed to till, sow and bring in the harvest, but none at all at other times. In summer the need for labour-power is two, three and often four times as large as in winter.

The existence of peasant domestic industry meant that these fluctuations were of only minor consequence: if there was not much to do in the fields, the family could work in or on the house. This ceased with the disappearance of peasant domestic industry, providing a further reason for keeping the family as small as possible – the need to avoid having to feed idle hands during the winter.

We are still only considering the effects of the disappearance of peasant domestic industry. Changes in agricultural production could nullify these effects – for example a changeover from pasturage to intensive stock-breeding which required more labour. On the other hand, other changes could magnify them. One of the most important tasks in the agricultural year, threshing the grain harvest, used to occupy much of the winter. The introduction of the mechanical thresher ended the necessity for this, and gave a further inducement to cut down the size of peasant families.

Of course those left behind had to slave all the harder during the summer. But no matter how much they sweated and strained, they could not fully make up for the labour-power of those who had left. Help had to be taken on – *wage-labourers* – who were only employed during periods of the most arduous work, and who could be dismissed when no longer needed. No matter how high their wages, this was still cheaper than feeding a family member for the whole year. The labour-power offering itself for hire was, however, supplied by proletarianised peasants looking for an additional income, and the excess sons and daughters of the peasantry.

The same development which generates a demand for wage-labourers also creates these labourers, proletarianising peasants, cutting down the size of the peasant family and throwing the excess children on to the labour market. For the smaller peasants this eventually means taking on a supplementary job outside of the family farm: such peasant holdings are too small to produce a surplus, and they have no produce to take to market. Their only saleable commodity is their *labour-power*, which is only partly utilised by their own farms. One means of putting it to remunerative use is to sell it for wages on the bigger farms.

Day-labourers, agricultural hands and maidservants were rarely seen working for peasants before the seventeenth century. Their employment only becomes widespread after this time. The use of wage-labourers in place of members of the family also affects those who stay in the lap of their homes. Inasmuch as the farm, the family inheritance, increasingly
becomes the exclusive property of the family head, the members of the family are pushed down to the level of wage-labourers in the service of the head of their own household.

The peasant family cooperative, working its own holding with its own labour, is replaced on the larger farms by regiments of hired labourers who till the fields, tend the cattle and bring in the harvest under the governance of the landowner.

The class antagonism between exploiter and exploited, between propertied and proletarian, forces its way into the village - in fact, right into the heart of the peasant family itself, destroying the old harmony and commonality of interests.

This process first got started in general in the Middle Ages, as we observed above, but was given a massive boost by the capitalist mode of production, which extended it to the rural population everywhere. And the process is still continuing to make headway, swallowing up new areas, turning what were spheres of peasant self-sufficient production into spheres of commodity production, increasing the peasant's need for money through a diversity of methods, and replacing family labour by wage-labour. The development of capitalist production in the town is therefore quite capable of effecting a total transformation of traditional peasant life, without any need for capital to engage itself directly in agricultural production, and independent of the conflict between large and small farms.

But capital does not confine its machinations to industry. As soon as it is strong enough, it also takes agriculture into its grasp.
The Agriculture of the Feudal Period

The Three-field System

This is not the place to undertake a study of the origins of peasant property relations. For our present purposes it will be enough to establish the state of agriculture and the peasant property relations, which developed in the lands occupied by the Germans after the storms of the great popular migrations of the fifth century and which — with a few exceptions, the most notable of which was England — persisted well into the eighteenth century, and in some localities right up until the present. These relations represented a compromise between the common ownership of land required by peasant pastoral farming, and private property in land, which corresponded with the needs of peasant arable farming.

Just as each peasant family constituted a self-sufficient domestic cooperative, each village represented a self-contained cooperative economy, the Mark.

We disregard here settlement in scattered farmsteads, as opposed to the compact village — a form of settlement which was for a long time regarded as natural, but which, as is now evident, was in fact an exception, the product of specific aspects of historical tradition and topography. The normal and typical form was the village system, and this will be the exclusive focus of our study here.

The starting-point of the peasant economy was the individual homestead, which had become individual property. Aside from the dwelling and necessary outbuildings, this consisted of a surrounding, enclosed plot, consisting of the kitchen garden, flax and fruit trees. The village was composed of a larger or smaller number of such homesteads. Around and outside the village lay the village’s arable land, the divided Feldmark. Where the three-field system was practised which was usually the case — this was divided into three open fields, known as Fluren or Zelgen. Each of these was subdivided into different furlongs, the Gewanne — arable fields differentiated by location and fertility. Each household had an arable strip in each of the furlongs. Beyond this lay the undivided Mark, consisting of pasture and forest.
This common land was jointly used by the whole community. Each family tilled its own plot on the arable land: but they could not do so completely as they wished. Arable land was used for growing grain crops for feeding people. But the overall practice of farming was dominated by pasturage, the raising of livestock. If arable farming was a matter for the individual family, pasturage was the joint concern of the entire community. This arrangement in turn reflected back on property relations. As arable land, the soil was private property: as pasturage, communal property. As soon as a field was harvested, it reverted to pasturage, and hence to the control of the community which practised communal grazing. Both fallow and stubble were used as common pasturage for all the village's cattle. However, this would have been impossible if every member of the village community could do as they liked with their own strip. Each strip owner was therefore obliged to cultivate their plot in each of the open fields in accordance with all the other strips – the Flurzwang. One of the fields was left fallow each year, the second planted with winter grain, and the third with summer grain. What was planted in each field changed annually. Apart from stubble and fallow, fodder for animals came from meadows, permanent pasture and forestland: the labour of the animals, their manure, milk and meat were all of equal importance for the peasant economy.

This agricultural system became dominant wherever Germanic peoples settled, irrespective of whether peasants were successful in obtaining their complete freedom, whether they were tenants on a lord's land, whether they surrendered their independence to obtain the protection of a powerful lord, or whether they were forced into dependency.

It was a farming system of extraordinary strength and durability, conservative in the best sense of the term. The well-being and security of peasant life rested as much on the Mark community as on domestic handicrafts. The three-field system with forest and pasture required no external inputs, producing all the stock and manure which were needed to cultivate the land and prevent the exhaustion of the soil. The communality of the pastureland and the open fields also produced a cohesiveness amongst the village members which offered an effective protection against excessive exploitation by outside forces.

Nevertheless, the development of urban industry, and with it of a money economy, also proved fatal for this system of agriculture, just as it had spelt doom for peasant handicrafts.
The Restriction of the Three-field System through Large-scale Farming by Feudal Lords

Urban industry, as we observed above, not only increased the cash needs of the peasantry, but also fed the greed of those who, either in whole or in part, got their livings by sucking the life-force out of the peasantry—the feudal aristocracy and the rising modern state. We also saw how this forced the peasant to produce foodstuffs for sale, for which a market was opening up in the towns. In itself this was enough to disrupt the balance of the Mark community, whose entire economic system presupposed self-sufficiency—with little or nothing coming in from the outside, and nothing leaving the village, or at least nothing of importance.

Originally, nearly all Mark communities strictly forbade the removal or sale of any type of produce which was of use to the community, such as hay, wood, straw or manure, without the permission of the members of the village. The crops harvested in the Mark were also intended to be consumed or used within the village. The same applied to animals bred in the village. Pigs fattened in the village were not allowed to be sold outside the boundaries of the Mark. Similarly, field crops and vines grown in the Mark had to be ground, baked, eaten or pressed and drunk in the Mark, which in many villages led to the emergence of monopoly rights on the part of the feudal lords. The requirement that nothing should be exported, and that village produce had to be consumed in the village often assumed curious forms under the circumstances of feudal exploitation.

Georg von Maurer’s Geschichte der Dorfverfassung contains a passage about a nobleman in Alsace who, in 1540, forced his peasants to drink his sour wine, of which he was the monopoly producer, as corvée in order to empty the barrels to take the subsequent, drinkable, vintage. 'They all had to pay a visit to the wine three times each week, and ceased to pay the noble, except for bread and cheese. Having drunk their fill, the peasants set about each other: the squire then fined them for their wantonness, and so ended up with more money for the wine than if he had sold it' (Maurer, Geschichte der Dorfverfassung I, p. 316). Our present-day liquor-squires, the Schnappsjunker, should have erected a monument to this valiant hero, who knew, even in those long-past days, what it meant to take a firm stand for alcoholism, profit and Christian propriety.

The limitations imposed by such monopoly laws proved to be unenforceable and futile once production for the market became a
necessity for the peasantry. Inevitably, the steady export of nutritional material to the towns, which no longer returned it to the land, gradually exhausted and impoverished the soil.

However, the economic equilibrium of the Mark was disrupted in quite a different way. The transformation of the products of the land into commodities with a market value also meant the transformation of the land itself into a commodity with a value. When agricultural commodity-production began to expand at the beginning of the Modern Age, land and soil were no longer available in the same abundance as when the Germanic tribes first settled and replaced the nomadic pastoral economy – supplemented by hunting and a little, very primitive, tillage – by the three-field system.

Each mode of production corresponds to a maximum sustainable population for a given area of land. We can only conjecture whether the Germanic tribes had reached this maximum at the time of their migratory movements, whether it was overpopulation which compelled them to invade the territory of the Roman Empire rather than the latter's defencelessness. What is certain is that the transition to a higher mode of agricultural production, to which they owed their contact with Roman civilisation, brought about an enormous extension in the food-producing capacity of the Germans in the post-migratory period. The small population could only go a little way towards meeting the demands of the new mode of production which favoured the production of large numbers of offspring. As a consequence, once the migratory storms and their fronts had abated, and relative peace and security had been established in Europe, the population began to expand rapidly. The increased population easily found the land it needed in the extensive waste and wildernesses. If a population of a village grew, either the village's arable land would be extended through clearing the undivided commons or a part of the latter would be detached and used to establish a new Mark community, a daughter-village adjacent to the original village. Alternatively, princes might endow monasteries or their noble retainers with large tracts of barely cultivated, or uncultivated, land on which the feudal lords settled incoming colonists at low rents. Through forcing back the Slavs, more and more areas were opened up for German colonisation.

The Hussite Wars in Bohemia and the overthrowing of the Teutonic Order in Poland brought an end to the eastwards advance of German colonisation at the beginning of the fifteenth century. At the same time, the population of Central Europe had grown sufficiently if not to exceed the maximum sustainable population, at least to eliminate the shortage of labour-power, and for land to cease to be available in such abundance.
that its supply did not have to be heeded. The prospect of a monopoly in the most important of all the means of production had become a real one— and the desire to establish such a monopoly was not long in coming. The bitter and persistent struggles over land which developed between the peasantry and the feudal nobility, extending into the modern period, and indeed, never really ending, passed through their decisive phase in Germany in the battles of the sixteenth century. The feudal aristocracy was almost universally victorious. By subordinating itself to the rising power of the state it could enlist the state's support against the peasantry.

The victorious nobility itself then set about producing commodities through a remarkable mixture of capitalism and feudalism. It began to produce surplus-value on large estates, not usually with wage-labour but with feudal forced labour. The way in which they practised forestry, arable farming and pasturage all encroached on the peasant's land and undermined the equilibrium of the three-field system.

Forestry was the most ideally suited of the three to feudal-capitalist exploitation and rural large-scale commodity-production. Once urbanism had made wood into a desirable commodity—and in the absence of coal or iron a much more important building material and fuel than now—the feudal lords tried to grab forest lands, either by taking them off the Mark communities to whom they belonged, or, where they themselves owned them, by restricting peasant access for the collection of wood and straw, or for grazing.

The fifth of the Twelve Articles of the rebellious peasants in the 1525 Peasant War reads, for example:

In the fifth place we are aggrieved in the matter of wood-cutting, for the noble folk have appropriated all the woods to themselves alone. If a poor man requires wood he must pay double for it. It is our opinion in regard to a wood which has fallen into the hands of a lord whether spiritual or temporal, that unless it was duly purchased it should revert again to the community. It should moreover be free to every member of the community to help himself to such fire-wood as he needs in his home. Also if a man requires wood for carpentering, he should have it free, but with the knowledge of a person appointed by the community to oversee the exploitation of the woods.

The exclusion of the peasantry from the use of forests and woodland was bolstered by the development of the organised hunt.

Originally the weapons of the hunt were the weapons of war, and the hunt itself was a kind of preparatory school for war—hunting and
warfare were intimately connected. As long as the hunt was necessary to meet the needs of the free commoner, the latter was also a warrior. Once hunting took second place to arable farming as a source of food, further encouragement was given to the division of labour between farmers \( \text{[Nährstand]} \) and soldiers \( \text{[Wehrstand]} \), between feeders and fighters, although this development was not its original cause. And in turn, the more warfare became a matter for the aristocracy, the more hunting became the sport of nobles.

The abolition of the noble's medieval functions of warrior and administrator of justice by the modern state rendered him superfluous: he became a courtier, thronging the court of the monarch, both for amusement and to plunder the state's coffers. On his rare visits to his estate his only idea of pleasure was the hunt.

Hunting and tilling cannot both flourish at the same time, however. A large stock of game requires extensive forests, and also represents a constant source of loss and damage to the peasant farmer.

The more superfluous and wanton the nobility became, the more the interests of hunting prevailed over those of cultivation. A limit was placed on advances in cultivation which threatened to restrict the supply of game; it was forbidden to clear woodland and severe punishments were meted out to peasants caught hunting - they were even prevented from killing the game which ravaged their fields.

This problem was reflected in the Twelve Articles of the Peasant War. The fourth article reads:

In the fourth place it has been the custom heretofore, that no poor man should be allowed to catch venison or wild fowl or fish in flowing water, which seems to us quite unseemly and unbrotherly as well as selfish and not agreeable to the word of God. In some places the authorities preserve the game to our great annoyance and loss, recklessly permitting the unreasoning animals to destroy to no purpose our crops which God suffers to grow for the use of man, and yet we must remain quiet.

In fact matters went from bad to worse in the following centuries. It took the French Revolution to put an end to this situation in France. But in Germany, a full 100 years later, the Prussian squires, the Junker, still had the gall to demand in the \text{Reichstag} that peasants ought to be obliged to feed the squire's hares with their cabbages, without any serious opposition from most of the members of the assembly.

In those areas where a market had developed for wood, the obvious and in fact rather easy thing to do was to turn forests into private
property and then run them along capitalist lines – though under feudal forms: similarly, where a large market emerged for a product of pastoral farming – primarily wool – it was equally obvious and no less difficult, given a favourable soil and climate, to set about capitalist pastoral farming, which, like forestry, required neither a large force of wage-labourers nor major investments of capital, and whose basic techniques were essentially quite simple. Like capitalist forestry, extensive capitalist pastoral farming needed virtually nothing apart from large tracts of private pastureland; and where the combination of market and natural circumstances urged it, the lords put in an honest effort at creating such tracts in the fifteenth and sixteenth centuries in England and Spain, and later in some parts of North Germany which offered favourable conditions for sheep-farming. The mildest form was the lord's monopolisation of grazing rights on the common pasture. Complaints about this were first heard in Germany shortly after the Peasant War. But frequently the profits to be made from sheep-farming impelled the lords to make the common pasturage into their private property, and also to take over peasant plots and turn arable land into pasturage.

Where a market established itself for arable crops, the lords also sought to supply it with the produce from their own holdings: but this was a more difficult matter than forestry or pasturage. Although requiring less additional land, it took more labour and a certain outlay of capital.

In the Middle Ages the feudal lords usually only cultivated a part of their land themselves, whether directly, or indirectly through a steward. The rest of the land was distributed amongst tributary tenants, who had to render service either in the form of produce or as corvée on the lord's own land, the demesne. As we observed, the rise of an urban market for foodstuffs created both the possibility and the temptation to commute these services into cash payments. However, wherever a lord began to use his farm for production for the market, another tendency came into play: wage-labour was scarcely developed, and the cultivation of the demesne relied on the corvée. The greater the surplus demanded from the demesne, the more labour-power was required and the greater the area of land needed. One result of this was that the lords strove to extend their estates at the expense of the peasantry, either by cutting back the undivided Mark – that is, pastureland – or more directly, simply by driving the peasants off the land. A further result, the attempt to step up the amount of corvée – which placed certain limitations on the eviction of peasants, since a reduction in their numbers would reduce the amount of labour-power available to work on
the demesne – was itself given a boost by peasant evictions, since the drop in the number of workers meant that each had to work all the harder.

The development of commodity-production thus initiated a number of processes, all of which acted to curtail the peasant's tillage, and in particular, pasture and woodland, long before any genuine overpopulation had arisen – meaning a level of population higher than that sustainable by the prevailing system of agriculture.

This shook the foundations of peasant life.

And the profound transformation in the conditions of peasant life was already becoming evident in the peasant's diet.

The Peasant Becomes a Starveling

We hope the reader will indulge a small digression here on a subject which, although only indirectly related to our main theme, may nevertheless throw some additional light on it.

One currently fashionable school of thought, based on the ideas of Comte and Spencer, has a great fondness for taking natural laws and transposing them directly on to society. Natural science has enjoyed such dazzling successes over the course of this century that those engaged in the study of nature have been seduced into thinking that they possessed the key to every riddle, including riddles quite remote from their own field. At the same time some sociologists have found it highly convenient to transpose the established laws of nature on to their field, instead of undertaking the complex studies required to unravel the laws specific to society.

One of the axioms of this natural-scientific sociology is the close connection between climate and diet. For example:

Even if an equal weight of food is consumed in hot and cold climates, Infinite Wisdom has ordained that very unequal proportions of carbon shall be taken in it. The fruits used by the inhabitants of Southern climes do not contain, in a fresh state, more than 12 per cent of carbon, while the blubber and train-oil which feed the inhabitants of polar regions contain 66 to 80 per cent of that element. (Liebig, *Familiar Letters of Chemistry*, p. 347)

Buckle concluded from all this that the slavery of the Hindus was the 'natural state' of this people, 'to which they were doomed by physical laws utterly impossible to resist', since the climate had made them vegetarians and the luxuriance of plant growth in the tropics had

We would not want to deny the widely recognised physiological principle that people living in cold climates need more carbon or meat than people in warm climates. However, the difference is not as great as is customarily supposed. Even within the Arctic Circle vegetable nourishment is still highly regarded. 'Apart from meat and fish', writes Nordenskjöld, 'the Tschuktschen consume an enormous mass of vegetables and other plant material. Authors who refer to this people as living exclusively from material derived from the animal world are therefore committing a grave error. In fact the Tschuktschen appear more "herbivorous" at certain times of the year than any other people known to me' (Nordenskjöld, *Die Umseglung Asiens und Europas*, pp. 108ff.). And at the other extreme, and in spite of Buckle who claims that the normal tropical diet consists 'almost entirely of fruit, rice and other vegetables' (p. 34), a wholly vegetable diet is, in fact, an exception. 'It is sheer fable that the demand for meat is less in Africa' writes Buchner (Buchner, *Kamerun*, p. 153) – an observation amply borne out by the facts. A meat diet is highly prized in Africa. The diet of the natives of the Congo must be especially delectable: according to Schweinfurth, with the exception of people and dogs, no animal is scorned as a source of nourishment – be it rat, snake, vulture, hyena, scorpion, ant or caterpillar. The Indians of British Guiana, living right on the Equator, seem to have similar tastes. 'Their main diet consists of game and fish, although they are not averse to rats, monkeys, alligators, frogs, worms, caterpillars, ants, larvae and beetles' (Appun in Peschel, *Völkerkunde*, p. 163). Far from living merely on fruit, many peoples in the tropics have even incorporated human flesh into their diets: in fact, cannibalism appears to be unique to the tropics.

A free choice of diet requires a level of cultural development sufficient to give substantial dominion over nature. The lower the stage of civilisation, the more a people must put up with what they find: instead of choosing a diet, they have to adapt to what is available. The Eskimo does not live chiefly on meat and train-oil because the climate prescribes such a diet, but because nothing else is available. A fruit diet is ruled out on the simple ground that insufficient fruit grows in Greenland. The value attached to the meagre supplies of vegetable material available is proof enough of the fact that an exclusively meat diet is not chosen on physiological grounds. In summer the southern Eskimos collect a few berries; the only vegetable matter known to those who inhabit the far north is what they find half-digested in the stomachs of reindeer – which they consider a great delicacy.
This is, of course, an extreme example: by far the bulk of the earth's surface supports a rich variety of animal and plant food. Humanity is not in general as restricted in its choice of diet as that portion which lives in the polar regions. But neither is there a completely free choice of diet. Most foodstuffs are available in limited amounts at specific times, and cannot be obtained without effort. Which sources of food are in a position to provide adequate and permanent sustenance depends neither on their carbon content, nor on human need for them, but mainly on the degree and character of technical knowledge – the art of dominion over nature: in short, the mode of production. The effects of climate, topography and other natural circumstances represent a vanishing term when set against the specific impact of the mode of production. Consider, for example, the various tribes of American Indians who live at much the same level of culture: irrespective of whether they inhabit the Pampas, the Rocky Mountains, the Amazon Basin or the Missouri, all consume much the same proportions of fish, game and vegetables, with only highly localised conditions – such as a particularly rich fish-bearing river – causing any noticeable differences, although all these areas differ climatically.

And if a people's mode of production changes, their diet will change too, without any change in the climate. The marvellous climate of Southern Italy does not explain why the Lazzaroni of Naples have to be content with a diet of macaroni, anchovies and garlic. As we know from the Iliad and Odyssey, the Greeks of the heroic age, living under the same climatic conditions, enjoyed a diet not only consisting of large amounts of meat, but also of 'prime fat', a diet which could also satisfy the needs of an Eskimo.

The Hindus, too, were not always vegetarians. Before entering and settling the valley of the Ganges they lived the life of nomadic shepherds, feeding mainly on the milk and meat of their flocks. It required a change in their mode of production for cultivation to displace shepherding: the Ganges valley offered favourable conditions for crops but not for extensive pasturage. The slaughtering of cattle – the plougher and giver of milk – gradually came to be seen as a sinful waste.

A similar revolution in the peasant diet took place in our own part of the world following the fifteenth century. Up until the fourteenth century woodland, pasture, water and the hen-yard provided plentiful meat, which was the customary diet of common folk throughout Germany. It was not unusual for a day-labourer to eat meat two or three times a day.

Klöden's calculations indicate just how widespread meat consumption was at that time: in 1308 annual meat consumption per head was at least
250 lbs per head in Frankfurt-an-der-Oder, whereas the current figure for Berlin is between 130 and 150 lbs. In Breslau it amounted to a mere 86 lbs between 1880 and 1889.

The turning point was reached in the sixteenth century, when the peasantry was excluded from forests and water which, instead of providing the peasants with nourishment, sheltered the game which ravaged their food supply. Pasturage was restricted and any cattle the peasant could raise had to be sold in the town to bring in needed cash – only draft animals were excluded. The German peasant's table was rapidly impoverished, and like the Hindu, the peasant became a vegetarian.

We encounter the complaints as early as 1550: Heinrich Müller, the Swabian writer, wrote, for example, that

My father – himself a peasant – well remembers a time when peasants ate very differently from today. Meat and food generally was in plentiful supply every day, and at fairs and festivals the tables sagged under the weight of food piled on them: wine was tippled like water, and you could eat, and take away, anything you wanted – there was growth and plenty. Things are different now. Times have been hard and expensive for several years and the diet of the richest peasants is now almost worse than what day-labourers or servants used to eat.

The drop in the production of cattle also soon inevitably led to a drop in the production of grain, since less cattle meant less manure. Often tillage suffered because the contraction in the stock of animals meant that fewer beasts were available for ploughing. The multiplication of feudal labour services by 'hand and span' – that is, digging and ploughing – worked in the same direction, since they took the peasants off their own land at precisely the time the labour was most needed.

The amount of products which agriculture had to ship off to the towns increased, necessitating compensating for the ensuing deficit through the increased application of fertilisers and intensified tilling, just at the moment when the amount of manure and time available for working the soil was contracting. The upshot was a decline in peasant agriculture, increasing soil-exhaustion and the growing infertility of arable land. This was barely able to keep the peasant's head above water in good years; and a poor harvest or hostile invasion – once a temporary setback – were now enough to bring about total ruin.

Following their conversion to vegetarianism in the sixteenth century, the peasants in some areas ceased to have enough to eat at all by the
seventeenth and eighteenth. Labruyère's descriptions of the state of the French peasantry 100 years before the Revolution are well known.

There is a type of timid creature, a mannequin, dark-skinned, emaciated and tanned by the sun; they live in the countryside and are chained to the soil, which they dig and turn with indefatigable perseverance. They have an intelligible voice, and when they stand up reveal a human face. They are in fact people, people who retreat to caves by night where they live on black bread, roots and water.

In some villages the peasants lived merely on grass and wild plants. Massillon, Bishop of Clermond-Ferrand, writing to Fleury in 1740 observed: 'Our rural folk live in frightful poverty for half the year most go without even the barley and oatmeal which makes up their only nourishment.'

Circumstances were particularly appalling in years of poor harvests, and because of the diminishing fertility of the soil these were ever more frequent. Between 1698 and 1715 the population of France fell from 19 million to 16 million as a result of a rapid succession of years of distress.

Louis XV's reign was more peaceful than Louis XIV's, and the burden of war correspondingly less; but the pressure of feudal burdens was undiminished. In fact, they became unbearable and many peasants simply abandoned the property which bound them to poverty, and discovered that they were better off as wage-labourers or even beggars or robbers. By 1750, as Quesnay observed, a quarter of the cultivable land was untilled. And shortly before the French Revolution Arthur Young noted that a third of the arable land (more than 9 million hectares) lay uncultivated. According to the Agricultural Society of Rennes, two-thirds of Brittany lay fallow.

Not every country in Europe was in the same state as France, where the peasantry was more subject to the absolute rule of the government – and hence caught in the clutches of a greedy and short-sighted court nobility whose arrogance was only matched by its lack of scruple. Nevertheless, matters were bad in Germany too, and flight from the land a common occurrence.

The Three-field System Becomes an Unbearable Burden on Agriculture

Even in those areas where the wantonness of the squirearchy had not forcibly curtailed the feeding capacity of the prevailing system of cultivation, this system itself emerged as a major fetter during the course
of the eighteenth century. In some districts the population density had increased so much that it became necessary to expand the feeding potential of the land by advancing to a higher system of farming. Such a system already existed in England, where a unique set of circumstances led to the destruction of the foundations of feudal agriculture in a series of revolutions extending from Henry VIII's Reformation up to the Glorious Revolution of 1688, which cleared the way for the development of intensive, capitalist farming. Pasturage was replaced by stall-feeding and forage and root crops planted in addition to grain. It proved impossible, however, to transpose these results to the Continent without at the same time initiating a general revolution in prevailing property relations. The scattering of individual strips and the obligation to abide by communal decisions as to which crops were to be planted blocked any innovation within the three-field system. Those peasants who took up the cultivation of the new crops, such as potatoes, had to do so in their own kitchen gardens where these obligations did not apply, or on the larger holdings which were not subject to communal cultivation.

Food production did not only have to be extended: it also had to be adapted to market demand. Traditional agriculture began to be an intolerable burden for the larger peasant who produced a significant surplus for market.

The medieval mode of production was ideally suited to a community of equals, sharing a common standard of welfare, and producing for their own consumption. The practice of communal agriculture, with its rigid rotation of summer grain, winter grain and fallow was perfectly adequate for such a society. The arrival on to this scene of the market, with its rapidly changing demands, wrought dramatic changes: inequality developed between the inhabitants of the village, with some scarcely producing more than they needed, or just enough for their own requirements, whilst others produced a surplus. One group, the smaller peasants, continued to produce for subsistence and clung to communal cultivation. For others this became a fetter, since regardless of what the market wanted, they were shackled to what the commune prescribed. A similar conflict of interest arose over the remnants of the common pasture. This was needed by the small peasants: lacking the means to move on to a higher form of agriculture, the division of the common pasture would have made it impossible for them to continue raising cattle. Most acutely, they needed more manure. The division of the common pasture may have provided a little more land to the individual peasant, but would have cut down the availability of manure since it would have necessitated a reduction in the size of the herd. In contrast, the big peasants thought it a sinful waste to use land for grazing which...
they could exploit much more effectively using their new methods: and they had on their side the theoreticians, the representatives of the more advanced agriculture of England.

The adoption of this form of agriculture meant the destruction of the compromise between rural communism and private property which had characterised medieval agriculture. Complete private property had to be established, the common pasture apportioned, common rights and obligations abolished, the scattered strips consolidated, and the property-holder had to become the full possessor of a cohesive tract of land, on which agriculture could be practised in accordance with the dictates of the market and competition.

Despite the need for such a revolution in rural property relations, economic development did not throw up a class within the rural population with the necessary motivation or power to carry such a revolution through.

However, agriculture today is not a structure existing in a vacuum: its development is intimately related to social development in general. That drive towards revolution which agriculture could not produce itself was supplied by the towns. It was economic development in the towns which had totally transformed economic conditions in the countryside, and necessitated the revolution in rural property relations. Within the towns themselves the same development had created the revolutionary classes which, by rising against feudal power, carried the political and juridical revolution out into the countryside and set about pushing through the long overdue renovation of rural social relations, often with the support of the mass of the peasantry but frequently in the teeth of their opposition.

The first to try to implement this new order was the town-based bureaucracy of enlightened despotism — not always happily, often rigidly, and usually, despite their grand tone, on a minor and irresolute scale. The transformation of rural property relations only really began to acquire momentum — first in France and then under French influence in neighbouring countries — after the rising of the revolutionary classes in Paris in 1789 under the political leadership of the bourgeoisie. The storming of the Bastille sent out the signal to the servile peasants to throw off their feudal burdens.

The transformation was violent and illegal in France — in one blow it not only rid the peasantry of its feudal burdens but also gave it land confiscated from the church and émigré estates, at least where the bourgeoisie itself had not already grabbed them.

The defeat at Jena forced Prussia to undertake such a transformation. Like everything else in Germany, it passed off peacefully and legally:
that is, the bureaucracy oversaw the inescapable process as cumbersomely and hesitantly as possible, with the maximum expenditure of time and labour, always anxiously striving to retain the consent of the Junkers who eventually reaped the rewards of the whole procedure, which still remained unfinished in 1848. The price the peasants had to pay to the Junkers for this peaceful and legal path was a high one – cash, a part of their land, and new taxes.

It is safe to assume that the sum paid by the peasantry to the aristocracy and the exchequer for commuting unlawfully imposed burdens amounted to at least 300,000,000 thaler. A billion marks to get back the tiniest portion of the land stolen 400 years before unencumbered by feudal burdens! The smallest part because the aristocracy and the exchequer kept the vast bulk of it in the form of Junker estates and other domains. (Engels, 1849, Preface to Wolff’s Schlesische Milliarde)

Recent studies have confirmed Wolff’s findings. Russia passed through a similar process of modernisation after the Crimean War. The peasants were not only relieved of serfdom, but also of their best land.

But regardless of how unsatisfactory the peaceful and legal revolution proved to be, the end result was the same everywhere – the lifting of feudal burdens on the one hand, and the abolition of the primitive communism of the soil on the other, with the establishment of complete private property in the land and soil. The way was cleared for capitalist agriculture.
Modern Agriculture

Meat Consumption and Meat Production

The bourgeois revolution provided the juridical foundation for the new agriculture, whose technical and social prerequisites were already in existence. The new agriculture had to meet two main requirements: an increased supply of manure, in other words increased stock-keeping with a reduction in the area devoted to fodder, and greater adaptability to the needs of the market.

The increase in livestock not only fulfilled a requirement posed by arable farming, but also met a need thrown up by the market. Although per capita meat consumption had been falling since the sixteenth century amongst the urban population, this was never expressed as a general absolute decline. On the contrary, the growth of the urban population was generally very rapid, and the decline in per capita meat consumption never matched the fall observable on the land. Despite widespread poverty, living standards were higher in the towns – partly as a by-product of the fact that capitalists and aristocrats preferred to consume the fruits of their exploitation of the countryside there, and partly because the concentration of wage-labourers facilitated the successful prosecution of wage struggles. Added to this, the reproduction of labour-power in the unhealthy living and working surroundings of the towns was more expensive than in the countryside. Cramped and shut in at work, and often subjected to an excessive and one-sided strain on nerves, rather than muscles, the town dwellers' efforts to keep fit for work imposed a greater need for an easily digestible diet of meat than that experienced by those living on the land. The relatively greater expansion of meat consumption in the towns vis-à-vis the countryside may also have been encouraged by the fact that, prior to the arrival of the railway, livestock was one of those rural products which – when still alive – could be very easily transported over considerable distances, and could therefore be taken to remote markets.

Settegast calculated the following transport costs by road as a percentage of the value of the commodity, per hundredweight and mile: straw 15, potatoes 10, hay 7.5, milk and fresh fruit 3.75, rye, barley and
oats 2, wheat and pulses 1.5, livestock 0.25. The difference between the transport costs of livestock and the other products, even wheat, is enormous.

Figures showing the gulf between meat consumption in the towns and countryside are available for France. According to the 1882 Enquête per capita meat consumption was as follows. In Paris 79.31 kilos, in other towns 58.87 kilos, in rural areas 21.89 kilos, with a national average figure of 33.05 kilos.

Nevertheless, since 1882 there has been some trend towards an equalisation between town and country, with a reduction in the towns and an increase in the country. According to the 1892 Enquête, urban per capita meat consumption fell from 64.60 kilos to 58.12 kilos between 1882 and 1892; in the same period the figure for the rural population rose from 21.89 to 26.25 kilos.

Even if there were no rise in the standard of living of the population – urban or rural – the faster capitalist large-scale industry, the transport system and the towns expand, the faster the growth in the demand for meat. As long as the towns continued to expand rapidly enough, meat consumption could increase despite a fall in living standards in the towns, in the rural areas, or in both at the same time. The growth in meat consumption – one of the favourite themes of the present system's apologists – is anything but an unmistakeable sign of increased national welfare: the much less disputed and more apparent fall in the rural population compared to the rapid absolute and relative growth in the urban population is often sufficient explanation for the growth in the consumption of meat – where such a growth does in fact take place. Such growth must also be encouraged by the decline in fertility – meaning an increase in the meat-eating age groups relative to those who eat little or no meat, namely small children.

Von Gerlach's article on meat consumption and the price of meat in the Handwörterbuch der Staatswissenschaften cites a number of instances of towns in which meat consumption actually fell during the first half of this century. In Munich the annual per capita consumption of beef, veal, mutton and pork, in kilos, was as follows: 1809-19, 111; 1819-29, 104; 1829-39, 93; 1839-49, 86; 1849-59, 75. Since the 1850s consumption has increased somewhat.

In Hamburg average annual meat consumption for a family, in lbs, was as follows: 1821-5, 538; 1826-30, 523; 1831-5, 452; 1836-40, 448; 1841-5, 429; 1846-50, 339; 1851, 379; 1852, 372.

Paris provides the most striking of recent examples of falling meat consumption. Between 1887 and 1896 the population of Paris increased by 300,000 whilst annual meat consumption fell in the same period from 185
million to 173 million kilos – not merely a relative but an absolute decline for the city. But this is exceptional. As a rule the absolute growth in meat consumption in the large towns and cities – and hence national growth – is sufficiently fast to outweigh any relative drop in the cities themselves.

The absolute increase in meat consumption was made possible by the increase in livestock which marked the first half of this century. For example, the number of sheep in the eight former provinces of Prussia was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Fully improved</th>
<th>Semi-improved</th>
<th>Native sheep</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1816</td>
<td>719,209</td>
<td>2,367,010</td>
<td>5,174,186</td>
<td>8,260,405</td>
</tr>
<tr>
<td>1849</td>
<td>4,452,913</td>
<td>7,942,718</td>
<td>3,901,297</td>
<td>16,296,928</td>
</tr>
</tbody>
</table>

Sheep-rearing reached a high point in the early 1860s, with a total of 19,314,667 by 1864; however, by 1883 the number had fallen back to 12,362,936. Foreign competition provides the main explanation for this fall, a subject we shall return to later. It marked the beginning of a new epoch for agriculture. But for the present we are concerned with the situation as it was at the beginning of the 1870s – and we shall only refer to more recent material if the basic tendencies have remained unchanged and suitable earlier material is not available. This to avoid any possible misunderstandings.

Other types of livestock increased as well. In the eight former Prussian provinces the figures were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>1816</th>
<th>1840</th>
<th>1864</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horses</td>
<td>1,243,261</td>
<td>1,512,429</td>
<td>1,863,009</td>
</tr>
<tr>
<td>Cattle (excl. veal)</td>
<td>4,013,912</td>
<td>4,975,727</td>
<td>6,111,994</td>
</tr>
<tr>
<td>Pigs</td>
<td>1,494,369</td>
<td>2,238,749</td>
<td>3,257,531</td>
</tr>
<tr>
<td>Goats</td>
<td>143,433</td>
<td>359,820</td>
<td>871,259</td>
</tr>
</tbody>
</table>

In fact the increase in meat production was greater than these figures show, on account of the simultaneous and substantial increase in the
average weight of individual animals. Thaer put the average living weight of a cow at 450 lbs; approximately 25 years later (in 1834) Schweizer assumed a figure of 500–600 lbs for the same animal. Nowadays there are many farms on which the average weight of a cow is 1,000 or 1,200 lbs.

According to the French 1892 *Enquête*, average meat weights, in kilos, were as follows:

<table>
<thead>
<tr>
<th></th>
<th>1862</th>
<th>1892</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxen, cows, steers</td>
<td>225</td>
<td>262</td>
</tr>
<tr>
<td>Calves</td>
<td>39</td>
<td>50</td>
</tr>
<tr>
<td>Sheep</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Pigs</td>
<td>88</td>
<td>94</td>
</tr>
</tbody>
</table>

This increase in meat production was accompanied by an increase in grain production, a phenomenon most clearly seen in post-revolutionary France. Estimated production in hectolitres was as follows:

<table>
<thead>
<tr>
<th></th>
<th>1789</th>
<th>1815</th>
<th>1848</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>34</td>
<td>44</td>
<td>70</td>
</tr>
<tr>
<td>Rye, etc.</td>
<td>46</td>
<td>44</td>
<td>40</td>
</tr>
<tr>
<td>Potatoes</td>
<td>2</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

**Crop Rotation, Division of Labour**

What led to these astounding results? They were the product of the total transformation of agriculture which followed the English revolutions of the sixteenth century and which arrived in Europe after the revolution of 1789, and its various offshoots.

Once the landowner had acquired full private property in the land and soil, the communal obligations of the open-field system, communal stubble and fallow grazing had been terminated, and the commons divided, there was no longer any necessity for the landowner to feed livestock on the pasturage. The introduction of a number of fodder crops delivering much larger volumes of forage than a comparable area of pasture land had already supplied the technical preconditions for a
higher form of livestock farming. The conversion of pasturage to arable land, and its planting with fodder crops – with the stock fed in stalls instead of being put to pasture even in summer – meant that the same area could carry a much larger number of animals without encroaching on grain-producing land. In fact, the advantages of the cultivation of fodder crops and stall-feeding were so great that it was not even necessary to devote the pasturage turned over to arable farming exclusively to the growing of fodder crops. The amount of livestock could be increased with only a portion under fodder, with the remainder available for grain.

Enormous areas of land were freed for grain production. According to Roscher, under the three-field system on average soil a mere 20 per cent of a village's arable land could be used for the production of edible crops. In contrast, Thünen estimated that with crop rotation and stall-feeding 55 or even 60 per cent could be used for grain.

The increase in livestock also meant an increase in the amount of animal manure and animal muscle-power available for tillage. This on its own could have improved cultivation. Not only did the acreage devoted to grain increase, but yields also rose – all due to this revolution. The 1892 French *Enquete* cites the following average wheat yields per hectare:

<table>
<thead>
<tr>
<th>Hectolitres</th>
<th>Hectolitres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1816-20</td>
<td>10.22</td>
</tr>
<tr>
<td>1821-30</td>
<td>11.90</td>
</tr>
<tr>
<td>1831-40</td>
<td>12.77</td>
</tr>
<tr>
<td>1841-50</td>
<td>13.68</td>
</tr>
<tr>
<td>1851-60</td>
<td>13.99</td>
</tr>
<tr>
<td>1861-70</td>
<td>14.28</td>
</tr>
<tr>
<td>1871-80</td>
<td>14.60</td>
</tr>
<tr>
<td>1881-90</td>
<td>15.65</td>
</tr>
<tr>
<td>1891-5</td>
<td>15.83</td>
</tr>
</tbody>
</table>

But the effects of the transformation in the relations of production went still further.

Once the landowner was in full possession of the land, there was no longer any necessity for land not required for feeding animals to be restricted to grain.

Other crops demanded by the market – the requirements of which exercised a more and more decisive sway over what was grown – could also be cultivated: either crops which were never grown under the three-field system, or were only permitted in individuals' gardens, crops intended for human consumption such as potatoes and pulses, or commercial crops (oil seeds, such as rape, poppies etc., textile plants
such as flax or hemp, dye-plants, such as madder or woad, spices, hops, cummin and commercial crops such as tobacco).

The succession of these different crops and their rotation with grain and fodder crops revealed that each depleted the soil to a different extent, and that a rational succession of different crops could bring about a substantial increase in yields. One type of plant — cereals, oil-seeds and textile — drew its nourishment mainly from the top-soil. These plants consumed the soil. Others conserved, and even improved it, either by holding down weeds through creating shade, or rendering the subsoil usable by loosening up the earth with their deep roots, and some, like clover and the pulses, by fixing the nitrogen they collected from the atmosphere.

The Romans knew of the benefits of crop rotation. However, its large-scale application did not take place until the mid-eighteenth century in England, from where it spread to France and Germany. It only became universal in this [the nineteenth] century.

Crop rotation allowed an extraordinarily large number of combinations, which could be varied according to the changing requirements of the market and the demands of cultivation — a number of combinations which grew in step with the introduction of new crops into European agriculture as result of increasing trade and scientific research. According to Hecke, Central European agriculture adopted 100 different types of cultivated plant during this period.

The development of crop rotation nevertheless went hand in hand with a greater division of labour amongst individual farmers. The three-field system was directed at satisfying the needs of the peasantry and the feudal lord, and as a result exhibited much the same features throughout Central Europe. Each village and each peasant produced the same, irrespective of the local soil conditions. The rise of production for market brought with it the phenomenon of competition. Each farmer was then obliged to produce that particular product — from those for which a demand existed — which could be grown at lowest costs given the soil-type, location, available transport, degree of capitalisation and size of holding. Individual farms developed their own specialities. One took up arable farming, whilst another chose livestock, with a third plumping for orchards or vine-growing. Arable farmers and livestock keepers became further divided into sub-types — for instance, the latter became divided into dairy farmers, fat-stock rearers and breeders.

The division of labour is especially advanced in England and the United States.

In England further sub-divisions are made within one type of useful
animal; for example, in dairy farming where a distinction is drawn between the production of fresh milk for immediate sale, milk for butter-making, and milk for cheese-making. Particular types of cattle are normally used for each specific purpose. The classic example of a country with an extensive division of labour must be North America. (Backhaus, 'Die Arbeitsteilung in der Landwirtschaft', p. 341)

Under favourable circumstances (suitable soil, high wages, good market), this division of labour can lead to a revival of pastoral farming, although in a higher, more intensive, capitalist form requiring high outlays on equipment, supplementary manures, soil improvements and stocking with high-quality animals. Such a modern type of pastoral system can be found, for example, in Southern England. Needless to say, it has nothing in common with the three-field system.

In addition to, and alongside, the division of labour between farms, a division of labour also establishes itself within the individual farm, at least in the larger ones.

In feudal agriculture, the large farm was not markedly superior to the small farm in this respect. The bulk of an estate's labour-power, both human and animal, was supplied by servile peasants who had to use their own tools and implements, ploughs, carts and animals to perform their manual labour and plough on the lord's land. The difference between the large and the small farm did not consist in the fact that the former had better equipment and a more extensive division of labour than the latter. The difference was that the same equipment which peasants used assiduously and enthusiastically when working for themselves, was used on the lord's land with that degree of indolence and carelessness only possible when undertaking forced labour for another.

A division of labour on the large farm superior to that prevailing on the peasant farm required a type of modern agriculture in which both large and small holdings were worked with the proprietor's own implements, animals and workers.

Both the division of labour within the farm and that between farms inevitably produced an improvement in workers, implements and tools, seed strains and breeds of animal. At the same time it also equally inevitably led to an enormous increase in the dependence of the farmer on the merchant.

Not only have peasants ceased to supply all their own wants as far industrial goods are concerned, but they have also ceased being self-sufficient cultivators. They not only have to buy more, and more expensive, tools than formerly, but also a portion of their own foodstuffs,
which their specialised farms no longer produce, or at least no longer produce in sufficient quantity. In particular, the increasing division of labour is associated with an increase in the number of farmers, especially small-scale farmers, who put grain production in second place and who therefore have to buy in grain or flour. In addition, such peasants no longer produce their own seed-corn or replacement stock — at least for larger beasts: this becomes the job of specialised farms who sell the improved seeds and breeds to the farmer, whose choice reflects the specific conditions prevailing on the individual farm. In turn, farmers resell their livestock, either because it is no longer usable for the purpose originally bought — such as a dairy cow which no longer produces enough milk — or because it has reached the stage at which the farmer passes it on to another specialist — such as the raising of young cattle either for work or for milk production. The more specialised the farm, the more specific the use for the livestock on it, and consequently the faster the turnover. This in turn encourages the development of the trader, and increases the dependency of the peasant who cannot have an overview of the market, and who therefore is more easily manipulated. This becomes a plentiful source of ways for cheating and exploiting the peasant.

The more commerce and transport develop, the more the accumulation of capital revolutionises the means of trade and transportation, and the greater the dependency of agriculture on trade.

As well as making the farmer more dependent on the market, this transformation — which is the creation of urban capital — also constantly changes the market conditions with which the farmer has to contend. A branch of production which was profitable as long as the only link between the nearest market and the world market was by road ceases to be so, and has to be replaced, once a railway is built through the district, allowing the incursion of cheap grain: the diminishing profitability of grain may be accompanied, however, by the prospect of a new market for milk. The expansion of transport also means the constant introduction of new or improved crops, and allows the area from which breeding-stock or useful animals can be drawn to be enlarged. English breeding-stock is exported throughout the world; the extent to which farm animals are transported over long distances is best evidenced in the existence of import duties on livestock and the agriculturalists' persistent outcry for their increase, despite the fact that stock is not simply imported for slaughter but also for such agricultural purposes as fat-stock, dairy cows and horses.

The modern revolutionising of agriculture reached a particular pitch once the achievements of modern science — engineering, chemistry, plant
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and animal physiology – were exported from the towns into the countryside.

The Machine in Agriculture

The paramount scientific achievement was the adaptation of machinery for use in agriculture. Following its brilliant achievements in industry, the application of machinery to farming seemed inevitable. Its material base lay in the large modern farm, with its division of labour – first, within the workforce into manual and scientifically trained workers, and secondly through the specialisation of tools and implements and their adaptation to particular appliances – and mass production for the market.

Nevertheless, the mechanisation of agriculture faces more obstacles than the mechanisation of industry. Some of these obstacles are technical in nature: the industrial workplace, the factory, is an artificial creation, adapted to the requirements of the machine. In agriculture, most machines have to work in and adapt to natural surroundings. This is often difficult, and occasionally downright impossible. In general, the application of machinery to agriculture presupposes a high standard of cultivation.

Economic obstacles also block the path to agricultural mechanisation. Whilst industry can use its machinery every day, most machines in agriculture are only required for a short period each year. Other things being equal, the labour-saving capacity of machinery is therefore much greater in industry. Given two machines, each of which can replace ten workers per day, of which one is used for ten days per year, and the other for 300, one will save 100 days' labour a year, and the other 3,000. If each machine wears out after five years, the agricultural machine will only have saved 500 days, whereas the industrial machine will have saved 15,000. If the value of each machine is equivalent to 1,000 days, then the introduction of the machine into industry will yield a net saving of 14,000 working days, as against the waste of 500 days occasioned by the introduction of the agricultural machine.

The fact that in the capitalist mode of production machines are used to save on wages, not labour-power, worsens the position as far as agriculture is concerned. The lower the level of wages, the more difficult it is to introduce machines. For a variety of reasons wages in rural areas are much lower than in the towns, and the incentive to replace human labour-power by machines is accordingly lower.

One further difference between industry and agriculture lies in the fact that in industry, as a rule, machinery does not require workers of
any greater dexterity or intelligence than are employed in handicraft or manufacture. Workers brought up within the modes of production which precede large-scale industry are quite adequate. And the worker employed day in, day out on the same machine soon acquires phenomenal skill in its operation.

Matters are quite different when we turn to agricultural machines. These are often highly complex, and demand a good deal of intelligence on the part of the operator. However, the exigencies of rural life over the last few centuries have not favoured the training and development of the intellect. The machines often lack the labour they need.

And since agricultural workers do not work at the same machine throughout the year, they cannot drill themselves as easily into the skill acquired by industrial workers.

Finally, in contrast to large-scale industry, agriculture is often practised far from railways and machine-shops, rendering the transportation and repair of complex machinery both more difficult and more expensive.

Despite all these obstacles, agricultural mechanisation has increased rapidly - proof of the level of technical excellence already attained.

Comparable figures for developments in France over a period of three decades illustrate the speed of growth there.

<table>
<thead>
<tr>
<th></th>
<th>1862</th>
<th>1882</th>
<th>1892</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steam engines and locomobiles</td>
<td>2,849</td>
<td>9,288</td>
<td>12,037</td>
</tr>
<tr>
<td>Threshers</td>
<td>100,733</td>
<td>211,045</td>
<td>234,380</td>
</tr>
<tr>
<td>Sowers</td>
<td>10,853</td>
<td>29,391</td>
<td>47,193</td>
</tr>
<tr>
<td>Reaping and raking machines</td>
<td>18,349</td>
<td>35,172</td>
<td>62,185</td>
</tr>
</tbody>
</table>

Within the German Reich the number of farms using the following machines amounted to:

<table>
<thead>
<tr>
<th></th>
<th>1882</th>
<th>1895</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steam ploughs</td>
<td>836</td>
<td>1,696</td>
</tr>
<tr>
<td>Sowers</td>
<td>63,842</td>
<td>20,673</td>
</tr>
<tr>
<td>Reapers</td>
<td>19,634</td>
<td>35,084</td>
</tr>
<tr>
<td>Steam threshers</td>
<td>75,690</td>
<td>259,069</td>
</tr>
<tr>
<td>Other threshers</td>
<td>298,367</td>
<td>596,869</td>
</tr>
</tbody>
</table>
The figures show a strong overall increase, especially for threshers: one exception is the sower, which has been displaced by the seed drill, for which no figures were collected in 1882: by 1895 they were in use on 140,792 farms.

The homeland of the agricultural machine is England, where industrial mechanisation was developed earlier than elsewhere and which also offered the best conditions for the incursion of machinery into agriculture. Perels notes that the level of cultivation is high throughout the countryside. Farmers are generally capitalists, and workshops for manufacturing and repairing machinery are plentiful – almost every small town has one – allowing easy repair and maintenance.

Spurred on by the shortage of agricultural labour, and the high wage demands of those labourers available, the United States joined England in the development of agricultural machinery. Mechanisation was also facilitated by the high level of education of the American worker, but on the debit side had to contend with a low level of cultivation, and considerable distances between farms and repair shops. As a result American agricultural machines tend to be more robustly built and simpler in design than the English, although their work is not as perfect as the latter.

In Germany circumstances were less favourable for the development of agricultural mechanisation. In the South and West the land is too parcellised; and in the East, although the large farm predominates, the wages and the level of education of agricultural workers are too low and repair shops too remote. Saxony offers the most favourable conditions: large farms, an intelligent workforce and plenty of workshops. Whereas Baden has only one steam plough, and Württemberg none at all, steam ploughs are at work on 482 farms in Saxony. Throughout the remaining parts of Germany, too, machines have been able to surmount the obstacles in their path, evidenced not only in the figures cited above, but also in the rapid rise in the manufacture of agricultural machinery. Apart from steam ploughs, at which England still excels, and reapers, which are mostly bought in from the United States, Germany produces all the enormous variety of machines which it currently uses.

Saving on labour is not the only purpose of machines, and in agriculture this aspect often takes second place. It probably remains the main consideration in the use of threshing machines, and according to many agronomists, including Goltz, is a crucial factor in the depopulation of the countryside.

Despite the utility and indispensability of the threshing machine for agriculture, its comprehensive application has had an unfortunate
effect on the circumstances of rural workers. Threshing with the flail was once the main occupation of the rural worker during the winter. Mechanical threshing requires far fewer people: it is often carried out in the autumn in order to obtain as great an amount of marketable grain as quickly as possible, in particular where the steam thresher is used. (Goltz, *Die ländliche Arbeiterklasse und der preußische Staat*, p. 144)

Goltz's proposal to obviate the problem is to 'restrict the use of the threshing machine, and in particular the steam thresher', apparently in the interests of agricultural workers, but in fact in the interests of the estate owners, who, as he himself concedes, 'will be amply compensated for any disadvantage arising from such a limitation, if not immediately then in the future, by the greater number of workers made available in the summer' (Goltz, ibid., p. 145).

Fortunately, this conservative beneficence towards agricultural workers amounts to nothing more than a reactionary utopian dream. The threshing machine is far too profitable a proposition for estate owners to renounce its use 'immediately' in the hope of profits 'in the future'. They will therefore continue with the revolutionary activity of driving workers into the towns, and so function as a powerful force both for raising agricultural wages and encouraging the further development of mechanisation.

The threshing machine is not only important because it saves labour, but also – as noted above – because it works much faster than human labour-power. Speed is by no means a secondary consideration where production for the market has replaced production for the direct consumption of the producer. Market fluctuations have to be exploited swiftly – and this is easier for the grain producer, the earlier the grain is marketable, that is, threshed. Whereas threshing, along with domestic industry, once provided winter employment for the country-dweller, the introduction of the steam thresher means that this job is now carried out in the open fields immediately following the harvest, saving both the time needed to bring in the crop and the losses incurred on the way in loading and unloading, a major factor in crops such as rape-seed. Perels' work on mechanisation in agriculture cites examples where 'the considerable costs of the steam thresher have been offset by a single favourable sale, made possible by having the produce more rapidly available for market'.

Speed is even more critical when we turn to the harvester. The success of an entire year's farming depends on the outcome of the harvest. This is concentrated into a few days. Any delay can result in substantial
losses. A machine which can minimise the time taken is therefore extremely valuable: in addition, the saving in time and labour reduces the farmer's dependence on agricultural workers, who – because they are at their most indispensable at harvest time – choose this period to put in their highest wage demands, and are more disposed to go on strike. Even farms which still practise hand-reaping often bring in mechanical reapers – without using them – solely as an insurance against strikes. Kärger's book on the Sachsengängerei – the migration of workers to take up seasonal employment in Saxony – notes how most of the large sugar estates have purchased reapers mainly as a means of preventing their workers from resorting to strikes. In fact, as long as there are plenty of willing workers, hand reaping is preferred since the heavy manuring means that the crop is often laid flat, rendering the machines ineffective. However, since Kärger wrote in 1890 a reaper has been invented which allows lying grain to be cut by machine.

Machinery not only replaces people: its greater precision and power also means that it can perform tasks which people could either never perform, or never perform as well.

The sower, the muck-spreader and the grain-cleaner are all more precise than their manual equivalents. Machine-sowing is superior to hand-sowing, and displaces it even where the latter is cheaper.

Seed drills and dibblers have enabled row planting to be extended to a much larger area, and achieved results unattainable by scattering. 'The highest yields can only be obtained by meticulous drill-sowing' (Settegast).

Seed-cleaners and graders, the trieurs, have replaced winnowing with the shovel, 'a practice still clung to by some dogmatic farmers in the belief that it yields the best seed'. The new machines remove weed-seeds and other impurities, extract damaged seeds, sort the seed-corn by size, weight and shape, and produce a good-quality seed-stock and hence a pure commodity for market.

The most notable of the machines in terms of sheer power is the steam plough.

Grain does not necessarily need deep-ploughing to thrive. Consequently, ploughing was not especially deep under the three-field system.

Eckhard's 1754 work on experimental farming was still suggesting an optimum depth of furrow, depending on soil type, of 2.5, 3 and at most 4 inches, with 5 to 6 inches on exceptional types of soil. He expressly warns against working the field any deeper. Zickens' 1780 General Economic Lexicon proposes similar figures. (cited in Goltz, 'Ackerbau', p. 28)
The arrival of crop rotation was accompanied by the discovery that some of the new crops, such as clover, potatoes and turnips, did best with deeper ploughing. New ploughs were invented, and deeper ploughing made possible by attaching more draft animals to the blade: this was also found to have a beneficial effect on cereal cultivation.

Deep-ploughing minimised the effects both of soil saturation and drought. Deep-ploughed soil was also found to warm up more easily than shallow-ploughed soil, and provided a less welcoming habitat for weeds.

The main aim of deep cultivation, however, was to give plants access to a much larger volume of soil than previously, and by allowing them to extend their roots to enlarge the area from which they could derive their nourishment. All rational husbandry now involves deeper ploughing than at the beginning of the century. Whereas four inches was once the rule, the current practice is double this, reaching up to 12, 15 and more inches.

'Deep ploughing is the basis of the future of our arable farming. In order to perform deep-ploughing in a thorough fashion, a more constant and effective force is required than that of animals' (Perels). Such a force is supplied by the steam engine.

Perels, who has perhaps contributed more than anyone else to the spread of the steam plough in Germany, sets out its advantages as follows:

The advantages of steam over animal traction are, in particular,

The indisputably better quality of work in comparison with the ox or horse-drawn plough demonstrated in more certain harvests and higher yields, and proven everywhere where steam ploughs have been in use over a number of years.

A further advantage consists in the fact that soil cultivation can begin promptly and be concluded by the onset of late autumn. Directly after the harvest, and thus at a time when most farms do not have workers or draft animals available for ploughing, the steam plough can set to work turning over the soil. In late autumn, when work would otherwise have to come to a close, the steam plough can continue in operation without any major problems, allowing cultivation to be finished before winter sets in. This advantage is particularly apparent for areas in which winter arrives very early. (Perels, Die Anwendung der Dampfkraft in der Landwirtschaft, pp. 307-9)

Despite all its advantages, the steam plough cannot be used in all
circumstances: the reason is that it is particularly subject to the obstacles to mechanisation which we noted above. It cannot be used if the terrain is difficult, if the soil is stony or littered with large rocks, if the land is boggy, or if the plots are small. It is not easy to learn how to operate it, and repairs are more frequent than with simpler machines. But the main obstacle lies in its high cost. A steam plough with two locomotives will cost 40,000 Marks or more, and with one locomotive — a less rational purchase — over 30,000. As with steam threshers, a hiring system enables them to be more widely available.

England, the home of the steam plough, also makes the most extensive use of it. The first practical version was not built until the early 1850s, and according to the Royal Agricultural Society's reports, steam cultivation was only being practised on 135 farms in 1867. By 1871 an official survey carried out in connection with the Wolverhampton Exhibition of the same year revealed that 2,000 steam ploughs were then in use in England, compared with a mere 24 in Germany. By 1882 Germany had 836 farms using steam, and by 1895 1,696. They were widely in use on the larger farms in Saxony.

Steam ploughs are also being increasingly used on larger estates in Austria and Hungary.

Steam power is not only used for ploughing, harrowing and rolling. It is also far superior to the horse gin — let alone the hand-operated windlass — for threshing. Grain — apart from rye used for hat-straw — is regularly threshed by steam power on the large sugar beet estates in Saxony, the prototypes of intensive farming. Even amongst the lesser peasantry, the capstan on the threshing machine has been almost wholly replaced by the locomobile (cf. Kärger, Die Sachsengängerei, p. 13).

The steam engine is also performing sterling service as a pump in irrigation and drainage systems, in the preparation of fodder (as a steamer), in grinding mills, chaff cutters and wood-saws. The reason, as Wüst explains: 'Despite its poor thermal efficiency, the steam engine is nevertheless the cheapest and the most universally applicable source of power for agriculture' (Wüst cited in Goltz, 1890, p. 721).

The number of steam engines in agriculture is therefore currently rapidly expanding. In Prussia the number of stationary and mobile steam engines has evolved as follows:
The increase in agricultural steam engines is not only enormous in absolute terms, but also faster relative to other branches of industry.

However, electricity may find that it is called to even greater triumphs than steam – both by supplanting steam engines in their existing territories and replacing human and animal labour-power in tasks presently inaccessible to steam. Electricity is easily transmitted to places which the locomobile and belt transmission of power cannot reach. The current is readily divisible and does not necessarily require coal for its generation. In regions where steam operation is not worthwhile because of the excessive distance from coal supplies, access to cheap water-power can mean that electricity will still allow mechanical ploughing to be a profitable proposition.

The electric plough is also much lighter than the steam plough. 'The large steam plough vehicles, whose steam engines deliver up to 50 horsepower, weigh in operational state – that is with water and coal – up to 22 tonnes, whilst the smallest never weigh less than 14 to 16 tonnes.' The 20 horsepower electric plough weighs eight tonnes, and the 50 horsepower version 12 tonnes. 'The main advantage of electrical over steam ploughs is their lower weight which allows mechanised working in areas where hilly terrain and soft ground previously made it impossible, together with a substantial increase in power for the same weight in comparison with steam' (Köttgen, 'Ist die Elektrotechnik schon befähigt', p. 180).

Electricity is already at work on some rural estates. One expert acquaintance has given us details of the plant installed on the Prat estate in the Tarn Département, France.

A waterfall, delivering 30 horsepower, drives a turbine connected to a dynamo. The dynamo can supply electricity at 40 amps and 375 volts. Cables run through the estate carried on conventional pylons, current being drawn off where required. Power has so far been used exclusively
for ploughing using an 18 h.p. electric windlass.

One of the advantages offered by the presence of electrical power is that of allowing the entire estate to be lit by electricity, and hence making possible night-working when absolutely necessary – such as at harvest time – although this is, admittedly, more of a benefit to the employers than to their workers.

A number of estates have also been equipped with electricity in Germany. In September of last year (1897) reports of experiments even reached us from Kolberg, where 60 farms had been connected to an electric supply from a central source with the aim of improving and cheapening farming operations. However, we have not yet heard whether these experiments have proved a success.

Light railways also figure amongst energy-saving mechanical devices. Transport costs play a major role in agriculture, which has to shift large masses of relatively low value materials such as manure, hay, straw, turnips and potatoes over considerable distances. The construction of good quality agricultural roadways devours both large sums of money and lots of space. Frictional resistances are still very high even on the best surfaces. Light railways have a number of advantages in this respect: a draft animal can move four times the load on a railway that it can on a roadway. And a light railway can be laid down without preparation and great effort in places where a roadway could be not built over moorland, cultivated fields, waterlogged meadows and so on. Not only do they make more effective use of the power of draft animals but also permit the transportation of large volumes of material, indispensable for certain improvements.

Improvements such as irrigation and drainage installations should also be included amongst mechanical aids to agriculture, although compared to the machines mentioned above they are of ancient vintage. Such works were to be found in prehistoric times in the Orient. However, under the three-field system such improvements were only undertaken on a paltry scale in Europe north of the Alps. The climate did not necessitate irrigation works, and wetlands could be made use of as pasturage; as long as virgin land, woodland and pasture could be brought into cultivation there was no incentive, and no labour, to set about melioration in the strict sense of the term. The increase in population density which did eventually occur also coincided with an intensification of feudal burdens, depriving the peasantry of the energy and means to undertake improvements. It was the [French] Revolution which created the preconditions for improvements.

Drainage is a particularly important modern improvement – the removal of water from the soil through a network of fired clay pipes,
first made possible by improvements in brick-making. Drainage makes it easier to cultivate the soil, allows the earth to dry out and become more friable. Drained fields warm up more easily and stay warmer longer, so much so that 'the consequences of drainage are tantamount to a change in climate' (Hamm). In Scotland harvests on drained soil have been observed to be ready for cutting 10 to 14 days before those on undrained land.

In England drainage has increased the gross yield of already cultivated land by 20 to 30 per cent, with some recorded increases of up to 100 to 200 per cent. Many fields can only be used for fodder crops or cereals after being drained.

**Fertilisers and Bacteria**

Chemists and physiologists – the latter assisted by the microscope – have contributed equally as much to the transformation of agriculture as engineers and mechanics.

Under the three-field system all livestock, without exception, had to make do with the fodder supplied by the pasture and meadowland. The development of transport has now placed innumerable feeding materials at the disposal of the farmer – not only those grown, but also those bought in, in particular the cheaply available industrial residues. This releases land, allowing the farmer to grow much more lucrative crops. Animal physiologists have been able to indicate the value of different types of feed, to show how to make the most efficient use of the animal, depending on age, sex and breed, and to instruct the farmer in rearing techniques – in which the machine now plays a large part – so that the animal can be kept in peak condition, and make its fullest contribution to the farm.

In the meantime the plant physiologist has been at work teaching the farmer the conditions which have to be created in order for crops to attain the richest and most enduring yields without wasting materials, time and energy. Apart from the mechanical cultivation of the soil – in which, as we saw, the machine has a large role to play – the main element is the application of fertilisers which ensure that the soil contains soluble material in the proper proportions for plant growth. Chemistry is not only able to specify what these substances are, but can also synthesise the ones which the soil lacks, and which the farmer could not produce in sufficient quantity or only at excessive cost.

Stable manure is not sufficient to maintain the equilibrium of modern agriculture producing for the market – especially a market which does
not return the vast bulk of the nutritional material which it takes from the land.

As a result the soil becomes depleted of the mineral elements on which plants are dependent for growth. Improved methods of cultivation, the growing of fodder crops with deep roots and deep-ploughing may all increase the yield of the fields, but at the cost of a more intense and rapid depredation and exhaustion of the soil.

Soil fertility can be substantially increased but, at the expense of its nutrient wealth, by the progressive physical improvement of the soil, such as mechanical loosening, liming and the increased application of stable manure. In the long term such techniques not only reduce the wealth of the land, but also its fertility. (Werner)

One of Liebig's undying contributions was his exposure of this fact, and the resolute struggle he put up against the intensified depredation of the soil implicit in the improved cultivation of the first half of this century. Liebig believed that the fertility of the land could only be conserved – and in fact could be steadily improved – by returning the constituents removed when agricultural products were taken off to market. The refuse of the towns had to be returned to the countryside.

In his work *Die Chemie in ihrer Anwendung auf Agricultur und Physiologie* (Part I, *Der chemische Prozess der Ernährung der Vegetabilien*) Liebig writes:

A combination of circumstances (introduction of clover, discovery of guano, introduction of potato cultivation and gypsum) has brought about an increase in the population of all the European countries in proportions which do not correspond to the productive capacities of these countries, and which are therefore unnatural. Population has reached such a level that it can only be sustained with present techniques of husbandry under two conditions. One, if a Divine miracle intervenes to restore the fields to the degree of productivity stripped from them by folly and ignorance; and two, if deposits of manure or guano are discovered in volumes approximating to those of the English coalfields. No one with any knowledge or reason would expect either of these conditions to be fulfilled. The introduction of the water-closet in most of the towns of England has resulted in an annual irreplaceable loss of the conditions for the restoration of the means of nutrition for three and a half million people. The quite enormous amounts of fertiliser annually imported by England for the most part return via the rivers to the sea, and the products which these imports give rise
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to are not sufficient to feed the growth in the population. The unfortunate thing is that the same process of self-destruction is taking place in all the countries of Europe, if not on the same large scale as in England. In the cities of the Continent huge sums are expended each year in rendering the conditions for the restoration and preservation of the fertility of the fields inaccessible to the farmer. The preservation of the wealth and welfare of nations, and advances in culture and civilisation, depend on how the sewage question is resolved. (pp. 125, 128, 129, 153)

These observations are now nearly half a century old. The high value of human excrement as a fertiliser and the need to restore it to agriculture have long since been acknowledged, but the solution to the sewage question demanded by Liebig is now even more remote than ever. No one has yet succeeded in devising a system for the removal of human excrement from large cities which meets the requirements of both agriculture and hygiene, without incurring a heavy financial penalty. The system of sewage farms, presently operated in Berlin, appears to be the most acceptable from the standpoint of hygiene since it avoids polluting the rivers by the waste carried in the pipes. However, the small number of sewage farms possible for each town can hardly be viewed as a return of the material extracted from agriculture. If the antithesis between town and country were to be overcome, and the population distributed more evenly over the land, this issue could be very simply resolved without great cost and even with a profit at the present level of technology using the sewage farm system. The prevailing mode of production rules such a solution out, however.

The failure to use the human excrement from towns in agriculture, and with it the growing depredation of the soil through intensive agricultural methods and production for market prompted both science and practice to look for a palliative which might allow lost nutrients to be returned to the land – the invention and production of supplementary fertilisers to add to the soil those substances required by the planned crops in a form easily assimilable by the plant. The number of fertilisers, some of which are imported and some manufactured (potash, phosphates and nitrates) – is legion and continues to expand; specific types of fertilisers are manufactured and mixed for each type of soil, method of cultivation and crop. This allows the wealth of the soil to be preserved and augmented. Under certain circumstances synthetic fertilisers can even release the farmer from the need to practise crop-rotation and stable-manuring at all, and to farm fully in accord with the dictates of the market, with the entire cultivable area given
over to commercial production. Such free cultivation represents the technical and economic apogee of modern farming.

The workshop and laboratory are not the only agencies involved in the transformation of agriculture: optics has also played a part. This is not the appropriate place to enter into all the details of how spectral analysis helped in the discovery of a number of substances, how the sugar industry employs polarisation equipment, or how photography has contributed to the science of animal husbandry. Instead, we concentrate on the most important optical instrument in agriculture – the microscope. Hamm writes:

It was some time before it was understood how to adapt this now indispensable instrument for use in practice. Now its importance is universally recognised, and agriculture in particular could not manage without it. At our current level of technology, the examination of the soil and its constituents has to begin with the microscope. Our precise knowledge of plants, the nature of cells and their contents, the form and diversity of starch grains and other forms rests on the use of the microscope. We owe it our understanding of the reproduction of crytogamic plants, and the nature of a number of fungi which can attack and often ruin a complete crop, such as blight, mildew, potato blight and grape fungus. The differentiation between the various spinning fibres, the structure of wool and hair, the discovery of a number of animal pests, such as bacteria, the vibrio which attack wheat, beet nematoda etc., was only possible because of the existence of the microscope. The microscope has been especially useful in seed control. In the hands of a trained individual, the microscope can carry out the indispensable task of separating good from bad seed, crop seed from weeds. (Hamm, Die Naturkräfte in ihrer Anwendung in der Landwirtschaft, pp. 142-5)

Since 1876, when Hamm made these observations, the microscope has facilitated one of the most important agricultural advances so far through the development of bacteriology.

Thanks to this advance the farmer can now either prevent animals and plants from contracting such devastating diseases as anthrax, tuberculosis and phylloxera, or cure them of it – or at least make a positive diagnosis once afflicted.

The second half of the eighteenth century witnessed the discovery that legumes (pulses, clover and similar plants) obtain almost all the nitrogen they need from the air rather than from the soil, and that instead of depleting the soil's supply of nitrogen such plants actually
enrich it. This property only functions, however, if certain micro-organisms which attach themselves to the plant's roots are present in the soil. If they are absent an inoculation with the relevant organisms can enable legumes to transform a low-nitrogen soil into a nitrogen-rich soil, thus fertilising it for other types of crops. Used in conjunction with suitable mineral fertilisers (phosphates and potash), they allow very high yields to be obtained without the need to apply stable manure. This discovery provided the free type of cultivation noted above with a solid foundation.

Agriculture – a Science

This transformation of agriculture from the feudal three-field system to the free cultivation of the late nineteenth century is truly monumental. What is more, the vast bulk of it took place within the space of a few decades. Liebig's epoch-making studies stem from 1840, and did not generally become known until the 1850s – the time at which the steam engine first made its agricultural debut and bacteriology registered its first successes (1837, discovery of the muscardine bacillus in the silkworm, saccharomycetes, and in 1849 anthrax).

Within a few years agriculture, traditionally the most conservative of occupations, nearly devoid of progress for almost an entire millennium and utterly devoid for several centuries, suddenly became one of the most revolutionary branches of modern industry, if not the most revolutionary. This transformation meant that agriculture progressed from being a handicraft, whose routines were passed down through the generations, to being a science, or rather a complex of sciences, undergoing a rapid expansion in both its empirical and theoretical knowledge. Any farmer not fully at home with such sciences, the mere 'practician', will be helpless and baffled in the face of current innovations, yet cannot continue in the old ways. The tried and tested methods of the past have now been thoroughly overtaken.

The development of agriculture into a science is particularly apparent in the history of the system of agricultural training, especially the universities. This development is not only evident in the scope and substance of training courses, but also in the history of the agricultural institutes themselves, where clear proof of the advances in scientific agronomy is to be seen.

Thaer, who made a study of the most advanced agriculture in England in the late eighteenth and early nineteenth centuries, and who tried to establish the same in Germany, was the first to recognise the need for specific teaching establishments for agriculture. In his Einleitung zur
Kenntnis der englischen Landwirtschaft (1798) he sought to promote the establishment of agricultural academies, and a short time later founded the first such academy at Celle (1802) and the next in 1804 at Möglin: these were followed in the next decades by a number of further academies, beginning with Hohenheim in Württemberg in 1818.

Each of these institutes was linked to a model farm – that is, located in the open country. This was the only possible way to combine the necessary 'grey theory' with observational training, since the number of rationally cultivated farms was still small:

This situation changed during the first half of the century, not least because of the influence of the institutes themselves. A significant number of large estates switched to a rational farming practice along scientific principles, and the young farmer no longer had to rely solely on the model farms in order to study how theory could be applied.

The growth in rationally cultivated estates was accompanied by an expansion of the subjects which agriculture encompassed in the wake of the changes wrought by engineering, chemistry, physiology and general economic and social conditions. Agricultural training required more and more scientific aids, more sciences, and an increasingly scientific atmosphere. The agricultural institutes, isolated in the country, were becoming less and less equal to the tasks required of them.

Liebig also played a major role in this field. In an official lecture given in Munich in 1861 as President of the Bavarian Academy of Sciences, Liebig exposed the inadequacy of the rural agricultural institutes, and demanded their relocation in the university towns. This provoked a debate which almost matched the debate over the exhaustion of the riches of the soil for sheer passion. And, as with this earlier debate, Liebig once again emerged victorious. With the exception of Hohenheim, all the agricultural academies are now located in university towns, not only in Germany but also Austria, France, Italy and other countries, either as an integral part of the university system or as independent colleges (as in Berlin, Vienna and Paris).

Agriculture taught in the city! This must surely rank as the most dramatic illustration of agriculture's dependence on the towns, and that it is from these that agricultural progress now emanates.

However, agriculture cannot rest content with academic knowledge alone. To believe that theory alone is sufficient would be as absurd as to think that practice could proceed without theory. Agriculture, even more than industry, needs theory and practice, since the reality in which theory is to be applied is especially complex and diverse. This demands examination and testing, and the accumulation of experience. And it also requires a constant and clear overview of each part of the
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complex whole, which can only be achieved through an accurate and rational system of accounting.

The three-field system, overwhelmingly producing for the farmer's own subsistence, did not require such a procedure. For any given locality, the circumstances under which agriculture was practised were more or less the same for each farm, and had remained simple, transparent and unvarying since the initial settlement. Modern agriculture is confronted with a completely different situation, with more extensive, diverse and constantly changing circumstances, relations of production and circulation, of purchase and sale. It would career into hopeless confusion without accurate and regular keeping of accounts. Although this applies to any modern large-scale enterprise in the modern mode of production, it is especially true of the farm. A modern industrial plant essentially produces identical or broadly similar goods; in contrast a farm is a unit composed of a diversity of sub-enterprises - stock, arable, vegetable garden, fruit garden, poultry - all supplying a great variety of articles. As a rule an industrial establishment buys in all its means of production and sells all its output. This never happens in agriculture. An agricultural establishment buys only a portion of its means of production and produces the rest itself: livestock, fodder, manure and seed are partly purchased, partly produced in situ. Wages are paid in part as money, and in part in kind. Accordingly, only a part of the overall output is actually taken to market and sold: part is consumed on the premises. Finally, the effects of a particular means of production or method of production are less easily observable in agriculture than in industry. It may take years before they can be fully evaluated. All this makes book-keeping all the more essential - a regular and accurate accounting, encompassing the tiniest detail, and directed not merely at commercial aspects of the farm, but also its scientific side since the farmer is not dealing simply with capital and profit on capital, but with the land and soil, and ground-rent. As differential rent, however, this depends on the wealth of the soil: to keep it undiminished, and to augment it where possible, is as much the task of the modern rational farmer as is the most lucrative use of his capital.

This combination of scientific and commercial accounting is perhaps the most accurate reflection of the nature of modern agriculture. The close association between science and commerce peculiar to the whole of the modern mode of production is nowhere more evident than in agriculture. It is the only trade whose book-keeping is taught at the university.
The Capitalist Character of Modern Agriculture

Value

The elevation of agriculture from the feudal stage to its modern heights, and its participation in the uninterrupted advance of economic and technical progress required — and still requires — a great deal of money. We hardly need to prove or demonstrate this further. Consider the simple fact that between 1835 and 1842 100 million Marks were spent in England on drainage alone, with a further 50 million for the same purpose between 1846 and 1855. This latter sum allowed 1,365,000 acres to be drained — still leaving 21,325,000 acres unattended to.

Modern agriculture is impossible without money, or, what amounts to the same thing, without capital, for within the contemporary mode of production any sum of money not needed for personal consumption can become capital, surplus-value-breeding value — and this is, in fact, its customary fate.

A modern farm is therefore a capitalist enterprise, and bears the characteristic features of the capitalist mode of production, but in forms unique to itself. The clarification of this point will involve a short digression into the realm of economic abstractions, in which we shall sketch out our theoretical standpoint — that of the Marxist theory of value, surplus-value, profit and ground-rent. We shall naturally have to content ourselves with a number of general observations here: any readers interested in deepening their understanding of the material in this chapter are recommended to read the three volumes of Marx's Capital, if they are still unacquainted with this work.

Modern agriculture displays two basic features: private property in land, and the commodity-character of agricultural products. We considered the second of these in our discussion of the emergence of modern agriculture: we now turn to the latter, together with its consequences. A commodity is a product of human labour not produced for the producer's own consumption, or simply surrendered without recompense for consumption by others, family members or feudal overlords: it is a product not directly needed by the producer and destined to be exchanged with other individuals for products which the producer does require.
Initially the ratio in which certain amounts of a commodity are exchanged for amounts of other commodities is very much a matter of chance. The more that commodity-production develops, however, the more this exchange will be regularly repeated: the accidental character of the ratio will diminish and the exchange-ratio will take on a certain law-like character. Each commodity acquires a definite exchange-value, based on these ratios. Exchange subsequently becomes sale – that is, a particular commodity becomes the money-commodity, the commodity which anyone can use, which anyone will accept, and which measures its value in terms of all other commodities. The specific amount of the money-commodity – gold or silver – which is given for a specific commodity is termed its price.

The value of commodities is only apparent as a tendency, as a law-like movement tending to regulate the process of exchange or sale. The product of this process is the actual exchange-ratio, or the price obtaining on a market. Naturally, a law and its result are two different things. Irrespective of whether we are talking about social processes or natural processes, distinguishing one from the other is the prerequisite for unearthing the laws governing these processes: each process must be considered separately, removed from disturbing secondary factors. This is the only method for discovering the laws which operate behind the visible phenomena: once these laws are understood, it is an easy matter to understand their surface manifestations. Proceeding in the opposite direction will yield neither an understanding of the phenomena, nor of their underlying laws. Despite the patent obviousness of this point – and its constant repetition – it is still persistently ignored, especially in value theory.

What then does determine exchange-value, the particular, regular exchange-ratio of two commodities? Exchange is the child of the division of labour. Commodity-production is a form of production in which workers in different branches of labour, working independently, produce for each other. In a socialist society they would work for each other directly; as independent producers they can only work for each other by exchanging the products of their labour. They are, however, free and equal – a true exchange of commodities can only take place between such individuals. A situation in which one party is dependent on the other would constitute extortion or robbery, not exchange. Of course, a free individual will not work for another for nothing: they will not give more labour than they receive. There is, therefore, an observable tendency for products requiring the same expenditure of labour to be equated with each other in exchange, with the average amount of necessary labour required for their production determining their value.
Whether the producer realises this value on the market, whether the price obtained for the commodity at least covers the labour contained in it, depends on a number of circumstances grouped together under the headings of supply and demand.

The theory that the value of the commodity is determined by the socially necessary labour required for its production is strenuously disputed by modern university economic science. A closer look reveals, however, that all the academics' objections rest on a confusion of commodity-value with use-value, on one hand, and price on the other. All academic theories of value basically boil down to trying to add in the utility of products and the demand for them into their value, in addition to the expenditure of labour required to produce them.

Clearly, a product has to be useful, it must correspond to some real or imagined need if it is to become a commodity and acquire a value. Use-value is the precondition for commodity-value, but does not determine the latter's level. The presupposition for any exchange is that both commodities are of a different sort - otherwise exchange would have very little purpose. Use-values of a different type cannot be compared in purely quantitative terms, as can be done with exchange-ratios. It would be absurd to maintain that a yard of linen is ten times more valuable than a pound of iron because it can satisfy ten times as much need, or is ten times more useful than a pound of iron: the utilities of commodities represent quite different and incommensurable concepts.

Of course, different examples of the same type of commodity can exhibit a higher or lower level of use-value: a durable pair of boots has a higher use-value than a less durable pair. A glass of Rüdesheimer has a greater use-value than a glass of Grünberger. The consumer is perfectly happy to pay more for the higher use-value: use-value is therefore an element of commodity-value. Or rather, it could almost appear so. But this raises a further question.

If the higher use-value creates a higher commodity-value, why doesn't every producer concentrate exclusively on producing examples of a given commodity with a higher use-value? Why doesn't every cobbler make solid shoes, or every vintner top-quality wines? The answer is very simple. If we disregard individual differences in the raw materials and tools used by the cobbler, for example, which do not affect the overall outcome, then better shoes are the product of better labour, that is a greater expenditure of labour. And it is this greater expenditure of labour, and not the higher use-value, which determines the higher commodity-value of the better quality product. There is a well-known saying that the most expensive goods are the cheapest: that is, their
use-value exceeds that of the lower quality product by much more than their commodity-value. A pair of boots costing 12 Marks might last twice as long as a pair costing 10 Marks.

The higher price of a Johannisberger or a Rüdesheimer is based, however, on the fact that these wines cannot be produced everywhere: the law of value ceases to apply here since we have entered the realm of monopoly. The law of value presupposes free competition.

Differences in quality which cause differences in prices for the same type of commodity are always attributable either to differences in the expenditure of labour or the existence of monopoly. It would be sheer idiocy to think that workers with the same skills or gifts would not produce the best quality product in their field were such factors not at work.

Greater or lesser demand has a similar effect to that of greater or lesser utility. Although the interaction of demand and supply might explain why the price – not value – of the same commodities can be high one day and low the next, it can never explain why one type of commodity is always more expensive than another: why, for example, on average a pound of gold was always approximately 13 times more expensive than a pound of silver, over a period of several centuries. The only plausible explanation is that the conditions under which the two metals were produced remained constant over this long period. It would be ridiculous to suppose that the demand for gold remained exactly 13 times greater than the demand for silver, uninterruptedly over the entire period.

Although one's initial feeling is one of embarrassment at having to repeat these arguments for the umpteenth time, it does unfortunately seem to be necessary every time the discussion turns to value theory since its opponents never seem to tire of resurrecting the same old confusions.

Take Professor Lujo Brentano, for example. Brentano's most recent writings on agrarian policy (Part I, Theoretische Einleitung in die Agrarpolitik) deals with the theory of ground-rent, and its presupposition, value theory. He writes:

Ricardo and his school spoke of natural value and characterised this as the sum of the costs required to produce a good. In the social-democratic extension of this theory, natural value is characterised as the sum of social labour time needed for the production of a good.

Brentano's 'social labour time' is a mystery as far as we are concerned. It is certainly something quite different to 'socially necessary labour
Both theories of value – Ricardo’s and Marx’s – have been superseded in economic science. Herman demonstrated their untenability in showing that costs are only one of the factors determining price; and that the urgency of need, serviceability, ability to pay, alternative sources of supply, the seller’s need to sell, the exchange-value of the means of payment, and other advantages offered by the buyer, together with other possibilities for sale, also play a role in price-determination. (Brentano, ibid., p. 84)

So, Marx’s theory of value has been 'superseded' because price is not determined solely by the expenditure of labour. Ricardo and before him Adam Smith talked about 'natural price'. Brentano forces them, and even Marx, to talk in terms of 'natural value'. It is remarkable how much confusion between price and value can be compressed into the space of so few lines.

Leaving aside those factors which determine fluctuations in prices, Brentano’s system is also left with only one determining factor – the expenditure of labour, or in Brentano’s ‘improvement’, the costs of production. Such an improvement is highly dubious, however.

Costs of production presuppose exactly what they are intended to explain – value. What determines costs of production? The sum of production costs is the sum of the values expended. Value is first explained by costs of production, and then costs of production by value. What magnificent reasoning!

Nevertheless, the proposition that the value of a commodity is determined by its costs of production is not entirely nonsensical; the university economists simply fail to clarify the circumstances under which it might become meaningful. Such a clarification requires us to distinguish between simple and capitalist commodity-production.

**Surplus-value and Profit**

Simple commodity-production is the original form of commodity-production. It is characterised by the fact that the producers not only confront each other as free and equal individuals, but also own their means of production.

As with all the other major epochs of economic development, simple commodity-production has never prevailed in its pure form, but always mixed with other forms, such as natural economy, feudailsm and guild-based monopoly. Likewise, under simple commodity-production,
the law of value was only able to operate effectively where regular production by free and mutually competing producers for the market managed to develop within the prevailing limitations.

Capitalist commodity-production superseded simple commodity-production at a particular culminating point in development. Workers ceased to own their means of production, became propertyless, and found themselves confronted by capitalists, the owners of the means of production. Unable to work directly for the consumer, the workers are now compelled to work for the capitalist entrepreneur; by selling their labour-power to the capitalist, the workers become wage-labourers.

Commodity-production has to await the arrival of this mode of production before it can become the universal, or at least the dominant, form of production. The natural economy then rapidly fades away, feudal exploitation and the guild monopolies cease to be viable, to be replaced by, in general, free and equal producers. However, in creating the conditions under which the law of value can become universally operative, this mode of production also allows an intermediary link to emerge between value and market price which both obscures the law of value and modifies its operation. This link consists of the costs of production, that is the total sum of money which has to be spent on the production of a commodity.

It would be nonsensical to determine the prices of finished commodities by their production costs under a system of simple commodity-production. Consider the simplest example of primitive peasant weavers producing their own raw materials and also putting together their own looms. No money outlays are required, and the production of the product costs the producer nothing more than labour.

However, the determination of price by the costs of production no longer appears so absurd where the existence of a division of labour means that producers have to buy their means of production. As with our rustic weaver, the value of the linen produced by a specialised craft weaver is determined by the labour socially necessary for its production; it is simply not quite as evident as in the former instance. The producers no longer make their own yarn and loom, but purchase them. Their value constitutes the craft weaver's costs of production and they enter into the value of the product - in full in the case of the yarn, and in part, depending on the rate of wear and tear, in the case of the loom. But these costs of production do not determine the total value of the linen; this can only be established by adding in the value created by the weaver's labour.

The situation is quite different under the capitalist mode of production. The owners of the means of production and the worker are
two different individuals. A capitalist who wants to produce an article not only has to buy in raw materials and implements, like the weaver in the previous case, but also has to buy the labour-power of the workers themselves. For the capitalist – and only for the capitalist – all the elements of production dissolve into outlays of money. The production of a commodity does not cost labour but money; it is the amount of money, not labour, expended which determines the costs of production and price. But one would have to be blind to the distinction between simple and capitalist commodity-production to pronounce the determination of price by costs of production to be the general law of commodity-production, and hence to 'improve' the labour theory of value.

The true costs of production do not account for all the costs which capitalists take into account when working out what to charge for a commodity. If the price of a commodity was equal to the amount of money expended in its production, capitalists would gain nothing by selling it: yet the motive for capitalist production is the prospect of gain. If investing money in an enterprise did not yield a profit, the capitalist would be better off spending it on his own immediate pleasure. It is profit, gain, which makes a sum of money into capital and any sum of money which is used to yield a profit is capital.

The capitalist therefore adds on an extra amount to the total outlays needed for production, and will feel that production has been at a loss if the customary or normal profit for that branch is not obtained. The capitalist's cost of production, which are used to calculate the price needed to cover costs, are worked out on the basis of the sum of cash outlays plus normal profit. This is a fact which is directly observable in capitalist practice, and is therefore well known.

Adam Smith, for example, distinguished between labour-value, which underlies the fluctuating market prices in simple commodity-production, and the modification of that value in the capitalist mode of production by the costs of production representing the natural price (not natural value à la Brentano), which Marx termed the price of production. The advance registered by contemporary academic economics over these 'outmoded' economists consists in not only conflating simple commodity-production and capitalist production, but also value, natural price and market price – and then stating that the classical theory of value has been superseded because 'natural value' does not explain price fluctuations. Smith notes in The Wealth of Nations:

In that early and rude state of society which precedes both the accumulation of stock and the appropriation of land, the proportion between the quantities of labour necessary for acquiring different
objects seems to be the only circumstance which can afford any rule for exchanging them for one another. (Smith, p. 150)

As soon as stock has accumulated in the hands of particular persons, some of them will naturally employ it in setting to work industrious people whom they will supply with materials and subsistence, in order to make a profit by the sale of their work, or by what their labour adds to the value of the materials. (ibid., p. 151)

Note the sharp distinction drawn between simple and capitalist commodity-production. In Chapter 7 Smith goes on to note that every society or neighbourhood exhibits an average rate both of wages and profit, and of rent, which we propose to deal with shortly. These average rates can be termed their natural rates.

When the price of any commodity is neither more nor less than what is sufficient to pay the rent of the land, the wages of the labour, and the profits of the stock employed in raising, preparing, and bringing it to market, according to their natural rates, the commodity is then sold for what may be called its natural price. (ibid., p. 151)

As with value, the 'natural' rate of profit only exists as a tendency: just as prices gravitate towards values, so profits gravitate towards the 'natural' or average profit.

What determines the level of this 'natural' or 'normal' profit, however? Neither Smith nor Ricardo, nor in fact any of the other bourgeois economists have much to say on this subject: the proposals they do make, such as greater or lesser risk, higher or lower wage-rates, only explain the deviations of actual profit from average profit, just as supply and demand simply explains the deviation of market price from value, or from price of production: they do not explain the level of average profits at a given moment. They may provide a satisfactory explanation of why profit is 19 per cent in one place and 21 per cent elsewhere – but not why it is 20 per cent on average, instead of 200 or 2,000 per cent. It was Marx, with the theory of surplus-value, who first supplied the explanation for this.

Marx did not discover surplus-value. Neither did he have to borrow the concept from William Thompson as it was already clearly outlined by Smith, who in Chapter 6 of *The Wealth of Nations* writes: 'the value which the workmen add to the materials, therefore, resolves itself in this case into two parts, of which the one pays their wages, the other the profits of their employer upon the whole stock of materials.
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and wages which he advanced' (ibid., p. 151).

This represents a clear recognition and definition of surplus-value, to which Thompson subsequently added nothing: his sole contribution was to derive a juridical demand of dubious value from the economic facts. In fact, he had no more idea of how to use the concept of surplus-value to explain economic processes than Smith or any of the other pre-Marxist economists. Surplus-value simply served to condemn profit, not to explain it. This achievement fell to Marx, who was the first to show systematically where surplus-value originated from, and how it functioned - a fact which the later discoveries of Menger and his associates can do little to change.

Surplus-value exists because, beyond a certain level of technical development, human labour-power can produce more than is required for its preservation and reproduction. Human labour-power has yielded up such a surplus since time immemorial; the entire progress of civilisation rests on the steady increase in this surplus through improvements in technology.

Under simple commodity-production, the surplus-product takes the form of commodities and receives a value. This cannot yet be termed surplus-value since although human labour-power produces values, at this stage of development it does not yet have a value itself, not being a commodity.

The receipts from the surplus-product accrue to the workers; they can be used to improve the welfare of workers' families, for enjoyments, both of a basic and more refined sort, to increase savings or even amass a fortune, and to improve the means of production. The worker has to make some deductions from the surplus-product: payments to landlords, the commune, the nobility and interest payments to the usurer, should the worker have previously fallen on hard times. The value of the surplus-product may even be wholly or partly denied the worker before it is even produced: the free worker's misfortune is not only to be open to exploitation by the usurer, but also at a certain level of development of the market to exploitation by the merchant - often one and the same individual. Under simple commodity-production the profit of the merchant cannot, therefore, simply rest on the fact that the commodities are sold for more than their value - but also that they are bought for less than their value. This source of profit grows in proportion to the degree of market competition and the subordination of the producer. One further step beyond this stage, and we enter the domain of the capitalist mode of production.

Instead of forcing the free producer to accept a price below the value of the product, it would not require a leap of imagination on the part of the
merchant to choose to exploit the distress of the workers by taking them into service as wage-labourers, shifting the site of the production of commodities from the worker's own workshop to that of the capitalist, and providing the workers' living by buying their labour-power not their products.

Labour-power becomes a commodity, and as such receives a value which is equal to the value of the means of subsistence necessary for its preservation and reproduction. The surplus of value which the workers produce above and beyond the value of their own labour-power becomes surplus-value: where the price of labour-power, the wage, corresponds to its value, this accrues wholly to the capitalist.

The industrial capitalist obtains the whole of the product created by his wage-labourers. The value of this product is equal to the value of the means of production used - raw materials, wear and tear on machines and buildings and the like - plus the value of the worker's labour-power (in more common parlance, the wage plus surplus-value). It is the latter which constitutes the profit. The transformation of surplus-value into profit is, however, a much less simple operation than the transformation of value into price.

Capitalists put capital, not labour, into the production process. Their profit does not appear as the product of surplus-labour but as the product of capital. The rate of profit is calculated not by the amount of labour employed, but on the amount of capital. What follows from this is that if several enterprises obtain the same rate of surplus-value, different rates of profit will emerge if the amounts of capital used in each vary.

We can illustrate this in a simple example. Consider three enterprises in which not only the rate of surplus-value, that is the exploitation of the workers, but also the turnover of capital is the same. The capitalist calculates the rate of profit as the ratio of the total mass of profit obtained by a firm in one year to the total mass of capital advanced for one year.

If two firms with the same rate of surplus-value and amount of capital had different turnover times for their capital, their rate of profit would be different.

If a capital of 100,000 Marks yields a surplus-value of 10,000 Marks on each turnover, then, with a single turnover of capital per year, the ratio of the annual surplus-value to capital would be equal to 1:10; if the capital turned over ten times it would be equal to 10:10. In the first instance the rate of profit would be 10 per cent, and in the second 100 per cent. Nevertheless, we will leave this difference aside here as it would merely complicate the issue at hand.

If we, therefore, consider three firms with the same rate of surplus-value, the same turnover time of capital, and the same number of
workers, then what will vary is the amount of capital required to employ this same number of workers. Marx distinguished between two types of capital: constant and variable. Variable capital is the money expended on the wages applied to produce surplus-value. This portion of the capital grows in the production process, can change, in other words, is variable. By contrast, that portion of capital tied up in buildings, machines and raw materials – that is, in the means of production – does not change the magnitude of its value during the production process; its value appears unchanged in the product which it produces: it is therefore constant. In our example we proceed on the assumption that each of the three firms expends the same amount of variable capital, but differing amounts of constant capital. In one firm an unusually small amount of constant capital is used – it could be a small carpenter's workshop without any buildings or machines, using simple tools to produce cheap timber. The second firm employs an unusually large amount of constant capital; we can imagine, perhaps, a chemical factory with very substantial buildings, numerous machines and relatively few workers in comparison. And finally, the third firm might represent the average expenditure of constant and variable capital: let's say a furniture factory.

To make our example as simple as possible we shall assume that all the constant capital will be completely used up in the course of one year, and will therefore appear in full in the value of the product. In reality, of course, this only rarely happens in a capitalist enterprise: buildings and machinery do not wear out that quickly. A machine remains in use for around ten years, and therefore only gives up one tenth of its value to the products which it creates in any one year's output. However, not making this assumption would unnecessarily complicate our example without affecting anything in the final result. Each of the three firms employs 100 workers at an annual wage of 1,000 Marks per worker. The rate of surplus-value is 100 per cent in each case, the mass of surplus-value is consequently 100,000 Marks. However, in firm A, the woodyard, constant capital is 100,000 Marks; in firm B, the furniture factory, it is 300,000 Marks, and in firm C, the chemical factory, 500,000 Marks. With one turnover per year, we therefore have the following results:
If the commodities were sold at their values then A would make a profit of 50 per cent, B of 25 per cent, and C of 16.6 per cent. This would constitute a gross violation of the supreme commandment of the capitalist mode of production: equality, not of people, but of profit. Capitalists would shun factories in branch C, and descend in a pack on firms in branch A. In C the supply of products would soon drop and, as a consequence, the price would rise above the level of value; the converse would take place in A. Finally prices in A and C would reach a level at which each would yield the same rate of profit as the average capital B. This rate of profit is the average rate of profit and determines the price of production. We therefore have:

\[
\begin{array}{cccccc}
\text{Firm} & \text{Total capital} & \text{Surplus value} & \text{Total value of annual product} & \text{Rate of profit} & \text{Profit} & \text{Total production price of the annual product} \\
\text{Marks} & \text{Marks} & \text{Marks} & \% & \text{Marks} & \text{Marks} \\
A & 200,000 & 100,000 & 300,000 & 25 & 50,000 & 250,000 \\
B & 400,000 & 100,000 & 500,000 & 25 & 100,000 & 500,000 \\
C & 600,000 & 100,000 & 700,000 & 25 & 150,000 & 750,000 \\
\text{Total} & 1,200,000 & 300,000 & 1,500,000 & 25 & 300,000 & 1,500,000 \\
\end{array}
\]

Consequently, the prices of production as determined by the 'costs of production' diverge from the values of the products: however, this is only a modification of the law of value, not its nullification. It continues to exercise its regulative function behind the price of production and retains its absolute validity for the totality of commodities and the
aggregate mass of surplus-value, providing the basis both for prices and the rate of profit – which in its absence would float, unsuspended, in mid-air.

Academic economists treat Marx's value-theory long since superseded by 'science' – with contempt. But this does not seem to deter them from regarding it as vital to maintain a running battery of books and monographs to supersede it yet again – works whose value is perhaps not always in proportion to the labour expended on their production. And what do they offer by way of explanation of the average rate of profit – just that little word 'normal'.

**Differential Rent**

The foregoing explanation of 'customary' or 'normal' profit has brought us to the subject of ground-rent.

One of the sources of ground-rent lies in the fact that capitalists can make a surplus-profit in addition to their 'normal' profits. Of the various types of surplus-profit which exist, the one we are interested in here arises from the fact that by having access to especially favourable means of production, an industrial capitalist can produce at a cost-price lower than that necessitated by the generally prevailing relations of production.

Consider the following illustration – based on the same simplifying assumptions made above.

Two shoe factories are located in a town. Miller & Co. produces using the conventional machinery available. Masters & Co. has managed to get hold of some particularly efficient machines. Miller & Co. produces 40,000 pairs of shoes a year, with a total outlay of 320,000 Marks. The average rate of profit is 25 per cent. Miller & Co. therefore has to set its prices sufficiently high to make a profit of 80,000 Marks, in order to avoid what would be regarded as a loss in capitalist terms. The total price of production for Miller & Co. is therefore 400,000 Marks, or 10 Marks a pair.

Thanks to its excellent machines Masters & Co. can produce 45,000 pairs of shoes with an outlay of 320,000 Marks. The individual price of production is, therefore, not 10 Marks a pair, but 8.88 Marks. But since the shoes can be sold at the general price of production – that of its competitors of 10 Marks a pair – Masters & Co. ends up with 450,000 Marks for its total production. In addition to the normal profit of 80,000 there is a nice little sum of 50,000 Marks as surplus-profit.

Let us now transpose this example to the realm of agriculture. Instead of two factories, we shall consider two areas of agricultural land (each
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of approximately 20 hectares) of differing fertility, cultivated by capitalist entrepreneurs. One produces 400 cwts of wheat for an outlay of 3,200 Marks, and the other 450 cwts for the same outlay. The owner of the first area of land – assuming a normal rate of profit of 25 per cent – will have to add 2 Marks to the cost-price of 8 Marks, making a price of production of 10 Marks with a total profit of 800 Marks. The second cultivator also sells the wheat at 10 Marks per cwt, but obtains total receipts of 4,500 Marks, and therefore obtains a surplus-profit of 500 Marks in addition to average profit.

Although this might appear to be exactly the same phenomenon encountered in the example taken from industry, it is in fact fundamentally different. Surplus-profit in agriculture is subject to quite unique laws, and as a result constitutes a specific category in economics, that of ground-rent.

The land – and consequently all those productive forces which represent 'an accessory to the land' (Marx, Capital, III, p. 615), such as the power of waterfalls or running water in general – is a productive force of a very special kind. It cannot be increased at will, it varies from locality to locality, and the particular characteristics of a given piece of land are rooted in it, and cannot be transported elsewhere. In contrast, machinery and tools can be multiplied at will, can be transported, and can be manufactured to a common standard.

Consequently, if an industrial capitalist achieves a surplus-profit through access to particularly favourable conditions of production, this is either a result of some unique personal attributes or connections, a stroke of good luck, some particular experience, intelligence or energy, or a particularly large stock of capital. It will not be long before other capitalists begin to hanker for the same profit: they will attempt to set up factories with the same conditions of production. Sooner or later, the once extraordinarily advantageous conditions of production will become widespread, increased supply to the market will cause prices to fall, and the surplus-profit of the capitalist who first introduced the improvements will disappear.

In industry, a surplus-profit based on more favourable conditions of production is always an exceptional and a temporary phenomenon.

In agriculture, where surplus-profit originates in the unequal productivity of different types of soil, matters are quite different. This unequal productivity is the result of natural conditions, and under given technical circumstances is a fixed magnitude. Even if we assumed that all other conditions of production were identical for different farmers, differences in the quality of the soil would still remain. Unlike surplus-profit in industry, ground-rent is an enduring phenomenon.
But this is not the end of the story. As we know, the price of production of an industrial good is determined by the normal profit plus the cost-price required on average under the given conditions of production—that is, the total outlay of capital needed to produce a good. A factory whose individual cost-price is lower than the 'socially average' is rewarded by a surplus-profit; and a factory which produces at a higher cost receives a lower than normal profit, and may even make a loss.

In contrast, cost-price in agriculture is not determined by the costs of production on average-quality land. If poorer soils are widely cultivated in addition to the best land, this is not something which can be attributed to the personal circumstances or the character of the farmer. It is a product of the fact that the better land does not produce enough to feed the entire population. But the capitalists—and we are only dealing here with capitalist agriculture—expect to obtain normal profits as well as cost-price from their entrepreneurial activities. Consequently, poorer land will only be cultivated if the reduced supply has so raised the prices of foodstuffs that cultivating even the worst land is worthwhile. In agriculture, therefore, it is the poorest—not average—land which generally determines prices of production.

This leads to a third distinction between ground-rent and industrial profit. Population growth occurs where industry develops, with a consequent growth in the demand for foodstuffs. New land has to be brought into cultivation. As a result, the differences in productivity between different areas of cultivated land will tend to widen during the course of economic development, with a consequent growth in ground-rent.

We can show this by extending our previous example to embrace a third piece of land which only manages a yield of 320 cwts of wheat. Thus:

<table>
<thead>
<tr>
<th>Type of land</th>
<th>Wheat yield (cwts)</th>
<th>Capital advanced (M marks)</th>
<th>Rate of profit (%)</th>
<th>Individual price of production (Marks per cwt)</th>
<th>General price of production (Marks per cwt)</th>
<th>Ground rent (Marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>450</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>8.88</td>
<td>4,500</td>
</tr>
<tr>
<td>B</td>
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<td>3,200</td>
<td>25</td>
<td>4,000</td>
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</tbody>
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</tr>
</tbody>
</table>
The Agrarian Question

Table II

<table>
<thead>
<tr>
<th>Type of land</th>
<th>Wheat Yield</th>
<th>Capital advanced of production</th>
<th>Rate of profit</th>
<th>Individual price of production</th>
<th>General price of production</th>
<th>Ground rent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cwt</td>
<td>Marks</td>
<td>%</td>
<td>Total cwt</td>
<td>Per cwt</td>
<td>Total Marks</td>
</tr>
<tr>
<td>A</td>
<td>450</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>8.88</td>
<td>5,650</td>
</tr>
<tr>
<td>B</td>
<td>400</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>10.00</td>
<td>5,000</td>
</tr>
<tr>
<td>C</td>
<td>320</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>12.50</td>
<td>4,000</td>
</tr>
</tbody>
</table>

The upshot of increasing production and its extension to poorer land is an increase in ground-rent on soil A from 500 to 1,650 Marks. Soil B, which previously yielded no ground-rent, now provides 1,000 Marks.

The rate of profit has a tendency to fall in the course of capitalist development. We cannot go into why this is so here – and the issue is not in dispute as such. In contrast, ground-rent has a tendency to increase. This does not mean that the ground-rent of a particular plot of land must steadily increase. In a country which has been under cultivation for a long time, the extension of cultivation will usually be from good soil to poorer soil. The opposite often happens in a new country, since the land first taken into cultivation is not necessarily the best but simply the most accessible. If we had assumed that better land was taken into cultivation as agriculture expanded, our table would have looked something like this:

Table III

<table>
<thead>
<tr>
<th>Type of land</th>
<th>Wheat Yield</th>
<th>Capital advanced</th>
<th>Rate of profit</th>
<th>Individual price of production</th>
<th>General price of production</th>
<th>Ground rent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cwt</td>
<td>Marks</td>
<td>%</td>
<td>Total cwt</td>
<td>Per cwt</td>
<td>Total Marks</td>
</tr>
<tr>
<td>X</td>
<td>500</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>8.00</td>
<td>5,000</td>
</tr>
<tr>
<td>A</td>
<td>450</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>8.88</td>
<td>4,500</td>
</tr>
<tr>
<td>B</td>
<td>400</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>10.00</td>
<td>4,000</td>
</tr>
</tbody>
</table>

Table IV

<table>
<thead>
<tr>
<th></th>
<th>Wheat Yield</th>
<th>Capital advanced</th>
<th>Rate of profit</th>
<th>Individual price of production</th>
<th>General price of production</th>
<th>Ground rent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cwt</td>
<td>Marks</td>
<td>%</td>
<td>Total cwt</td>
<td>Per cwt</td>
<td>Total Marks</td>
</tr>
<tr>
<td>Y</td>
<td>600</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>6.66</td>
<td>5,328</td>
</tr>
<tr>
<td>X</td>
<td>500</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>8.00</td>
<td>4,440</td>
</tr>
<tr>
<td>A</td>
<td>450</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>8.88</td>
<td>4,000</td>
</tr>
</tbody>
</table>
In Table III the ground-rent of A has not risen, but area X, which previously produced no ground-rent, now yields 1,000 Marks. The mass of ground-rent accruing to land-ownership has increased in absolute terms and in proportion to the total capital advanced in comparison to Table I.

Under certain circumstances so much land, and of such high quality can be made cultivable that food prices fall, and agriculture ceases to be profitable on the poorer soils, which have to be abandoned. Where this happens, the ground-rent from certain plots will fall, but despite this the mass of aggregate ground-rent can continue to increase, both absolutely and in proportion to the total capital employed. This case can be seen in Table IV.

In Table IV the price of production has fallen, and soil B is abandoned. Area A no longer provides a ground-rent, and the ground-rent on X has fallen from 1,000 Marks to 440. Nevertheless, the total amount of ground-rent has risen from 1,500 Marks (Table III) to 1,768.

This rule operates irrespective of whether we consider an individual plot, the total land area of a country or even the world economy as a whole. The only difference is that the scale shifts from hundreds and thousands, to hundreds and thousands of millions.

Differences in the fertility of land are not the only source of ground-rent. Differences in location and distance from market can also have the same effect. The more the population of a market for foodstuffs, and hence its demand for food, grows, the greater the distance from which produce has to be obtained. Naturally, remote tracts of land will only be cultivated if food prices have risen sufficiently to cover transport costs and production costs, as well as yielding the average rate of profit. Ground-rent will then arise in the plots of land nearest to the market.

Consider three plots of land at various distances from the market: to keep matters simple we shall assume that all are equally fertile. Transport costs are 1 penny per cwt/mile.

<table>
<thead>
<tr>
<th>Plot</th>
<th>Distance from market</th>
<th>Production of wheat</th>
<th>Individual production price where produced</th>
<th>Transport costs</th>
<th>Market price</th>
<th>Ground rent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>miles</td>
<td>cwt</td>
<td>Marks</td>
<td>Marks</td>
<td>Marks</td>
<td>Marks</td>
</tr>
<tr>
<td>A</td>
<td>5</td>
<td>400</td>
<td>4,000</td>
<td>20</td>
<td>4,400</td>
<td>380</td>
</tr>
<tr>
<td>B</td>
<td>50</td>
<td>400</td>
<td>4,000</td>
<td>200</td>
<td>4,400</td>
<td>200</td>
</tr>
<tr>
<td>C</td>
<td>100</td>
<td>400</td>
<td>4,000</td>
<td>400</td>
<td>4,400</td>
<td></td>
</tr>
</tbody>
</table>
This type of ground-rent also tends to rise in proportion to the growth in population, although improvements in transportation counteract this.

We now turn to the third, and for countries with well-developed cultivation, most important type of ground-rent. Food production cannot only be increased by bringing land under the plough, but also by improving methods of cultivation on already utilised land, and by applying more labour to it; in short, by advancing a larger amount of capital (outlays on wages, stock, fertilisers, implements, etc.). If this additional capital produces a higher yield when applied to good land than would have been obtained by using it to bring poorer land into cultivation, this additional yield constitutes a new surplus-profit, new ground-rent.

We can illustrate this by reconsidering the example in Table I. There we had two plots of land of equal size – A and B. B has poorer soil, and its price of production (10 Marks per cwt) is the one which dictates the market price. An additional amount of capital is applied to soil A, doubling the original capital: the new investment is not as productive as the former, but more productive than the capital applied to the poorer soil. We then have:

Table V

<table>
<thead>
<tr>
<th>Capital investment</th>
<th>Wheat yield</th>
<th>Capital sum</th>
<th>Rate of profit</th>
<th>Costs of production</th>
<th>Market price per cwt</th>
<th>Market price total</th>
<th>Ground rent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cwt</td>
<td>Marks</td>
<td>%</td>
<td>Marks</td>
<td>Marks</td>
<td>Marks</td>
<td>Marks</td>
</tr>
<tr>
<td>A1</td>
<td>450</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>10</td>
<td>4,500</td>
<td>500</td>
</tr>
<tr>
<td>A2</td>
<td>420</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>10</td>
<td>4,200</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td>870</td>
<td>6,400</td>
<td>25</td>
<td>8,000</td>
<td>10</td>
<td>8,700</td>
<td>700</td>
</tr>
<tr>
<td>B</td>
<td>400</td>
<td>3,200</td>
<td>25</td>
<td>4,000</td>
<td>10</td>
<td>4,000</td>
<td></td>
</tr>
</tbody>
</table>

The overall ground-rent on A has therefore been increased by the additional capital investment A2.

Irrespective of the various forms of ground-rent, they all have one thing in common: they arise from the differences in the fertility or location of individual plots of land – they are differential rents. But who benefits?

In industry, the surplus-profits resulting from above-average productivity of labour are pocketed by the capitalist, even though they may not have invented the better machine themselves, but simply commandeered the means for getting one up on their competitors, and
even though they are not personally responsible for the greater productivity of labour, which rests on the fact that the capitalist can produce with a larger capital — that is, on an expanded scale. The capitalist does not do as well out of the surplus-profit arising from the differences in the fertility or location of a plot of land.

Naturally, if landowner and farmer are one and the same person, then the producer will reap in the surplus-profit. But this will not happen where farmer and landowner are two separate individuals, with the former merely leasing the land, which cannot be transferred or expanded at will. The non-landowning farmer requires the permission of the landowner to practise agriculture, and the price of this permission is the obligation to hand over any surplus-profit, ground-rent. As a rule the landowner will not be able to get any more than this surplus-profit out of the tenant (assuming, as we do here, that the tenant is a capitalist farmer). If the capitalist sees no prospect of making the customary profit, he will abandon the business, and the landowner will be left tenantless.

On the other hand, if the lease-price is less than the ground-rent, the tenant will retain part of the surplus-profit for himself: this above-average profit will then attract competition, and push up the lease-price on land.

**Absolute Ground-rent**

The monopoly control over the land exercised by the landowner is also evidenced in another way. So far we have assumed that the poorest land yields no surplus-profit. However, if the market prices of capitalistically produced commodities were determined directly by their values, and not by their prices of production, capitalist agriculture could also obtain a surplus-profit even on the poorest soils.

Let us go back to the Tables on p. 70 above in which we indicated the ratio of surplus-value to total capital for three different enterprises, A, B and C, with, as Marx terms it, 'different organic compositions of capital', where 'organic composition of capital is the name we give to its value composition, in so far as this is determined by its technical composition and reflects it' (Marx, *Capital*, III, p. 245). The lower the amount of constant capital used in relation to variable, the lower the composition of capital. The exploitation of the workers, that is, the rate of surplus-value, is assumed to be the same in all three cases.
If commodities were sold at their values – that is, if the mass of surplus-value in each case was equal to the profit – then with B representing the average composition of capital, A will obtain a surplus-profit. A will receive 50 per cent and B 25 per cent, making a surplus-profit of 25 per cent for A.

Were A producing under free competition this surplus-profit would be a temporary phenomenon. But if A were to occupy a unique position, enabling it to exclude competition to some extent, as in landownership, matters would be quite different. The ownership of land is a monopoly in all the older nations and confers the right to exclude land from cultivation should it fail to yield a rent. 'Wo alles liebt, kann Carlos nicht hassen' (Schiller, Don Carlos) – and in a situation where every landowner is pocketing a rent, the owner of even the poorest land, yielding no differential rent, will also want to join the game. Such land will be kept out of cultivation until the price of food has risen sufficiently to award this landowner a surplus-profit too.

In fact, such a surplus-profit can arise without the price of production of grain exceeding its value. At least up to a certain level of technical development, agriculture is one of those branches of industry which exhibits a lower composition of capital inasmuch as they process virtually no raw materials – in fact they are the producers of such materials. Rodbertus, whose merit it was to provide the initial demonstration that the source of ground-rent was the surplus-profit arising from agriculture, was nevertheless wrong in claiming that the lower composition of agricultural capital is inherent in agriculture. Although agriculture uses much less raw material than other branches of capitalist economic activity, its outlays on machinery and buildings – silos, stalls, drainage and so on – rise steadily in step with technical progress. It is very doubtful whether intensive agriculture could be practised with a lower than average composition of capital.

<table>
<thead>
<tr>
<th>Firm</th>
<th>Variable capital</th>
<th>Constant capital</th>
<th>Total capital</th>
<th>Surplus value</th>
<th>Ratio of surplus-value to total capital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marks</td>
<td>Marks</td>
<td>Marks</td>
<td>Marks</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>100,000</td>
<td>100,000</td>
<td>200,000</td>
<td>100,000</td>
<td>1 : 2</td>
</tr>
<tr>
<td>B</td>
<td>100,000</td>
<td>300,000</td>
<td>400,000</td>
<td>100,000</td>
<td>1 : 4</td>
</tr>
<tr>
<td>C</td>
<td>100,000</td>
<td>500,000</td>
<td>600,000</td>
<td>100,000</td>
<td>1 : 6</td>
</tr>
</tbody>
</table>
The turnover time of capital is also relevant in the calculation of profit (we left this to one side earlier so as not to introduce unnecessary complications into the analysis). The capitalist's rate of profit is the ratio of the mass of profit obtained in a given period (say, a year) to the total capital employed. Given a uniform organic composition of capital and size of enterprise, the total amount of capital used will have to be larger, the slower the turnover of capital. In agriculture, the turnover of capital is especially slow – and a slower than average turnover can negate any surplus-profit emanating from other sources.

Let us assume that the three capitals A, B, C from our previous example each have different turnover times, with A needing 200,000 Marks, B 400,000 and C 600,000 to obtain a surplus-value of 100,000 Marks. The turnover time in A is one year (we disregard the distinction between fixed and circulating capital at this stage), in B six months, and in C three months. A will therefore have to advance the full 200,000 Marks in order to achieve the required outlay for one year. B will also have to advance 200,000 Marks to reach a total of 400,000 for the year as a whole, but C can attain its annual requirement of 600,000 Marks by advancing a mere 150,000.

<table>
<thead>
<tr>
<th>Firm</th>
<th>Total capital</th>
<th>Surplus-value</th>
<th>Ratio of surplus value to total capital %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marks</td>
<td>Marks</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>200,000</td>
<td>100,000</td>
<td>50.0</td>
</tr>
<tr>
<td>B</td>
<td>200,000</td>
<td>100,000</td>
<td>50.0</td>
</tr>
<tr>
<td>C</td>
<td>150,000</td>
<td>100,000</td>
<td>66.6</td>
</tr>
</tbody>
</table>

The more rapid turnover has more than made up for the loss which C suffered through its higher composition of capital.

Rodbertus was therefore wrong to suppose that the lower composition of capital in agriculture necessarily produces a surplus-profit whenever agricultural products are sold at their values. First, there is nothing necessary about this lower composition, and secondly, its effects can be more than offset by the slowness of agricultural capital's turnover.

Although Rodbertus overshot the mark by trying to prove that the lower composition had to give rise to a specific form of rent, he did none the less show how such a rent could arise. It was left to Marx to explore the laws of this type of rent, which he termed absolute ground-rent.

As with any monopoly price, the price of food as determined by
monopoly land-ownership can exceed its value. How much it exceeds it is a function of the extent to which the laws of competition still operate within the limits imposed by monopoly. This is determined by competition between landowners, including those from abroad, by the extent to which additional capital flows to better land under the impact of rising prices, thus raising its output, and finally, and most importantly, by the purchasing power of the population. The higher the price of food, the smaller will be the numbers of consumers, and the greater will be the number of those who have to cut back on consumption, in the process raising the demand for surrogates and stimulating their production. If this method does not succeed in providing the mass of the population with an adequate supply of food, increased emigration and mortality will eventually reduce their numbers.

The owners of land cannot, therefore, raise absolute ground-rent simply at will – but what they can extort they certainly do.

If absolute ground-rent is paid on the poorest soils, then it must also be paid on all others. This can be shown by a simple calculation. If we recall Table II, in which the poorest land C paid no ground-rent at a wheat price of 12.50 Marks per cwt, we can see what would happen if soil C was kept out of cultivation until the price of wheat well exceeded 12.50 Marks. In fact, let us assume that it rises so much that even bringing C into cultivation and the consequent additional supply will not push the price below 15 Marks per cwt.

We would then have the following situation:

<table>
<thead>
<tr>
<th>Type of land</th>
<th>Wheat yield</th>
<th>Price of production per cwt</th>
<th>Market price per cwt</th>
<th>Differential rent</th>
<th>Absolute rent</th>
<th>Total rent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individual cwt</td>
<td>General cwt</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marks</td>
<td>Marks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>450</td>
<td>8.88</td>
<td>12.50</td>
<td>15.00</td>
<td>1,630</td>
<td>1,125</td>
</tr>
<tr>
<td>B</td>
<td>400</td>
<td>10.00</td>
<td>12.50</td>
<td>15.00</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>C</td>
<td>320</td>
<td>12.50</td>
<td>12.50</td>
<td>15.00</td>
<td>800</td>
<td>800</td>
</tr>
</tbody>
</table>

The owner, or owners, of plot C have not only created a rent for themselves through the increase in the price of wheat, but have demonstrated their practical Christianity by virtually doubling the rent of their colleagues. How they did this is the method adopted by all cartels — restricting output to raise prices. The distinction between an
agrarian and an industrial cartel consists in the fact that the landowners' natural monopoly makes it easier for them to raise prices than is the case for their industrial or commercial colleagues, who are obliged to create a monopoly by artificial means. Of course, no one is more indignant about corn-profiteering and wheat price-rings than the landowners - precisely the same individuals who prohibit 'Jewish' trading in futures since it allegedly prevents the price of bread from going up.

Ground-rent enters the landowners' coffers pinned to the title-deeds of land: they do not have to lift a finger to collect it once the land is leased out. Capitalist entrepreneurs - although not actually engaged directly in production - at least have to be active in the sphere of commodity circulation, in purchase and sale, in order to realise the profit produced by their workers, or used to until joint stock companies both revealed and confirmed their superfluity here too.

All the landowner has to do is own the land - and look on as the rents not only come rolling in, but also often increase without any effort on the landowner's part.

Capitalist ground-rent should not be confused with the burdens imposed on peasants by the feudal aristocracy. Initially, and more or less throughout the Middle Ages, these corresponded to important functions which the lord had to perform - functions which were subsequently taken over by the state, and for which the peasants paid taxes. The seigneurial class had to superintend the system of justice, to provide police, and represent the interests of its vassals to the outside world, to protect them through its possession of arms, and to furnish military service on their behalf.

None of these concerns is relevant to the landowner in capitalist society. As differential rent, ground-rent is the product of competition; as absolute ground-rent, it is the product of monopoly. The fact that these accrue to the landowner is not due to the latter's exercise of any social function, but solely and simply due to the consequence of private property in land and soil.

In practice, ground-rent appears undivided: one cannot spot which parts are differential rent and which absolute ground-rent. In addition, they are also usually mixed up with interest on capital for expenses incurred by the landowner. If the landowner is the cultivator, ground-rent appears as a portion of agricultural profit.

Nevertheless, the distinction between the two types of rent is crucial. Differential rent arises from the capitalist character of production - not from private property in the land: it would continue even if the land were to be nationalised - as the land-reformers demand - but with the
capitalist organisation of agriculture retained. The only difference would be that the differential rent would accrue to society rather than to private individuals.

Absolute ground-rent arises out of private property in land, and the conflicts of interest between landowners and the population at large. Land nationalisation would facilitate its abolition, offering the opportunity to reduce the price of agricultural products.

The reason for this – and this is the second distinction between differential and absolute rent – is that the former is not an element in the determination of the prices of agricultural products, whilst the latter most certainly is. Differential rent is the product of prices of production, absolute ground-rent of the excess of market-prices over prices of production. The former is constituted out of the surplus, the extra-profit, obtained via the greater productivity of labour on better land, or in a more advantageous location. The latter, in contrast, owes nothing to any additional yield by certain sections of agricultural labour, and as a consequence can only come about via a deduction, which the landowner makes from the values available, a deduction from the mass of surplus-value implying either a diminution of profit or a deduction from wages. If food prices and wages rise, the profit of capital will fall. If prices rise without a proportional increase in wages, then it is the workers who will suffer.

Finally, it can happen – and it usually does – that workers and capitalists share the loss imposed on them by absolute ground-rent.

Fortunately, there are limits to how much absolute ground-rent can be increased. We referred above to the fact that landowners cannot fix its level just as they might wish. Until recently, like differential rent, it was steadily rising in Europe due to the growth in population which accentuated the monopoly character of land-ownership. Foreign competition has now broken this monopoly to a considerable extent. With the exception of a few districts in England, there is no reason to suppose that differential rents in Europe have suffered from this foreign competition. No poor land has been taken out of cultivation: even the worst land is still cultivated. At most the type, but not the intensity, of cultivation has changed.

Absolute ground-rent has fallen, however – the main beneficiaries being the working classes. The substantial improvement in their standard of living since the 1870s is basically attributable to the drop in absolute ground-rent (and, in addition, to the strengthening of the political and economic power of the proletariat which has prevented the capitalist class from deriving the sole benefit from this development).
These benefits have to be set against a number of disadvantages. Falling ground-rent has led to a crisis in agriculture which, unlike industrial or commercial crises, is chronic in character, especially in those areas where, as in most countries, the landowner and farmer are one and the same individual, so that a loss to the landowner is also a loss to the farmer, and in areas where ground-rents are fixed in the price of land.

Private property in land, which, through the mechanism of increasing ground-rent was one of the most prolific sources of the impoverishment of the working classes before the emergence of foreign competition, is now a source of the impoverishment of the landowner and farmer. Any attempt to block either source simply induces the other to flow more freely.

The Price of Land

Where land is overwhelmingly in private hands and used to produce commodities, the individual pieces of land themselves become commodities. And if the means of production become capital, it is only natural to regard land as capital as well. But this is far from being the case. No matter how often land is termed capital, the landowner will not be a penny richer. Although the landowner's property has become a commodity, with a definite price and market-value, it is subject to quite different laws to those which normally govern the value of commodities. Land is not a product of human labour, and its price is therefore determined neither by the labour necessary for its production, nor by its costs of production. It is determined by ground-rent. In capitalist society the value of a plot of land, or an estate, equals that of a stock of capital whose interest-yield is the same as the ground-rent from that plot. The market-value of the land is equal to the size of this capital. This market-value is determined on the one hand by the level of ground-rent, and on the other by the 'customary' rate of interest.

Interest on capital is that portion of profit which a capitalist entrepreneur pays to the owner of capital in return for having this sum at his disposal; or alternatively, that portion of profit which the capitalist can enjoy merely by virtue of owning capital, without any obligation to exercise any entrepreneurial role in trade or industry. This occurs both in loan capital, and joint-stock capital. We are not concerned here with the forms of primitive loan capital and its activity outside the sphere of production.

As with rates of profit, rates of interest on capital also tend towards a uniform level. All things being equal – risk and so on – fresh capital will be attracted by a higher than average rate, and flow away from a lower
than average rate. In fact, 'the rate of interest, whether it is the average rate or the market rate of the time, appears as something quite different from the general rate of profit, of a uniform, definite and palpable magnitude' (Marx, *Capital*, II, p. 487).

The equalisation of the rate of interest also takes place more swiftly than in the case of the rates of profit. The latter occurs through changes in the overall national process of production, through increasing production in some areas and reducing it in others. Money capital has a less stressful method of equalising the rate of interest, executed with a mere wave of the hand. On the market where capital investments are bought and sold, a higher valuation is given to those which yield a higher than average rate of interest, whilst investments yielding a lower rate are valued correspondingly lower. A share bought for £200 bearing a dividend of 10 per cent will sell for £400 if the customary rate of interest is 5 per cent, regardless of the value of the means of production which it represents.

Land is treated exactly like a capital investment and valued in accordance with the level of ground-rent it pays to its owner.

In treating land as capital, economists nevertheless overlook a number of important differences.

The above-average rates of interest obtained by a sum of money capital invested in an industrial enterprise are no more permanently sustainable under free competition — that is, disregarding the type of monopoly found in railways, mines and so on — than above-average rates of profit. The valuation of a capital investment above its price of production can, therefore, only be a temporary phase.

This does not, however, apply to the price of land: as we saw above, land, as such, does not have a price of production. A general fall in the rate of interest has no effect on the market value of money capital, but it does affect the market value of land. A piece of land yielding a ground-rent of £6,000 would be worth £100,000 if the rate of interest were 6 per cent, but £150,000 if the rate were 4 per cent. In contrast, it would be absurd to expect that a sum of loan or share capital of £100,000 presently paying 6 per cent would become worth £150,000 if there were a general fall in interest rates to 4 per cent. What would usually happen is that it would stop paying 6 per cent as a result of a conversion of assets or of increased investment in the field concerned, and start paying 4 per cent, retaining its value of £100,000. A general fall in the rate of interest increases the market value of land, not of money capitals.

It is, of course, possible that capital is also invested in land, and this is usually the case in capitalist countries. But this merely complicates matters without fundamentally changing them. Where this is the case,
the share of the landowner in the agricultural surplus-value will not simply consist of ground-rent but also interest on capital, and the price of land will include, in addition to capitalised ground-rent, capitalised interest on capital, which under normal circumstances is the capital itself.

Interest on its own cannot explain the price of land, since land which contains no capital, indeed even land which is totally uncultivated, still has a price if the capitalist mode of production is sufficiently developed. This represents the second distinction between land and capital. The value of a stock of money capital is measured on the capital market according to the interest which it actually yields; the price of a piece of land is measured by the ground-rent which it could yield.

A third distinction can also be found: those means of production created by human labour are subject to wear and tear – both materially and, as a result of new inventions, morally. Sooner or later they cease to exist; they must be constantly renewed. In contrast, the soil is eternal and indestructible, at least from the standpoint of human society.

It would be ridiculous for the owner of an industrial enterprise not to operate it, to leave it unutilised. But this is by no means ridiculous for the landowner if ground-rents are rising (especially in the towns): in fact, where this is the case, it is often extremely profitable to keep a piece of land out of use.

All these distinctions are obscured if land is termed capital. Despite this, many economists still insist on this identity. For Brentano, for example, the proof is the fact that capital is invested in land, and that Rodbertus characterised an urban building as capital, 'despite the fact that the land on which the building is erected is a monopolised gift of nature. Therefore, land is now capital. It is distinguished from other capitals solely by being a monopolised gift of nature in limited supply. This applies not only to agricultural land, but also to that used for dwellings or for industrial purposes, and is also the case for waterfalls, mines, railways and the like' (Brentano, Theoretische Einleitung in die Agrarpolitik, p.13). This does not, of course, prove that the land is capital, but rather that urban land, waterfalls and mines yield a rent. A highly active imagination is certainly required to include railways amongst the 'gifts of nature'. As Dogberry says: 'to be a well-favoured man is the gift of fortune; but to read and write comes by nature.'

One can call land 'capital' as often as one likes – it will not make the landowner into a capitalist.

In assessing the price of an estate a number of other factors, apart from ground-rent, come into consideration: aside from the 'ground-capital', that is capitalist ground-rent, there is the real capital advanced for the
86 The Agrarian Question

conduct of farming – buildings, equipment, live and dead stock. The market-value of this capital is calculated according to the price of production, less wear and tear.

An estate can also be combined with the provision of various luxuries, and this is in fact the rule as far as large-scale land-ownership is concerned. Such luxuries, which are utterly unrelated to production, naturally increase the price of land, but not the ground-rent. The higher the price of such luxuries, the lower the yield of the 'ground-capital' will appear to be should their price be included in the price of the land as a whole. To stay with our example, a piece of land yielding a ground-rent of £6,000 at a usual average rate of interest of 3 per cent will be worth £200,000. If the owner builds a castle on it requiring an outlay of £100,000, the market price of the estate will be set at £300,000. All this means, however, is that the 'ground-capital' will merely pay 2 per cent interest – much lower than conventional capital.

One often hears it claimed that ground-capital has this curious capacity to pay a poor yield, and that this type of capital is a poor interest-bearer. This is utterly incorrect.

As we saw, such a type of capital does not exist in the first place: it is fiction. What we actually have is ground-rent: this forms the basis for calculating the value of 'ground-capital'. When such a calculation is made, ground-rent is usually capitalised at a higher level than would correspond to the average rate of interest, not because ground-capital possesses the mysterious property of bearing a lower interest rate, but because the capitalist possesses the eminently unmysterious and easily understood attribute of regarding land, the production-site for ground-rent, as a capital investment with special advantages. And this is usually the case. Not only does land have both material and non-material advantages not expressed in the ground-rent – the ownership of a country-house or castle, production of food for the owner's immediate consumption, hunting, political influence – but in addition, ground-rents have tended to rise in relation to interest on capital up until recently in Europe – and continue to do so in the large cities and their environs. The capitalist who has bought land has had to pay for such a prospect.

All these transactions do not, however, make the landowner, qua landowner, into a capitalist. It is, of course, possible to be both a landowner and capitalist, but this is not the point here. Sale and purchase make land-ownership into a capital investment: they no more make land into capital than buying a magistracy in the last century made having a seat on the bench into capital. Landowners can, quite naturally, sell their titles and become capitalists: but they cease to be
landowners in that same moment. Conversely, a capitalist who uses all his capital to buy land stops being a capitalist in that moment. This observation was first made by the English landowners, who lost the feudal services of their tenants earlier than their continental counterparts, and were consequently obliged to make an earlier start in capitalist agriculture. The low level of development of the credit system meant this remained at the level of an attempt. As early as the fifteenth century, landowners found themselves forced to divide up their estates into leaseholdings of varying sizes, and lease them to farmers who owned the live and dead stock needed for cultivation. The capital required for agriculture found its way on to the farm via the capitalist leaseholder.

The modern capitalist tenant-system is less developed on the European mainland, in particular north of the Alps, than it is in England. In 1895 only 4,640,000 acres were cultivated by owner-farmers in England against 27,940,000 by tenants: 61,014 farms cultivated by their proprietors as against 459,000 by tenants.

*Germany* and *France* present a very different picture. Nevertheless, tenant-farming is on the increase. In the German Empire the number of farms held on lease increased from 2,322,899 to 2,607,210 between 1882 and 1885, with a reduction in the number of unleased farms from 2,953,445 to 2,951,107. In France the situation was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Owner-farmer</th>
<th>Tenant-farmer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1882</td>
<td>3,525,342</td>
<td>1,309,904</td>
</tr>
<tr>
<td>1892</td>
<td>3,387,245</td>
<td>1,405,569</td>
</tr>
</tbody>
</table>

Increase (+) or Decrease (-)
-138,097 + 95,665

Tenant-farming is even on the increase in the *United States*.

<table>
<thead>
<tr>
<th>Year</th>
<th>Owner-farmer</th>
<th>Tenant-farmer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>2,984,306 (75%)</td>
<td>1,024,601 (25%)</td>
</tr>
<tr>
<td>1890</td>
<td>3,269,728 (72%)</td>
<td>1,294,913 (28%)</td>
</tr>
</tbody>
</table>

In the old North Atlantic states of the Union there is not only a
relative but, as in Europe, an absolute decrease in owner-farming.

<table>
<thead>
<tr>
<th></th>
<th>Owner-farmer</th>
<th>Tenant-farmer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>584,847</td>
<td>111,292</td>
</tr>
<tr>
<td>1890</td>
<td>537,376</td>
<td>121,193</td>
</tr>
<tr>
<td>Decrease</td>
<td>-47,471</td>
<td>+ 9,901</td>
</tr>
</tbody>
</table>

None the less, proprietor farms are still the dominant form of agriculture in all these countries. Capitalist agriculture only began to become significant once urban capital, and hence the credit system, had become well developed. This provided a second way for agriculture to obtain capital: through raising loans, either as personal credit or a loan against property, a mortgage bond. We are only concerned with the latter here. The landowner takes out a mortgage – that is, pledges the ground-rent – in order to obtain money for necessary improvements, to buy livestock, machinery and synthetic fertilisers.

Under the system of capitalist tenant-farming – the lease-system – the three great categories of income in capitalist society appear sharply demarcated. The owner of the land and the owner of the other means of production, the capitalist, are two separate individuals, both of whom confront the wage-labourers exploited by the capitalist. The worker receives a wage, the capitalist the profit on enterprise, and the landowner ground-rent. The latter is utterly superfluous as far as the actual practice of agriculture is concerned, neither working administratively nor commercially as the capitalist entrepreneur does. Their sole activity consists in collecting as high a rent for the land as possible and then consuming it in the company of their parasites.

The mortgage system makes matters somewhat less clear and straightforward, but does not fundamentally alter the final outcome.

The division between the landowner and the entrepreneur – albeit hidden behind particular juridical forms – is still there. The ground-rent which accrues to the landowner under the lease system ends up in the pocket of the mortgage creditor under the mortgage system. As the owner of ground-rent, the latter is consequently the real owner of the land itself. In contrast, the nominal owner of the land is a capitalist entrepreneur who collects the profit on enterprise and ground-rent, and then pays over the latter in the form of the interest on the mortgage. If the business fails, and the entrepreneur is no longer able to pay the ground-rent due, then this entrepreneur has no more claim to remain on
the land than a leaseholder who ceases to pay rent. In fact, the mortgage creditor often has the power to drive difficult farmers out of their homes and farms by calling in the mortgage in precisely the same way that the landowner can give notice to the tenant. The difference between the lease system and the mortgage system is simply that in the latter the actual owner of the land is termed a capitalist, and the actual capitalist entrepreneur a landowner. Thanks to this confusion, our farmers, who actually exercise capitalist functions, tend to get very indignant about exploitation by 'mobile capital' – that is, the mortgage creditors who in fact play the same economic role as the landowner under the lease system.

Mortgage indebtedness is rising rapidly in all countries with a long history of cultivation.

In Prussia the total of new burdens on rural properties exceeded redemptions by:

<table>
<thead>
<tr>
<th>Year</th>
<th>Marks (000,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1886/87</td>
<td>113</td>
</tr>
<tr>
<td>1887/88</td>
<td>88</td>
</tr>
<tr>
<td>1888/89</td>
<td>121</td>
</tr>
<tr>
<td>1889/90</td>
<td>179</td>
</tr>
<tr>
<td>1890/91</td>
<td>156</td>
</tr>
<tr>
<td>1891/92</td>
<td>207</td>
</tr>
<tr>
<td>1892/93</td>
<td>209</td>
</tr>
<tr>
<td>1893/94</td>
<td>228</td>
</tr>
<tr>
<td>1894/95</td>
<td>255</td>
</tr>
</tbody>
</table>

This reveals an increase of 1.5 billion within the space of a few years!

This rapid increase is a sign that the same process which has already advanced to such a degree in England is now making headway everywhere, although perhaps in a different form: the separation of the cultivator from the ownership of land. Nevertheless, the farmer is still a long way from being a proletarian – just as the English tenant-farmer is no proletarian. As with the tenant-farmer, the German cultivator continues to own the means of production, apart from the land (our concern here is only with mortgage and not personal indebtedness).

The increase in mortgage indebtedness is not necessarily a sign of agricultural distress. It can arise from this – the need to improve and raise the standard of farming is not the only cause of indebtedness. We shall encounter these other causes later. However, progress and prosperity in agriculture will inevitably express itself in an increase in mortgage indebtedness, first because such progress generates a growing need for capital, and secondly because the extension of agricultural credit allows ground-rents to rise.
The best long-term statistics on mortgages are kept by the Austrians. There the increase in mortgage indebtedness (excluding Galicia, Bukovina and the Coastal Provinces) was:

<table>
<thead>
<tr>
<th>Year</th>
<th>GuBen</th>
<th>Year</th>
<th>GuBen</th>
</tr>
</thead>
<tbody>
<tr>
<td>1871</td>
<td>46,740,617</td>
<td>1881</td>
<td>10,034,671</td>
</tr>
<tr>
<td>1872</td>
<td>107,621,665</td>
<td>1882</td>
<td>22,926,080</td>
</tr>
<tr>
<td>1873</td>
<td>202,458,692</td>
<td>1883</td>
<td>34,289,210</td>
</tr>
<tr>
<td>1874</td>
<td>156,127,016</td>
<td>1884</td>
<td>57,241,240</td>
</tr>
<tr>
<td>1875</td>
<td>136,692,565</td>
<td>1885</td>
<td>55,871,264</td>
</tr>
<tr>
<td>1876</td>
<td>99,276,440</td>
<td>1886</td>
<td>52,708,237</td>
</tr>
<tr>
<td>1877</td>
<td>24,694,812</td>
<td>1887</td>
<td>56,330,623</td>
</tr>
<tr>
<td>1878</td>
<td>44,160,263</td>
<td>1888</td>
<td>56,954,250</td>
</tr>
<tr>
<td>1879</td>
<td>22,765,037</td>
<td>1889</td>
<td>52,738,749</td>
</tr>
<tr>
<td>1880</td>
<td>18,404,585</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mortgage indebtedness rose the most in what were in fact the best years for agriculture (and urban land-ownership), in the early 1870s.

The separation of the landowning farmer into two individuals, the landowner and the entrepreneur, is a necessary and natural consequence of private property in land within the capitalist mode of production. It also creates the possibility of the abolition of private property in land, even though conditions may not be ripe for abolishing private property in the other means of production in agriculture. Nationalisation could be accomplished through nationalising or socialising the ownership of land where the lease system prevails, and by nationalising mortgages where the mortgage system is dominant.

The conditions for such a nationalisation are brought much nearer, the more ownership, under the lease system, or mortgages, under the mortgage system, are concentrated in a small number of hands. Unfortunately, proving such a concentration statistically for entire countries over extended periods of time is by no means easy. Although we might possess adequate statistics on agricultural establishments, statistics on mortgages have so far been far from satisfactory, and the statistics on land-ownership do not permit a comparison between different time-periods or the tracing of the concentration of a number of diverse holdings in a single hand.

We shall consider the concentration of land-ownership in some of the provinces of Prussia later in a different connection. One can generally suppose, however, that increases in the number of leaseholding tenants
and in the area of leased land will imply a concentration of land-ownership in fewer hands, since anyone not requiring their own land for agriculture, anyone, that is, with a surplus of land, can set about leasing part or even all of it. Countries with the most developed lease system are also those in which large-scale land-ownership predominates.

In Germany, the mortgage system is more important than the lease system. The process of concentration of land-ownership, or if one wishes to be more accurate, of ground-rent, is clearly visible. We shall see below how the numerous small village usurers have been increasingly pushed to one side to make room for the large centralised capitalist cooperative institutions which have a monopoly on mortgage credit.

According to figures provided by Hecht in his study on national and provincial land credit societies, the total sum of mortgage bonds in circulation issued by the German land banks was more than 4.75 billion Marks at the end of 1888. Approximately 1.9 billion was accounted for by the cooperative banks, 420 million by the state or provincial land banks and 2.5 billion by the mortgage banks. Most of the latter is tied up with urban land-ownership, however. There are also a number of other large financial institutions relevant to the centralisation of mortgage lending, such as savings banks, insurance companies, foundations and corporations of all types. A total of 35 German life insurance companies have 80 per cent of their funds invested in mortgages, the Prussian savings banks over 50 per cent. In Prussia the savings banks owned around 1 billion Marks of rural property through mortgages in 1892: in 1877, the 17 cooperative land banks in Prussia issued mortgage bonds to the value of 1.65 billion Marks, whilst the 11 private land banks purchased mortgage claims worth 735 million Marks in 1886. These figures show an enormous concentration of ground-rents in a small number of financial institutions; the concentration continues to grow rapidly. In 1875 the German mortgage banks issued mortgage bonds to the value of 900 million Marks; by 1888 this had risen to 2.5 billion Marks, and by 1892 to 3.4 billion, concentrated in 31 banks (27 banks in 1875).

Hermes' article on the Landschaften [Prussian agrarian mortgage institutions] cites a number of examples of how rapidly mortgage indebtedness has become concentrated in the cooperative land banks of the big Prussian landowners. Mortgages issued by the Knightly Credit Institute of Brandenberg (less those discharged) were as follows, for example:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1805</td>
<td>11,527,000 Marks</td>
<td>1875</td>
<td>82,204,000 Marks</td>
</tr>
<tr>
<td>1855</td>
<td>38,295,000 Marks</td>
<td>1894</td>
<td>189,621,000 Marks</td>
</tr>
</tbody>
</table>
The New Brandenburg Credit Institute, established in 1869, issued mortgage deeds (less those discharged) to the following value:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>48,000 Marks</td>
</tr>
<tr>
<td>1880</td>
<td>3,695,000 Marks</td>
</tr>
<tr>
<td>1890</td>
<td>74,275,000 Marks</td>
</tr>
<tr>
<td>1895</td>
<td>101,434,000 Marks</td>
</tr>
</tbody>
</table>

These figures are a clear indication that 'Marx's dogma' is no less valid for landed property than for capital: and indeed, no doubt is placed on its applicability in this respect. It is not, however, held to apply to the actual exercise of cultivation. This is a much more important question which we consider later. At this juncture our concern is still land-ownership, and the two forms in which it appears in the capitalist regime.

We saw that the mortgage system and the lease system are similar in many respects. But they also display important differences.

The most important is that the movement of the lease-price follows the movement of ground-rent. This is not the case with interest on mortgages. Although not fixed, the latter moves more slowly than lease-price, and its movement is not determined by the movement of ground-rent, but rather by the rate of interest on capital which follows quite different laws. Both can move in opposite directions at the same time. Interest on capital can fall and ground-rents rise. In fact, this was the normal state of affairs until a short while ago in all the older countries with capitalist production.

Under the lease system the benefits of this accrued to the landowner. In contrast, under the mortgage system the actual agricultural entrepreneur, the nominal landowner, can either pocket the increase in ground-rent or use it to acquire new mortgage capital.

The mortgage creditor derives no more benefit from this advantage of land-ownership than from any of the other factors which raise the market value of land-ownership and create the low yield on 'ground-capital'. As a consequence, at least where ground-rents are rising, the mortgage creditor demands a higher return on capital than that yielded by the 'ground-capital' - that is, the sum of a mortgage capital which demands the total ground-rent as interest is less than the market value of the land encumbered by the mortgage. Consider an estate yielding 6,000 Marks ground-rent: the average rate of interest is 4 per cent, with capitalised ground-rent therefore equal to 150,000 Marks. However, the estate also confers a number of benefits already noted above: of these the most important is the prospect of an increase in ground-rent. The owner would therefore demand more than 150,000 Marks for the land. Let's say the figure is 200,000 Marks: this would
correspond to a yield on 'ground-capital' of 3 per cent. Meanwhile, the mortgage creditor wants the average rate of 4 per cent, with the farmer only able to pay 6,000 Marks in interest. Mortgage indebtedness can therefore only go up to 150,000 Marks, can only equal three-quarters of the value of the land, yet still swallow up the entire ground-rent. With rising ground-rents, which we assume here, the farmer will nevertheless be better off under the mortgage system than under the lease system. However, there is another side to this coin, which is revealed once ground-rents start to fall.

Where this happens the tenants, at least the capitalist tenants, will shift their losses on to the back of the landowner, who despite perhaps entering into a long struggle, will have to accept a reduction in lease-price. By contrast, the owner-farmers must initially bear the brunt of a fall in ground-rent themselves: they cannot offload the burden on to the mortgage creditor.

As a consequence, a development which under the lease system will represent a problem for land-ownership, represents a problem for the agricultural entrepreneur – or 'agriculture' – under the mortgage system.

The real landowner, the mortgage creditor, is not initially affected. Although mortgage interest rates might of course fall along with ground-rents, this is not a result of agricultural distress but of a fall in capital-interest in general, a phenomenon which will strike all loan-capital. This is not our concern here, however. The rate of interest on mortgages is determined by the general rate of interest on capital, and is unaffected by agricultural distress, serious though this might be. In fact, the greater the difficulties confronting the farmer, the higher the risk-premium which has to be paid, and the higher the rate of interest which has to be tolerated – at least when raising fresh loans – and as a consequence, the lower the limit below the price of the estate up to which it can be encumbered with a mortgage.

Under the mortgage system, the adjustment of agriculture to falling ground-rents does not follow the same course as it does under the lease system, through falling interest, but through the bankruptcy of farmers and the loss of the mortgage creditors' capital – not the most painless or rational operation.

Apart from the lease and mortgage system, a third case is possible. This is where the landowner is simultaneously a capitalist – that is, that aside from owning the land, he also possesses enough money to establish a modern farm entirely from his own resources, pocketing as a result not only the profit on enterprise but also the entire ground-rent.

Such a unification of landowner and capitalist in one person is nevertheless an historical exception, and is likely to remain so within
The further development of the capitalist mode of production. The reason for this should be looked for firstly in the *superiority of the large farm over the small farm*, and secondly in the *private ownership of land*.
Large and Small Farms

The Technical Superiority of the Large Farm

The increasingly capitalist character of agriculture brings with it a growing qualitative difference in the techniques used by large and small farms.

Leaving aside the plantation system, and similar forms of agriculture which are not our concern here, such a distinction did not exist in pre-capitalist agriculture. The feudal lords cultivated their land using human and animal labour-power and the implements of their servile peasants. The lords' own contributions were meagre and their means of production not superior to those furnished by the peasant. The fact that they had more hands merely reflected the greater requirements of their household, and had no influence on methods of cultivation. Moreover, the lord was not distinguished from the peasant through possession of a solid tract of land. As with the peasant, the lord's land lay scattered in small lots amongst the open fields (Fluren), and was subject to the same communal obligations (Flurzwang). As we have already noted, the only distinction between the peasant's farm and that of the lord was the fact that the latter was tilled by unwilling, forced labourers, whose main concern was to lessen the strain on themselves and their animals as much as possible. The cultivation of the lord's land therefore involved an enormous waste of both labour-time and the means of labour. This changed once feudal services were commuted and the land-holder became the free owner of the land: holdings were consolidated as much as was possible, and cultivated using the owner's implements, stock and wage-labourers – in accordance with a plan of their own devising. The large farm acquired a very different aspect to the small: thereafter, it was the small farm which wasted labour-time and the means of labour.

Inevitably the distinction between the large and small farm initially made its appearance in the house and homestead, in the household, which took on a greater significance once it began to produce using its own animals, implements and wage-labourers.

One of the most important differences between industry and agriculture is that, apart from a few rudimentary forms, the industrial
The Agrarian Question

factory and the household are entirely separate establishments, whereas in agriculture the household and the economic unit constitute one solid entity. No agricultural establishment exists without its corresponding household. And turning this proposition around, one can also say that in the countryside all independent households practise agriculture.

We scarcely need to prove that the larger household is superior to the smaller when it comes to saving on labour and materials. If we compare a large estate occupying the same area as 50 smaller peasant plots, a single kitchen and stove is set against 50 kitchens and 50 stoves in the smaller farms: five cooks as against 50. A need to heat perhaps five living-rooms in winter as against 50. The larger estate can buy its oil, chicory-coffee and margarine wholesale – whereas the smaller has to buy retail.

If we leave the house and go out into the farmyard, we find a stall for 50-100 cows on the large farm, against the 50 stalls, each for 1-2 cows, on the small farms: with one barn and one well in place of 50. Walking a little further, we discover fewer roadways – peasants cannot make use of light railways at all – leading from the farmyard to the fields, fewer hedges and fences and fewer borders.

The smaller the plot, the greater the length of its boundaries in relation to its surface area. Boundary length per are (= 100 sq.m.) for the following plots would be as follows:

<table>
<thead>
<tr>
<th>Area (hectares)</th>
<th>Boundary per are (metres)</th>
<th>Area (hectares)</th>
<th>Boundary per are (metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1.26</td>
<td>0.25</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>1.79</td>
<td>0.10</td>
<td>12.65</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>0.05</td>
<td>17.89</td>
</tr>
<tr>
<td>0.5</td>
<td>5.66</td>
<td>0.01</td>
<td>40</td>
</tr>
</tbody>
</table>

Fencing 50 plots of 20 ares requires seven times more fencing material, and seven times more labour than one plot of 10 hectares.

On the assumption that the boundary of each plot was 20 centimetres wide, the total amount of land rendered unproductive per are for the following land areas would be as follows:
Demarcating a plot of 10 hectares loses a mere 2.5 are, but 50 plots each of 20 are will mean a loss of 18 are to cultivation. The longer the boundaries of a plot, the greater the seed-loss over the border which will inevitably occur in hand-sowing – and hence the greater the amount of labour needed to work the plot. According to Krämer,

The cultivation of the soil with plough, extirpator, harrow, roller, horse-drawn hoe and ridging plough, and sowing it by machine incurs more costs for the same area the smaller the plot. This increase in expenditure on smaller plots is based on an accumulation of losses of time which accompany the cultivation of the land. Such losses regularly occur on turning round at the heads of fields and in working across an edging strip on the narrow side of the plot (the margin, etc.) whose width varies with the length of the strip and in the hand-tilling which has to be done in those corners not reached by the cultivation of the margin. (Goltz, Handbuch der Landwirtschaft, I, p. 198)

The 50 peasant plots also require 50 ploughs, 50 harrows, and 50 carts where the larger holding can manage with far fewer – perhaps a tenth – of this number. With the same type of farming, the large farm can therefore save on its overall inventory. This can be seen in the statistics for agricultural machinery. One of the few machines which is almost as accessible to the smaller farm as to the larger is the threshing machine. In 1883 the following numbers of threshing machines were in use per 1,000 hectares of land on farms of the following size: 2–100 hectares, 2.84 steam thresher and 12.44 other types of thresher; above 100 hectares, 1.08 steam thresher and 1.93 other types of thresher. No one could sensibly want to attribute this difference to the fact that the threshing machine is more widespread on small farms than on large farms.

Despite the saving on equipment with the same techniques, the larger farm’s stock of machinery and equipment may be relatively as well as
absolutely larger than that of the small farm, since in practice its farming techniques do not remain the same. A number of implements and, in particular, machines can only be used profitably in large-scale farming: the peasant cannot make thorough use of them.

Kraft's theory of farm management specifies the following farm sizes at which various machines can be fully exploited:

<table>
<thead>
<tr>
<th>Implement</th>
<th>Arable Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horse-drawn plough</td>
<td>30 ha.</td>
</tr>
<tr>
<td>Seed-drill, reaper, gin-thresher</td>
<td>70 ha.</td>
</tr>
<tr>
<td>Steam thresher</td>
<td>250 ha.</td>
</tr>
<tr>
<td>Steam plough</td>
<td>1,000 ha.</td>
</tr>
</tbody>
</table>

Electric power is also only profitable on large farms.

For the time being it looks as if the electric transmission of power is ruled out as a means for raising the net yields of all types of agricultural establishment, in particular the small ones. The benefits are questionable even on estates with 600 acres of arable land. *Beneficial effects only begin to be evident on still larger farms.* (Köttgen, Thiels Landwirtschaftliche Jahrbücher, XXVI, Vols 4–5, p. 672)

These figures can be seen in their true light when one considers that out of the 5,558,317 agricultural establishments in the German Empire in 1895, only 306,828 covered more than 20 hectares, and only 25,061 more than 100 hectares. The vast majority of agricultural establishments are so small that they cannot even make adequate use of the horse-drawn plough, let alone machinery.

In 1894 the government of the United States commissioned a number of consular reports on the prospects for the sale of American agricultural machinery abroad. The reports from countries with small-scale land-ownership such as Belgium and France and districts of Germany like Hesse and Württemberg were unanimous: farms were too small to allow the application of machinery or even improved implements. US Consul Kiefer, reporting from Stettin, stated that Americans would regard as laughable the local practice of splitting wood with axes no better than Indian tomahawks. Consul Mosher in Sonnenberg observed: 'Agricultural implements in Thuringia are extremely crude. I recently noted some old wood cuts depicting agricultural scenes from the fifteenth century, and was surprised at the resemblance between the implements in the pictures and those prevalent today.' Modern equipment is
virtually confined to the large ducal model estates. Consul Wilson's report from Nice noted much the same in the South of France: 'In the interior the old Roman plough is still in general or frequent use – a device which merely scratches at the soil without throwing up furrows' (Reports from the Consuls of the United States on Agricultural Machinery, pp. 510, 524, 621).

In 1895 the use of machinery in the German Reich, by size of farm, was as follows (in per cent):

<table>
<thead>
<tr>
<th>Farm Size</th>
<th>Machinery in general</th>
<th>Steam ploughs</th>
<th>Seed drills</th>
<th>Reapers</th>
<th>Threshers Steam</th>
<th>Threshers Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 2 ha.</td>
<td>2.03</td>
<td>0.00</td>
<td>0.46</td>
<td>0.01</td>
<td>1.08</td>
<td>0.49</td>
</tr>
<tr>
<td>2-5 ha.</td>
<td>13.81</td>
<td>0.00</td>
<td>1.29</td>
<td>0.06</td>
<td>5.20</td>
<td>6.56</td>
</tr>
<tr>
<td>5-20 ha.</td>
<td>45.80</td>
<td>0.01</td>
<td>4.88</td>
<td>0.68</td>
<td>10.95</td>
<td>31.89</td>
</tr>
<tr>
<td>20-100 ha.</td>
<td>78.79</td>
<td>0.10</td>
<td>17.69</td>
<td>6.93</td>
<td>16.60</td>
<td>64.69</td>
</tr>
<tr>
<td>100 and over</td>
<td>94.16</td>
<td>5.29</td>
<td>57.32</td>
<td>31.75</td>
<td>61.22</td>
<td>60.53</td>
</tr>
</tbody>
</table>

The large farm is far ahead in terms of the use of machinery in every respect. Apart from the threshing machine, small farms' use of machinery is negligible.

The same basic situation also applies in the case of the animal, human or other motive power used to propel or steer machines, tools and implements. The small farm requires much more effort to achieve the same useful effect for a given area, and cannot make as full or efficient use of these resources as the large farm. The 50 ploughs and 50 carts which our 50 small peasant farms own also need 50 draught animals and 50 drivers: in contrast the 5 ploughs and carts of the large farm will only need 5 teams of animals and 5 drivers. Of course, the dwarf-holdings will only have 1 cow each per plough, whereas the plough on the large farm will be drawn by 4 horses – but this does not represent any advantage for the small farm. The double plough with one operator and 3 horses can do the same work as 2 simple ploughs each with 2 horses. The three-furrow plough, driven by 1 operator and drawn by 4 horses, can perform the same work as 3 simple ploughs, with their 3 operators and 6 horses.

According to Reuning (quoted in Roscher, Nationalökonomie des Ackerbaus), there were 3.3 horses per 100 acres of peasant holdings in 1860 in Saxony compared with only 1.5 on Junker estates. In the 1883 census, the distribution of farm animals in Germany per 1,000 hectares
The peasant’s cow is not merely used for milk production and calving, but also serves as a draught animal. The large number of cows on small farms is largely attributable to the fact that peasants practise more stock-rearing and less grain production than larger farmers; however, this cannot explain the difference in the keeping of horses.

In Great Britain the 1880 figures revealed the following distribution of cattle and horses per 1,000 acres:

<table>
<thead>
<tr>
<th>On farms of (acres):</th>
<th>Horses</th>
<th>Oxen</th>
<th>Cows</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>72</td>
<td>49</td>
<td>37</td>
</tr>
<tr>
<td>5-20</td>
<td>58</td>
<td>43</td>
<td>32</td>
</tr>
<tr>
<td>20-50</td>
<td>54</td>
<td>37</td>
<td>32</td>
</tr>
<tr>
<td>50-100</td>
<td>49</td>
<td>37</td>
<td>32</td>
</tr>
<tr>
<td>100-300</td>
<td>49</td>
<td>37</td>
<td>32</td>
</tr>
<tr>
<td>300-500</td>
<td>49</td>
<td>37</td>
<td>32</td>
</tr>
<tr>
<td>500-1000</td>
<td>49</td>
<td>37</td>
<td>32</td>
</tr>
<tr>
<td>Over 1000</td>
<td>49</td>
<td>37</td>
<td>32</td>
</tr>
</tbody>
</table>

In addition to savings on livestock, the large farm can also make more economic use of human labour power – as the example of the plough drivers showed – by making do with fewer cattle and fewer implements, by being able to use more labour-saving machinery, and by more rational arrangement of the shape and size of its fields.

Although the individual large farm requires relatively less living and dead stock and less labour-power relative to its surface area with the same type of cultivation, it naturally always uses absolutely more than the individual small farm – meaning simply that the large farm can take much better advantage of the benefits of the division of labour than the small. Only large farms are able to undertake that adaptation and specialisation of tools and equipment for individual tasks, which render the modern farm superior to the pre-capitalist. The same applies to breeds of animals. The dwarf-holder’s cow is a dairy animal, a draught animal and breeding stock; there is no question of choosing a specific breed, or of adapting the stock and feed to specific requirements. Similarly, the dwarf-holder cannot delegate the various tasks on the
Large and Small Farms

farm to different individuals. The ability of the large farm to practise this type of specialisation confers a number of advantages. The large-scale farmer can divide the work into those tasks requiring particular skill or care, and those merely involving the expenditure of energy. The first can be allotted to those workers who display particular intelligence or diligence, and who will be able to increase their skill and experience by concentrating completely, or mainly, on a particular task. As a result of the division of labour and the greater size of the farm, the individual worker will spend longer on each job, and will therefore be able to minimise the loss of time and effort associated with constant switching of tasks or workplaces. Finally, the large-scale farmer also has access to all the advantages of cooperation, of the planned collaboration of a large number of individuals with a common objective.

An English farmer already drew attention to this as early as 1773. He pointed out that one farmer employing the same number of workers on 300 acres as 10 farmers each on 30 acres has the advantage in the proportion of servants which will not so easily be understood but by practical men; for it is natural to say, as 1 is to 4, so are 3 to 12: but this will not hold good in practice; for in harvest time and many other operations which require that kind of despatch by throwing many hands together, the work is better and more expeditiously done: f.i. 2 drivers, 2 loaders, 2 pitchers, 2 rakers, and the rest at the rick, or in the barn, will despatch double the work that the same number of hands would do if divided into different gangs on different farms’. (Marx, *Capital*, I, p. 444)

Extending the farm allows individual tasks to be rapidly and properly executed by specialists: tasks which the small farmer could only do with difficulty and poorly, or which would require the attention of a distant specialist, often after a long wait and frequently in an emergency. Large farms can have their own smithy, saddlery and wheelwright’s shop for repairing and making simple equipment, tools and auxiliary materials.

However, the most important advantage which the large farm derives from the larger number of workers at its disposal is the division of labour between so-called hand-work and head-work. We have already drawn attention to the importance of scientific management in agriculture, how it alone allows planning, the avoidance of waste or depletion of the soil’s wealth and hence the attainment of maximum yields; and how only a scientifically trained farmer using rationally
planned and accurately executed book-keeping can ascertain the crop rotation, fertilisers, machines, animal breeds and type of feed appropriate to the permanently changing exigencies of science and the market. Training in manual skills and training in science are two strictly separate activities, however. Only a scale of operations large enough to require the full-time employment of someone as manager and supervisor can make use of a fully trained scientific farmer.

There is generally an appropriate minimum scale for each specific type of agriculture. Under highly intensive farming, such as wine-growing, it can be as little as 3 hectares; with extensive farming, such as pasturage, it can rise to 500 hectares. On average, under Central European conditions, an intensively farmed holding needs to be 80–100 hectares, and an extensively farmed holding 100–125 hectares to warrant the full-time employment of a person as manager.

In our view, this is the minimum size for equipping and running a farm according to scientific principles. But in 1895, Germany possessed only 25,061 farms with more than 100 hectares out of a total of 5,558,317! Small wonder that there is a noticeable shortage of rational agriculture! Goltz notes that the average yield is very low in comparison with the yields which could be obtained and which are obtained on poorer soils with more assiduous cultivation. With practical and experienced farmers, I think I can state without fear of contradiction that yields could be increased by 4–8 cwts per hectare through better cultivation. In fact, I believe the possibility for increasing yields to be considerably greater, but I have deliberately chosen this figure since it cannot be disputed by anyone well acquainted with this field. (Goltz, *Die ländliche Arbeiterklasse*, p. 165)

Taking this figure as a basis, improved cultivation would mean that Germany could produce an additional 100 cwts of grain without any enlargement of the area under cereals.

Elementary agricultural training schools have been introduced in an effort to provide for the managers and owners of farms too small to require full-time management, and who have to turn a hand to a variety of tasks, a level of learning higher than that offered by ordinary elementary schools. We are the last to want to dispute the usefulness of such training, but it is evident that what they teach cannot really be compared with the training offered by the agricultural colleges proper. They seem more suited to the production of low-cost clerks for reducing the administrative costs of large farms than for educating modern
Larger and Small Farms

independent farmers. The intermediate agricultural schools present a
different problem. One specialist complained that they inculcated

habits inappropriate for a middle-sized and even less for a small
farmer. Such students therefore later feel uncomfortable in such a
restricted environment, or do not live in a manner suited to it. Instead
of benefitting from their attendance at school, they are, in fact, ruined
for life. (Kirchner, cited in Goltz, Handbuch der gesamten
Landwirtschaft, I, p. 421)

Kirchner's fear is that these bad effects are the result of picking up
student habits at the schools: but the acquisition of such habits is merely
the external manifestation of an inner transformation wrought by the
agricultural schools. Higher education and contentment with a
proletarian standard of living are not reconcilable. Most of the students
are recruited from the bourgeoisie, and grow up with the expectation of a
bourgeois standard of living – an expectation which, via the inevitable
influence of the milieu, also touches those working their way up from
below. An income providing a comfortable existence for a peasant,
artisan or industrial worker would eventually lead to the physical or
moral decline of an educated person – and often both. Conservatives who
argue that a higher education does not fit the peasant for his occupation
are not entirely wrong. One absurd, and more often than not
disagreeable, exaggeration of this view is the argument that even the
tiny amount of learning imparted by our elementary schools is
irreconcilable with peasant life. This both lowers the peasants to the
status of beasts, and denies them their last hope of ever being able to
organise their farm on some sort of rational basis.

Nevertheless, the higher education required by a fully rational farm
is indeed difficult to reconcile with the present-day life of the peasant.
This is not meant as a condemnation of higher levels of education, but
rather of the conditions under which peasants are obliged to live. In
fact, what it implies is that the peasant farm does not rest on a higher
level of efficiency but on a lower level of expectations when compared
with the large farm. The large farm has to be more efficient than the
small farm simply to achieve the same net yield as the latter, since it
also has to bear the costs (in money-wages and payment in kind) not only
of its farmhands, mostly of peasant origin, but also its urban and
bourgeois staff.

It is the medium-sized farms with their relatively high
administrative costs which come off worst in this respect. These costs
fall rapidly with increasing size. A farm of 100 hectares will need a
trained administrator (the owner or tenant); a farm of 400 hectares would only require the addition of a clerk. All other factors being equal, its yield will be four times as great, but its administrative costs will only be one-and-a-half times as great.

And other things being equal, the larger holding is superior to the small within the peasantry itself: and the same is true for all bigger farms up to certain limits which we deal with below. By contrast, to use Hegel's terminology, a transformation of quantity into quality takes place at the boundary between peasant and large-scale farming, such that the peasant farm may be economically; if not technically, superior to the scientifically managed farm. The costs of scientifically trained management can easily overburden a small estate – all the more so where the management has become more adept in the ways of the aristocracy rather than the ways of science, and where their abilities are in inverse proportion to their expectations. This apart, both the large peasant and the large estate are superior to their smaller counterparts – naturally everything else being equal.

The larger farm also enjoys a number of constructional advantages which can only be obtained when working with a large area – in particular irrigation and drainage. It is often completely impossible to drain a small area, and is not usually worth the effort. As a rule, only larger areas are drained. Meitzen recorded 178,012 morgen [1 morgen = two-thirds of an acre] of drained land on large farms in 1885, contrasted with a mere 20,877 on smaller farms. Light railways can also only be used on large interconnected areas.

The large farm is not only blessed with advantages in production: it also has a number of advantages in the sphere of credit and commerce. In fact commerce reveals the superiority of the large farm with particular clarity.

It takes no more time to reckon with large figures than with small. It takes ten times longer to make ten purchases of £100 than one purchase of £1,000 ... In commerce, in fact, far more than in industry, the same function takes the same amount of labour-time whether it is performed on a large or small scale. (Marx, Capital, III, p. 409)

Costs of transportation, particularly by rail, are also lower the larger the volume of goods shipped. Better terms can be had and better produce, by buying wholesale, than by buying retail; and an equal, or even larger profit can be obtained by selling wholesale, selling cheaper and undercutting the competition. The large merchants not only have much lower costs in relation to turnover than the smaller: their grasp of what
Large and Small Farms 105

is happening on the market and their ability to dominate it is also greater. Although this primarily applies to the merchant proper, it is also true for the industrialist and farmer inasmuch as they have to buy and sell. Lack of market power and knowledge hits the small handicraft workers even harder than the small merchants: they cannot retain commercial staff and have to be their own merchant. Worst afflicted are the peasantry in their rural isolation. Their commercial knowledge is the most sparse; they are least able to make swift use of favourable opportunities, let alone to predict them, or to avoid unfavourable situations. At the same time peasant farming is more diverse than the activity of the town-dwelling handicraft worker, requiring many more individual types of labour and a great deal of sundry buying and selling. Apart from tools, the shoemaker only has to buy leather, twine and nails: the only products for sale are shoes. But in addition to tools, the peasant also has to buy in seed-corn, fodder and the artificial fertilisers – and sells stock, grain, milk, butter, eggs and so on. No one is more dependent on the presence of the merchant than the peasant.

This dependency is at its greatest and most pernicious where the trader doubles up as usurer, where the pressing need for money to pay taxes or debts forces the peasants to offload their goods at any price or to sell them before they are even ready for market.

It is at this point that we encounter a further aspect in which the large farm is superior: *credit*.

Chapter 5 showed how modern agriculture is impossible without capital, and that, in the absence of a system of leaseholding, the main means by which farmers acquire money is the mortgage. The farmer can also raise a personal loan or sell off one piece of the farm in order to cultivate the rest. This is not, however, always possible, and it is often inadvisable, since by diminishing the size of the farm, the owners lose the advantage of scale. Not only that: they also forgo the prospect of any increase in the price of the separate plot through an increase in ground-rents or fall in the rate of interest. Personal credit and mortgages are therefore the main method for the acquisition of capital.

Mortgage credit tends to be used where fixed capital is involved (improvements, construction works – disregarding here any changes in ownership which may have prompted the mortgage indebtedness). Personal credit is more customary for circulating capital – fertilisers, seeds, wages and the like.

Indebtedness on the part of a landowner was once the result of an emergency: it represented an abnormal situation. In the capitalist mode of production it arises wherever the landowner and the farmer constitute a single juridical person: it is a necessity rooted in the production process.
Indebtedness on the part of landowners is therefore now inevitable. And with it, the type of indebtedness of landownership has also become a fundamental factor in agricultural production.

Although this observation is true of both large and small farms, the former have a number of advantages when it comes to raising money. Finalising and administering a mortgage of 200,000 Marks does not require proportionally more work than one of 2,000 Marks: 200,000 Marks lent to 100 different individuals is 100 times more costly in terms of labour than the same sum lent once.

Lafargue's valuable study of small land-ownership in France, 'Der kleine Grundbesitz in Frankreich' (Neue Zeit, I, p. 348), provides a striking example of how this works in practice:

The costs of a mortgage rise greatly in proportion to the total, the smaller the loan and the shorter the period for which it is made. The following are the rates of interest and the usual costs of a mortgage of 300 francs:

| Solicitor's fees | 5.00 Francs |
| Preparation of contract (two copies) | 3.00 |
| Registration note | 3.00 |
| Seal | 1.95 |
| Registration fee of 1 franc | 3.30 |
| '10 cent. per 100 francs | 3.30 |
| Entry with the Bureau of Mortgages | 3.00 |
| Minimum interest of 5% | 15.00 |
| Repayment cost | 14.25 |
| **Total:** | **48.50** |

On a nominal loan of 300 francs the debtor receiving a mortgage loan in fact obtains a mere 251 francs and 50 centimes.

Matters are not radically different in Germany. The Annual Report of the Prussian Central Land Credit Institute for 1894 – prepared in April 1895 – reads:

Over the last few years we have made special efforts to ease access to
credit for small and medium-sized landowners. The fact that these continue to be burdened with high-interest mortgages from individuals, foundations and banks rests on the fact that the land-credit institutes are rarely able to exempt the debtor from a standard charge even on the pledging of small plots, and the standard costs which have to be paid by the small borrower are out of proportion to the size of the loan. Two years ago we began to assist on this aspect through a system of flat rate charges: irrespective of the real costs to us, the borrower only pays 0.02 per cent of the sum applied for - with a minimum charge of 30 Marks and a maximum of 300. For loans between 1,500 Marks - the minimum under our statutes - and 15,000 Marks, application and examination fees will only amount to the modest sum of 30 Marks.

This 'social reform' therefore consists in deducting as much for a loan of 1,500 Marks as for a loan of 15,000 Marks! No loans at all are made below 1,500 Marks. The very small landowner is completely denied access to mortgage credit. They have the good fortune to avoid indebtedness altogether!

According to Meitzen's 1884 study, large land-ownership in Prussia is more heavily burdened with mortgages than small land-ownership. Registered debts as a percentage of the estimated value of holdings (per holding by net property tax yield) were as follows:

<table>
<thead>
<tr>
<th>500 Thalers and more</th>
<th>100-500 Thalers</th>
<th>30-100 Thalers</th>
</tr>
</thead>
<tbody>
<tr>
<td>53.8 per cent</td>
<td>27.9 per cent</td>
<td>24.1 per cent</td>
</tr>
</tbody>
</table>

This does not necessarily reflect the worse position of large landowners, but may lie in the greater difficulty which peasants have in obtaining mortgage loans. The peasant is therefore forced to rely on personal loans.

Personal loans are even more pernicious than mortgages, however. Large farmers sell their produce directly on the large-scale market: they remain in constant contact with the market and - if they are competent farmers - are therefore able to obtain credit in the economic centres where large masses of investment-seeking loan-capital accumulate, just as any industrialist or merchant.

The isolated peasant with only small amounts of produce does not reach the major markets. Business is transacted through an intermediary who lives in the nearest town, or who visits the peasant. Large-scale loan-capital remains unaware of the peasant's commercial affairs. And nor does the peasant have a banker in the town with whom receipts
could be deposited, and from whom credit could be obtained. The cash-strapped peasant has to approach the nearest rural capitalist, and since capitalists are generally few and far between in rural areas there is usually little choice in the matter. It might be the agent or middleman already used by the peasant, the village innkeeper or a large peasant — people acquainted with the peasant's circumstances, who have a not insignificant interest in this small traffic in loans and are eager to extract a substantial profit from the business. That they can do so rests on the fact that the demand for capital in rural areas far exceeds supply, that the peasant's distress is usually considerable, and that the capitalist is therefore in a very strong position. Whereas capitalist development has enabled large landowners, at least the competent and efficient farmers among them, to shift from reliance on the usurer to modern production credit with a level of interest adapted to the current rate of profit, the peasant is still dependent on the medieval type of blood-sucking usurer, who squeezes out what he can, whose interest is utterly out of proportion to the rate of profit, and who instead of fostering production simply undermines the existence of the debtor. The capitalist mode of production compels both peasant and large landowner to run into debt; but the small size of the peasant's enterprise often leaves him/her still entrapped within the manifestations of the medieval debt system, a system utterly incompatible with the needs of capitalist production.

Weighing up all the advantages enjoyed by the large farm— the smaller losses of cultivated areas, savings on living and dead inventories, the fuller utilisation of these inventories, opportunities for using machinery denied to the small farm, the division of labour, scientifically trained management, commercial superiority, easier access to money — it becomes difficult to understand how Prof. Max Sering can claim so emphatically that:

There is not the slightest doubt that any branch of cultivation can be conducted on medium and small farms just as rationally as on large, and that in contrast to industrial development, the growing intensity of cultivation has given a definite advantage to the smaller unit. (Sering, *Die innere Kolonisation im östlichen Deutschland*, p. 91)

On this argument one might have expected Sering to demand the forced dismemberment of large estates. But this conclusion somehow eludes him. Directly after the above he declares:

*The simple consequence of the fact that the large landowner is in the*
van of agricultural progress is that serious damage would be done to our development were large-scale farming in the East to cease entirely. Such absolute levelling-down never does any good: diversity is the precondition for all development. Not only their political but also their economic achievements render the continued existence of our Eastern landed aristocracy a national necessity.

So, the small farm is superior to the large as far as rational cultivation is concerned, irrespective of the particular branch - and all the more so, the more intensive cultivation becomes. Yet the economic achievements of the East Elbian estates make their continued existence a national necessity.

Just how this simultaneous enthusiasm for both large and small farms is to be explained is a matter we shall come to later: we rest content here with the observation that the fear of crippling agricultural progress inhibits even such an enthusiastic advocate of small-scale cultivation as Sering from daring to draw the logical conclusion - the abolition of the large farm.

Dispassionate observers rarely come to such whole-hearted admiration for the small farm. Krämer, by no means an enemy of the peasantry, states very pointedly:

It is well known and explicable that the small farm is burdened with disproportionately high expenditure on buildings, draught animals and dead stock, and on running expenses - heat and light for example - compared with the large farm. Certain agricultural tasks, by their nature, can only be successfully executed on a large scale, such as stock-raising, the running of technical operations, the use of machinery, carrying out of improvements and so on. The large farm is always superior in such spheres. Similar advantages may be enjoyed by the large farm in the sale of produce and the use of credit. The main advantage of the large farm nevertheless consists in the fact that, depending on location and function, it can operate according to a definite plan, which serves both to provide an overview of the business and assist in the orderly conduct of the farm. And by applying the key and mobilising principle of the concentration and division of labour, it can develop the economic forces to even higher levels of efficiency by allowing workers to become skilled in each specific operation. There can be no doubt that the development of agriculture has provided the large farm with rich resources of science and technology: and these have enabled it to maintain its lead in all these respects through the specialised training of farm personnel.
This all sounds somewhat at odds with Professor Sering's claim.

**Overwork and Underconsumption on the Small Farm**

Small farms have two major weapons to set against the large. Firstly, the greater industriousness and care of their cultivators, who in contrast to wage-labourers work for themselves. And secondly, the frugality of the small independent peasant, greater even than that of the agricultural labourer.

John Stuart Mill, one of the most passionate champions of small-scale cultivation, drew attention to the fact that its most notable feature was the unremitting toil of its labourers. Quoting Howitt he writes:

> They labour busily early and late because they feel they are labouring for themselves. They plod on from day to day, and year to year – the most patient, untirable and persevering of animals. It would astonish the English common people to see the intense labour with which the Germans earn their firewood.

He goes on to refer to the 'almost incredible toil' of the small peasants, which makes a powerful impression on all observers. Whether the impression made by such observations on people as 'the most patient and indefatigable of all beasts of burden' was also an *elevating* one, is certainly doubtful (Mill, *Principles of Political Economy*, p. 226–68).

The small peasants not only flog themselves into this drudgery: their families are not spared either. Since the running of the household and the farm are intimately linked together in agriculture, children – the most submissive of all labour – are always at hand! And as in domestic industry, the work of children on their own family's small peasant holding is more pernicious than child wage-labour for outsiders. 'Child and women's labour,' writes a reporter from Westphalia, 'in outside service is quite rare, and not associated with any particular drawback: in fact, it has an evidently beneficial effect. However, children are sometimes so overworked by their own parents that the unfavourable effects could still be observed at subsequent military recruitment.' Another observer wrote in a more appeasing tone: *'The employment of children to a degree sufficient to warrant anxiety takes place at most (!) by their own parents, and contrasts with those children put out to work for the Heuerlinge in return for food and clothing'* (Kärger, *Verhältnisse der Landarbeiter in Nordwestdeutschland*, pp. 83, 122). How reassuring!
It takes a very obdurate admirer of small-scale land-ownership to see the advantages derived from forcing small cultivators down to the level of beasts of burden, into a life occupied by nothing other than work – apart from time set aside for sleeping and eating.

Of course this obsessional drive to work is not innate to peasants. The numerous holidays of the Middle Ages are sufficient testimony to this – and many such holidays are still retained in Catholic areas. Roscher noted one district in Lower Bavaria with 204 holidays each year (including 40 consecration days and post-consecration days, 12 days target-practice and so on), and where work stops at 4 pm! The demand for an eight-hour working day for 300 days a year seems quite modest in comparison!

Overwork begins once labour for the producer's immediate consumption turns into labour for the market, impelled by the goad of competition. Competing through lengthening working time always goes hand in hand with technical backwardness. The latter generates the former – and vice versa. An enterprise which cannot fight off the competition through technical innovation is forced to resort to the imposition of even greater demands on its workers. Conversely, an enterprise in which the workers can be pushed to their limits is much less exposed to the need for technical improvements than one in which workers place limits on their exertions. The possibility of prolonging working-time is a very effective obstacle to technical progress.

Opportunities for the more intensive use of child-labour also work in the same direction. We saw above that rational agriculture is impossible without a good deal of scientific knowledge. Although the middle and higher agricultural training schools cannot provide a substitute for a proper college education in the natural sciences and economics, they nevertheless enable those peasants who do receive training to practise if not the most rational, then at least more rational farming than peasants who lack such learning. However, the need to exploit family members as young as is feasible, and as productively as is possible, represents an immovable obstacle to the need for a higher level of knowledge. In fact, there are some areas, in particular in Austria and Bavaria, where compulsory school attendance to 14 is too much for the local peasantry: they either cling tenaciously to the lower limit of 12 or 13, or campaign vigorously for its introduction.

The more agriculture becomes a science, and hence the more acute the competition between rational and small-peasant traditional agriculture, the more the small farm is forced to step up its exploitation of children, and undermine any education which the children might acquire.
The overwork of the small independent farmers and their families is not therefore a factor which should be numbered amongst the advantages of the small farm even from a purely economic standpoint, leaving aside any ethical or other considerations.

The situation is no better when we turn from the peasant's industriousness to the peasant's frugality.

One disadvantage suffered by the large farm is its need to pay for 'workers by brain', as well as manual workers, the former having much higher expectations than the latter. It also has to grant its manual workers a higher living standard than that tolerated by the small peasant. The same property which drives the peasants to work so much harder than the propertyless wage-labourers also forces them to lower their demands on life to a minimum, lower even than the standards expected by wage-labourers.

Again, this is not intrinsic to peasant farming or the peasant economy. The holiday-filled Middle Ages also saw the peasant enjoying an agreeable level of well-being, which, as we saw above, did not exclude plentiful food and drink. And where such medieval conditions, or at least traditions, have continued, peasants have been spared the miserable fate of their counterparts elsewhere.

The niggardliness of the peasants begins when their farms fall under the sway of competition - a phenomenon revealed most clearly in the case of the French peasantry which has been longest exposed to the effects of free competition as free private independent landowners.

An English observer writing in the early 1880s commented that he could not imagine a more miserable existence than that led by the French peasant. Their houses were more like pigsties:

There was no window, just two panes over the door which could not be opened; there was neither light nor air unless the door was open. No shelf, no table, and no cupboard were visible; the floor was littered with onions, dirty clothes, bread, sacks and an indescribable heap of rubbish. At night men, women and children, and cattle, slept in a chaotic heap. This lack of comfort was not always the result of poverty: these people had lost any sense of decency. Their only thought was that of saving on fuel.

The same author goes on to note how the peasants' carefulness soon degenerates into meanness: they seem even to lose utterly any capacity for pleasure, and as long as they can save a sou, they are indifferent to any enjoyment and comfort in life.
Not one book or newspaper was in evidence, no picture or wood-cutting adorned the walls, not a fragment of porcelain, not one ornament, not one good item of furniture, no wall-clock – the pride of the English farmhouse. You cannot imagine a life so totally devoid of progress and comfort. Every penny is grudged – even that spent on the most essential articles. The result is a stingy, miserable, repugnant existence, whose only ideal consists in stuffing as many sous as possible into an old sock.

Notwithstanding this, conditions are not much better on English small farms. The most recent report of the Royal Commission on Agriculture (1897) reveals how their owners and tenants live and work. For instance: 'All around here [Cumberland] the farmers' sons and daughters work for nothing. I do not know one case where a father pays his sons' and daughters' wages. They give their sons a shilling or two to buy tobacco' (p. 357). A small-holder from Lincoln reported:

I have brought up a family and nearly worked them to death. They said, 'Father, we are not going to stop here and be worked to death for nothing', so they went off into shops and left me and the old women to struggle along.

Another: 'I and my three boys ... have been working 18 hours a day for several days, and average 10-12 during the year. I have been here 20 years and have just been scraping along. Last year we lost money. We eat very little fresh meat.' A third: 'We work much harder than labourers, in fact like slaves. The only advantage we get is being our own masters. We live very carefully, just keep going' (p. 358).

Mr Read, reporting to the Commission on the condition of the small farmer, noted:

I say that the only way in which he can possibly succeed is this, in doing the work of two agricultural labourers and living at the expense of one. As regards his family, they are worse educated and harder worked than the children of the agricultural labourer. (p. 34)

The picture is only slightly less gloomy in areas specialising in fruit and vegetable growing, or where alternative employment is available. Many parts of Germany tell a similar story. A report from Hesse published in Die Neue Zeit reads:

The small peasant passes the most miserable existence imaginable. Agricultural day-labourers are much better off in comparison, since –
as they put it – they 'attend along with their mouths', that is, they get their food. Their incomes are not prey to the moods of the weather, apart from the fact that the food is poorer during bad weather.

One reason suggested for the day-labourer's better diet is that, 'the only means of getting good workers is to offer good food'. The staple diet consists of potatoes.

The small peasants' dwellings are poor in the extreme; their houses are usually built of wood and loam, are clumsily put together and have recently been very neglected. The house is also poorly furnished – a table, a bench, a few chairs, a bed with a curtain – a four-poster – and a cupboard usually make up their total wealth.

One example of how the peasant art of starving can lead to the economic superiority of the small farm is illustrated by Buchenberger. He compared a large peasant holding of 11 hectares and one of 5.5 hectares in the Bischoffingen district of Baden. Unusual circumstances forced the larger to rely exclusively on wage-labourers – a highly unfavourable state of affairs, since the farm was too small to balance the disadvantages of wage-labour with the advantages of the large farm. The smaller farm was cultivated solely by the owner and family (husband, wife and six grown children). The larger farm turned out a deficit of 933 Marks, the smaller a surplus of 191 Marks. The main cause of the difference lies in the better diet of the wage-labourers on the large farm – worth almost a Mark per day per head, whereas on the farm on which the family was lucky enough to be able to work for itself, the value of the diet amounted to a mere 48 Pfennig per head, per day, barely half what the wage-labourers consumed (Verein für Socialpolitik, Bäuerliche Zustände in Deutschland, III, p. 276). If the peasant family on the small farm had eaten as well as the wage-labourers on the large farm, they would have had a deficit of 1,250 Marks instead of the 191 Mark surplus. Their profit was not the result of a full barn, but an empty stomach.

This picture is complemented by a report from Weimar.

The fact that forced auctions are not more common, despite all this inefficiency, can be simply explained by the fact that our small peasants are accustomed to tolerating an unbelievable amount of privation in return for their independence. Such peasants represent an entire class for whom fresh meat, which the estate worker must have twice a week at least, only appears on the table on high feast days,
and for whom fresh butter is a delicacy. As long as smallholders refrain from shackling themselves to their own land, and stick to hiring themselves out as day-labourers, they can be reasonably well off: their misery begins when they take up their own plough. (ibid., I, p. 92)

Yet another instance of the wage-labourer on large-farms being better off than the independent owner of the small farm.

Finally, let us note some comments by Hubert Auhagen in his paper on large-scale and small-scale enterprises in agriculture. Auhagen compared two farms, one of 4.6 hectares and one of 26.5 hectares as far as their profitability - not labour-productivity was concerned. He calculated that the small farm was the more profitable.

How did this come about? On the small farm the children help: on the large farm they cost money. 'The small peasants receive a substantial amount of help as soon their children are grown. Child-labour often begins as soon as the children can walk.' The small farmer in Auhagen's case study used his children on the farm, even those as young as seven. Annual spending on schooling was 4 Marks. The larger peasants send their children to school: a 14-year-old son studying at grammar school cost 700 Marks a year alone - more than the total household expenditure of the entire family on the small farm. So much for the superiority of the small farm!

In addition to the young members of the family, the oldest also have to put in their diligent contribution. 'I have often found older members of the family, more than 70 years of age, who were able to replace a full-time worker, and who naturally made a major contribution to the welfare of the farm.' Of course, the able-bodied slaved extraordinarily hard.

The average day-labourer, especially on a large farm, normally thinks: 'if only it were finishing time.' The small peasant, at least when there is pressing work to do, hopes that the day might last just a few hours more.

If a particular time is especially favourable for carrying out a particular task, as is very often the case in agriculture, the small farm can make better use of the moment by getting up earlier and working longer, and more swiftly, than the larger holding, whose workers will not get up earlier, or work better or longer than on any other days.

This extreme drudgery also brings its own reward: the peasant can
manage under the most miserable conditions. Auhagen speaks with admiration of a peasant in the Deutsch-Kroner area who

inhabits a clay-built cottage, 9 metres long and 7.5 metres broad. There is a door in the middle of the house leading directly into the living room. This living room also serves as a bedchamber in which husband and wife, and the four children all sleep. This room leads on to a small kitchen and from there into the maid's room, the only outsider on the farm. This is the best room in the house, since the maid wants the same standard as she can have anywhere else. The house cost 860 Marks to build. Only the head carpenter, joiner and stove-fitter were paid. Everything else was done by the family and relatives. The woman had been married for 17 years, and had only just started to wear a pair of shoes; summer and winter, she went barefoot or wore clogs. She wove her own clothes and those of her husband. Their diet consisted of potatoes, milk and very occasionally a herring. The man smoked a pipe of tobacco only on a Sunday. These folk were not aware that they lived especially simply (simple is good!) and did not affect dissatisfaction with their lot. Living under this simple regime, these people managed a small surplus nearly every year. When I asked them the value of their farm, they answered that it would not be for sale for under 8,000 Marks.

What an uplifting hymn of praise to the benefits of the small farm, which even under the 'simplest' of circumstances - that is, the dirtiest and most degrading misery - still manages to produce a surplus! The rural wage-labourers at least regard themselves as human beings, not mere beasts of burden, have higher needs than the small peasants, and represent a higher level of general culture. So away with wage-labourers - that is, with the large farm - and long live the infinitely superior small farm!

We have to confess that as far as we are concerned the sub-human diet of the small peasant is no more an advantage of the small farm than its superhuman industriousness. Both testify to economic backwardness, and both represent obstacles to economic progress. In this manner, small-scale land-ownership has become a means for the creation of a 'class of barbarians standing half outside society, combining all the crudity of primitive social forms with all the torments and misery of civilised countries' (Marx, *Capital*, III, p. 949). It is of course, easy to see why conservative politicians want to preserve this barbarism as the last refuge of capitalist civilisation.

The greater care taken by peasants in their work is less ruinous for them than their drudgery and excessive frugality. Care plays a major
role in agricultural production - greater than in industry for example. And workers working for themselves will clearly exercise more care than wage-labourers. Whilst this might not necessarily be an advantage in all types of large enterprise, it certainly is as far as large-scale capitalist farming is concerned. This should not be overstated, however. The other weapons in the small farm's arsenal - overwork, undernourishment, and accompanying ignorance - offset the effects of greater care. The longer the worker has to work, the lower the standard of diet, and the less time available for education, the less care ultimately exercised in work. And what is the point of taking great care if there is no time to clean the stall and livestock, if the draught animals - often simply a dairy cow - are just as overworked and underfed themselves.

J.J. Bartels, director of the Saarburg Agricultural School, writing on the subject of small peasants in the Merzig district of Trier, noted:

These small-holders live almost solely on potatoes and rye bread; their consumption of meat and fats is very low. One could honestly say that their diet is inadequate, and that has a deleterious effect on their willpower. They become dull, indifferent, unable to arrive at a proper assessment of cause and effect in their own businesses. (Verein für Socialpolitik, Bäuerliche Zustände, I, p. 212)

The small farm is at its most impoverished where it is unable to provide even a modestly adequate diet, and where the head of the household is obliged to look for supplementary employment. Professor Heitz, of Hohenheim, writing on the subject of small peasants in the Swabian districts of Stuttgart, Boeblingen and Herrenberg, notes:

All those factors which contribute to the higher yield of the larger estates - deeper furrows and more careful cultivation of the fields, the attractive appearance of the produce, the better diet and greater cleanliness of the stock - are only very slowly and laboriously trickling through to the peasant, who lacks both the will and the money to take any additional risks. A large number of machines which were introduced elsewhere some time ago are virtually unknown. And a further factor also has to be reckoned with, deeply rooted in current circumstances. We would attribute the lack of real effort and stamina, which is often complained of, not to the nature of the people but to small-scale land-ownership. It is widely accepted that the combination of completely diverse activities has a crippling effect on each one. If the small trader and pedlar have lost both the
desire and the energy to carry out heavy agricultural work, the peasant in turn usually makes a poor craftworker and the craftworker a poor peasant. (Verein für Socialpolitik, Bäuerliche Zustände, III, p. 227, cf. I, pp. 83, 120)

The following figures show what this actually means for German agriculture. According to the 1895 Census, 502,000 independent farmers (20 per cent) have a supplementary occupation; 717,000 agricultural establishments are owned by agricultural wage-labourers, and 791,000 by industrial workers, with 704,000 belonging to independent industrialists, mostly craft workers.

Of the 5,600,000 owners of agricultural establishments, only 2,000,000 (37 per cent) are independent farmers without a supplementary occupation; of the 3,236,000 owners of farms of less than 2 hectares, only 417,000 (13 per cent) come under this category. Of these small farms, 147,000 belong to independent farmers with a supplementary occupation, 690,000 to agricultural labourers, 743,000 to industrial wage-labourers, and 534 to handicraft workers. The number of these miserable hybrid farms is therefore enormous.

If the position of most small farmers is inimical to the exercise of care, conversely the large farm is eminently capable of getting careful work out of its wage-labourers. Good pay, good food, and good treatment have a considerable effect. 'Dissatisfied, poorly paid or poorly fed workers can, and will, do much more harm on a farm through neglect or wilful damage than is saved on wages, whilst those farms – and this is proven by experience – which pay adequate wages, thrive and make profits' (Kirchner in Göltz, Handbuch, I, p. 435). Well-paid and well-fed, and hence intelligent, workers are an indispensable prerequisite for rational large-scale farming. This precondition is still undoubtedly lacking in the majority of instances, and it would be naive to expect any improvement from the 'enlightened despotism' of large-scale farmers. As in industry, any improvement in agriculture will come from the pressures of the organised workforce, either directly, or indirectly, through the medium of the state. The task of the workers' movement is to create this one important precondition for rational large-scale agriculture by raising the moral and physical standards of the rural proletariat and combatting rural barbarism, in the process removing one of the last props of the small farm.

Apart from paying and feeding its workers well, the large farm has other means at its disposal for achieving greater care in the execution of work. Thünen, for example, introduced a system of profit-sharing in which all the permanent estate-workers received a share of the surplus
of the net profit over and above a certain minimum. More common is the use of the division of labour to achieve greater care and conscientiousness. As already noted above, given the large number of workers in its employ, the large farm can seek out those with particular skills, intelligence or industriousness and assign them jobs in which these qualities play an important role – either as workers, supervisors or overseers.

Finally, we should remember that as far as the central forms of farming are concerned – primarily arable farming proper – the machine not only works more swiftly but also much more thoroughly than the manual worker equipped with simple tools, and produces results unattainable by a worker even exercising the maximum conceivable care. The machine ploughs better, sows better, can cut (apart from lying corn), thresh and clean the grain, as well as sort, to a higher standard than a peasant with simple tools or implements. And despite Professor Sering, we still have not yet found one expert who thought that the small enterprise could function as rationally as the large. In fact, the types of agriculture in which the small farm is still held to be competitive are much more modest in scope.

According to Professor Krämer, the large enterprise is preferable for certain types of farming and the small for others.

The small farm is most appropriate where complex and high-value cultivation is involved, in which great care is demanded of the individual worker. Such types of cultivation are precisely those which offer the most opportune use of spare time and less strong hands [small children!?: K.K.] amongst the owner's family, allowing work to be executed cheaply, as the success of market-gardening, vine-growing and the cultivation of certain industrial crops show. (Goltz, Handbuch, I, p. 197)

The following figures reveal the importance of those types of cultivation which – for the present – favour the small enterprise, as opposed to stock-rearing and arable farming. In 1899 the German Reich contained 161,408 hectares planted with industrial crops, and 120,935 with vines. In contrast, fodder crops and pasturage took up 8,533,790 hectares, grain 13,898,058 hectares, and potatoes approximately 3 million hectares. Viticulture and market-gardening have also been successfully practised in large-scale establishments. Many of the smaller industrial crops are also on the decline. Tobacco fell from 27,248 hectares to 15,198 hectares between 1881 and 1893 within the German customs area. Since the latter date it has recovered a little (22,076
hectares in 1896), but is still well short of its 1881 level. The cultivation of flax and hemp has also fallen. In 1878 155,100 hectares were planted with flax and hemp; by 1883 this had fallen to 123,600 and by 1893 to 68,900. Hops are not much better off: cultivation rose from 40,800 hectares in 1878 to 45,900 in 1883, but then fell back again to 42,100 hectares in 1893.

Opting for industrial crops can spell disaster for peasants. Dr Robert Drill notes:

In Bohemia it is well known that peasants in the hop-growing districts concentrate almost exclusively on this one crop, and thus make their entire fate totally dependent on this plant. Needless to say, this is a hazardous sport, since hops are subject to very marked price fluctuations. Entire villages in Bohemia have already been reduced to beggary after a couple of bad harvests. (Drill, 'Die Agrarfrage in Österreich', p. 24)

According to Krafft (Lehrbuch der Landwirtschaft, p. 82) the price of hops can fluctuate by up to 1,000 per cent or more. Looking at agriculture overall, the types of farming in which the small farm is superior to the large are really only of scant significance: in general, the large farm is decisively superior to the small.

This is also acknowledged by the 'practician', who generally prefers to farm a large, indebted, estate than a small unencumbered one representing the same value. Most mortgage indebtedness arises from this preference for the large farm. Anyone deciding to invest 50,000 Marks in an estate will prefer to buy one with a market value of 100,000 Marks and take a mortgage for 50,000 Marks rather than make an outright cash purchase of 50,000 Marks.

Practical cultivators also recognise the superiority of the large farm in another way – in establishing cooperatives. The cooperative enterprise is a large enterprise.

The Cooperative System

The cooperative system is of undeniable importance: the question is whether the advantages of the large cooperative enterprise are accessible to peasants in those spheres in which the large farm has the edge over the small farm. And how far does their superiority extend?

Until now, the cooperative system in agriculture seems to have been confined almost exclusively to the spheres of credit and commerce (apart from a number of industrial enterprises run by single cooperatives, such
as dairies, sugar factories and the like whose significance for agriculture is dealt with below). At this stage we are concerned with agriculture proper. The only associations directly involved with production in this respect are the improvement cooperatives. Other agricultural cooperatives are mainly involved in credit and intermediary trading, where the cooperative benefits both large and small farms.

Conditions for the organisation of cooperatives are notably unfavourable among the peasantry: their manner of working and general pattern of life fosters an isolated and restricted outlook, and denies them the free time which cooperative self-administration requires. Conditions are at their worst in police states, where centuries of bureaucratic tutelage and oppression have totally extinguished the traditions required for cooperative democracy. Alongside ignorance, the lack of political freedom is also one of the most serious impediments to peasant welfare. The greatest difficulty in bringing peasants together in cooperative organisations is encountered where patriarchal rule is still untouched, and its twin props of throne and altar remain intact.

Large landowners can engage in cooperative activity much more easily than peasants. They are fewer in number and have sufficient leisure time, extensive connections and commercial knowledge – either their own or purchased in the form of experts. As with every other agricultural advance, the large enterprise is also ahead in the cooperative sphere. The cooperative system is indispensable for the peasantry: but in most cases not as a means of achieving equality with the large landlord by combining their many small forces, but as a means of preventing all the benefits of the cooperative system from accruing solely to the large landowners – and obtaining a small share for themselves.

Under the mortgage system, it was the large unit which first seized the advantages of the cooperative system. The Prussian Landschaften extend back to the eighteenth century. They were originally simply compulsory associations between Junker estates in individual provinces for the guaranteeing of mortgage credit. In the 1860s and 1870s one after the other began lending to non-Junkers as well. But like the mortgage institutions which made their living by lending, they did not want to get involved in all the trouble and expense associated with loans to small farms. Loans were not extended to holdings below a specified net property tax yield (150 Marks in Saxony, Schleswig-Holstein, Westphalia, Brandenburg, 240 Marks in Pomerania) or a certain net value (6,000 Marks in Posen).

Here cooperative organisation is a means of obtaining advantages for the larger estates which are not available to the small. Hecht in his
introduction to his work on national and provincial land credit institutions in Germany comments: 'A brief distinction would be that the cooperative organisation of land credit has principally benefitted large landed estates.'

For the small peasant, the credit cooperative is primarily a means of raising personal loans. The credit cooperative can manage what the scattered peasantry cannot – namely, obtain credit from large-scale urban money capital, on modern capitalist terms and conditions. Although the loans desired by the individual peasants may be too small to interest large-scale capital, the loans raised by a large cooperative are quite a different matter. Furthermore, for an urban bank to grant a loan to a completely unknown peasant is a risky undertaking: the joint liability of the cooperative members means a substantial reduction in the risk. The credit cooperatives also therefore enable the peasant to obtain money at moderate rates of interest, which, thanks to the improvements effected by the loans, can be paid without incurring ruin. The credit cooperatives are undoubtedly a very important lever for economic advance amongst the peasantry: and although this is an advance towards capitalism, rather than socialism as some claim, it is nonetheless of considerable economic value.

Of course this is only valid if the roots take hold and thrive – no easy matter. The establishment and management of cooperatives does not come easily to simple peasants: it may be that their spread throughout the bulk of the peasantry will involve some expensive lessons. Argument is still raging as to the most appropriate organisational form for agriculture – with the proponents of each view accusing the other of doing nothing to help the farmer.

The Raiffeisen banks are controlled by the clergy, whilst in the Schulze-Delitzsch banks the handicrafts have the upper hand. But even the best organised rural lending banks can only be of use to some sections of the peasantry. Not all peasants can get loans when they most need them. Great care has to be exercised to avoid heavy losses by the cooperative. And those who are not creditworthy – usually those most in need – still fall into the usurer's clutches. Nevertheless, the credit cooperatives remain the most important type as far as the peasantry is concerned (aside from those concerned with the agricultural industries). They are also growing rapidly. According to Sering (1897) only c. one hundred rural lending banks existed in the German Empire in 1871; by 1891 this had risen to 2,134 and by 1896 to 6,391. In Prussia the central cooperative bank statistics listed c. 5,000 on 1 October 1895 – the first day of its own existence; by 30 October 1897 this had risen to 7,636.

Large landowners do not need these institutions. If they are
creditworthy there are much simpler ways to get money.

Trade, ousting the competition, winning customers, and taking advantage of the market are not activities at which cooperatives excel. The single entrepreneur – independent, ruthless, highly motivated – can do it much better than the official of the cooperative.

And the more unbalanced the relation between supply and demand, and the more uneven the quality of the product, the more this will hold true for any individual commodity. This explains, for example, why it is so difficult to sell livestock on a cooperative basis. Virtually every attempt to set up such a system in Germany has failed. This lack of uniformity of the product is felt all the more acutely by marketing cooperatives consisting of a large number of small peasants, producing under widely differing conditions and employing widely differing methods, as opposed to those comprised of a few large farms each of which is rationally cultivated. Mendel-Steinfels reports, for example,

the sale of butter by cooperatives has proved successful everywhere where it has involved large and equal quantities of butter – that is, the produce of dairy cooperatives or large landowners. However, where the cooperative has had to deal with the sale of butter produced by many small producers, they have always come to grief. (Handwörterbuch der Staatswissenschaften, IV, p. 950)

We shall deal with the significance of the dairy cooperatives for the peasantry below. Our main point here is that those marketing cooperatives which flourish usually consist of large, not small, farms. The same applies to the sale of livestock, grain and alcohol. The alcohol sales cooperatives, which have recently grown so rapidly in North Germany, are – looked at in the cold light of day – nothing more than manufacturers’ cartels for keeping up the price of alcohol.

Marketing cooperatives can only begin to play a useful role for the small farm if they allow the individual members to coordinate their production according to a common plan using common methods. The prospects for this are poor: German peasants seem disinclined to invest any more time in learning how to organise themselves in this sphere. No rapid advances in peasant cooperatives can be expected in the near future.

Matters are still very much at the experimental stage.

The situation is somewhat better when we turn to the wholesale purchasing cooperatives, for the collective buying-in of fertilisers, fodder, seed, stock, machinery and so forth. These are rapidly expanding. In 1875 there were 56 agricultural raw material associations;
In addition, in 1894 there were a further 214 agricultural machinery and implement cooperatives.

Agricultural cooperatives may well thrive in the sphere of the purchase of raw materials and machinery, which is straightforward compared with selling. The market is known, and the cooperative members place their own orders: the sellers to the cooperatives are not scattered small firms, but large industrial companies or farms (the stock-breeders for example).

Such cooperatives bring undeniable benefits to the farmer, who saves on the costs of the middleman. Naturally, the farmer's gain is the merchant's loss: curiously, those most up in arms about the large retail stores and cooperatives which cheapen the worker's food are the agrarian lobby, the very same people who are busily engaged in wiping out the middleman who raises the prices for produce for government employees, officers and landowners. In addition to cutting out the middleman, agricultural purchasing cooperatives also have the advantage of protecting the farmer against fraud. The question still nevertheless arises as to whether the large farm might not have even more to gain from such co-ops than the small. For example, the supply of cheap coal to large landowners for running their steam engines by the Berlin Central Cooperative is not exactly designed to promote the interests of the small farmer. And cooperatives which buy machinery for sale or hire to their members are naturally of more use to members who can utilise it - that is, those with larger farms. Clearly, it is the large farms and landowners – not the small – who have the most to gain from the steam-plough cooperatives.

Pastor Gohre, addressing the National Social Party conference in Erfurt in 1897, expressed the fear that large landowners would seize control of the agricultural cooperatives and use them for their own ends. The central administration of the agricultural cooperatives was already evidently in the pockets of the large landowners at their 1896 conference in Stettin. Of the 41 speakers, only four were small farmers. The 1897 Dresden conference was also overrun by Junkers. This is fully in accord with Sering's paean of praise to the cooperatives, delivered to the State Agricultural Board: according to Sering the co-ops have established 'a new communion of interests and activities in which peasant and big landowner, priest and teacher, employer and employee work for and represent each other's interests'.

The cooperative system is therefore very important for modern agriculture, but is by no means a device – even where it operates successfully – for offsetting the advantages of the large enterprise. In
fact, quite the opposite: it is often a means for widening the gulf. In our view, the greatest benefit is enjoyed by the medium-sized farm, and the least by the small farm.

The most important areas of agricultural activity are not, however, accessible to cooperatives made up of independent single farms. We saw above that the steam-plough (and other machines, such as the seed-drill) owned by machine cooperatives cannot be used by small peasants. Other machines are inappropriate for cooperative use by their very nature — such as machines which have to be used over specific short periods of time. What is the point of a cooperative reaper? Even cooperative threshing machines are a rich source of trouble. The large landowners, with their own threshing machines, can thresh in the field immediately after the harvest, saving on transport and storage. The grain is ready for immediate sale, enabling the best advantage to be taken of the state of the market. The cooperative member who has to shift unthreshed corn and wait for their turn on the list for the thresher is denied these advantages.

Of course this type of cooperation can never offer the small farmer the crucial advantages of the large-scale enterprise: large interconnected areas of land, the division of labour, management by scientifically trained staff. It would, therefore, be vain to hope that the cooperative might confer the same rational cultivation on the small enterprise as it does on the large. If small farmers truly wish to enjoy the benefits of large-scale agriculture, they must refuse to be diverted down byways and march straight at their goal. They must no longer confine themselves to the spheres of trade and profiteering but venture out onto the territory most central to the farmer — agriculture itself.

Quite plainly, a cooperatively cultivated large estate would be able to enjoy all the advantages of large-scale cultivation either denied or only incompletely available to cooperatives active in the fields merely of raw materials, machinery, credit and sales. At the same time, a cooperatively farmed estate must also benefit from the superiority that working for oneself has over wage-labour. Such a cooperative would not only be the equal of the large-scale capitalist enterprise, but would inevitably prove its superior. But curiously, no farmer ever contemplates this type of cooperation. Some animal-rearing cooperatives might possibly be seen as tentative steps in this direction — foal-breeding cooperatives, for example. Most peasants lack a paddock, and are prey to the temptation to break horses in too soon, ruining them in the process. On top of that, peasants cannot usually provide suitable stabling, skilled grooming or even proper fodder. Foal-rearing cooperatives can alleviate these problems: the Ihlienworth cooperative, founded in 1895,
allows its members to rear their foals in hygienic stalls, with a large paddock and qualified grooms. Although these are clearly agricultural establishments, such cooperatives are still confined to secondary branches of agriculture, acting merely as palliatives for the isolation and limited character of peasant agriculture without impinging on its fundamental nature.

Why don't peasants try to organise their central activities on a cooperative basis? Why do they stay at the stage of mere palliatives? One suggested reason is that by its nature agriculture is not a social activity, and is not therefore amenable to social organisation. But this simply restates what has to be explained.

There is no obvious reason why modern agriculture, which can be operated on a capitalist basis, cannot also be conducted cooperatively. Might the only reason be simply that it has not yet been tried? If so, this would be a poor excuse, since there have already been attempts – in fact successful attempts.

In the first few decades of this century, when the great thinkers had already recognised that large-scale socialist enterprises, not small concerns, represented the means for surmounting capitalist exploitation – although a number of the specific economic, political, and intellectual prerequisites for the advance and survival of such enterprises had not been identified – a number of enthusiasts, of whom the first and by far the greatest was Robert Owen, sought to establish the initial framework of a socialist society by founding socialist colonies and cooperatives. Not all these attempts met with success; and those which did were anything but the first steps towards a socialist society. However, they did prove one thing: the possibility of cooperative production, the possibility of replacing the individual capitalist by social institutions.

By their nature, most of these attempts were undertaken in the industrial sphere, although one was made in agriculture. This was the Ralahine cooperative which flourished and whose later collapse was the result of an unfortunate accident. This cooperative experiment is of such interest, and so little known, that we reproduce a substantial passage here from Charles Bray’s discussion in The Philosophy of Necessity. (Brentano reported on the same text in his notes on Mrs Webb’s British Cooperative Movement.)

In Ireland, however, an interesting experiment was made, and with better success, by Mr Vandaleur on his estate of Ralahine in the county of Clare. His tenantry were of the lowest order of Irish, poor, discontented, disorderly, vicious. Anxious to amend their character
and condition, and also desirous for his own sake of obtaining steady and useful labourers, he determined in 1830 upon trying Mr Owen's principle, with modifications adapted to the circumstances. About 40 labourers willingly entered into his plan, and he formed them into a society under his own government and superintendence. To this society he let the estate of Ralahine, containing 618 English acres, about 267 acres of which was pasture land, 285 tilled, 63.5 bog, and 2.5 acres of orchard; the soil was generally good, some stoney. This land, together with six cottages and an old castle which were converted into dwellings for the married people; all the farm buildings, barns, cowhouses, stables, sheds, etc., part of which he had converted into a public dining-room, and committee and schoolrooms with dormitories above them, for the children, and unmarried males and females – he let to them for £700 a year tithe and tax free. There were also included a saw-mill and threshing-mill, turned by a water wheel, and the shells of a factory and of a weaving shop, but no machinery in them. For the tools, implements of husbandry, livestock, and advances made to them for food and clothing till the harvest was got in, they were to pay (which was reckoning about 6 per cent interest) £200 more. They were to live together upon the estate in the buildings provided, in common, and they were to work upon the common capital for their joint interest. After paying the above rent and charges, the remainder of the produce was to be the property of the adult members of 17 years old and upwards, share and share alike, male or female, single or married. The tools, implements, and machinery, were to be kept in as good repair as received, and when worn out replaced, and the cattle and other live stock were to be kept up both in number and value. The rent was to be paid in the produce of the estate always; the first year it was to be a money rent – £900 worth of produce at the prices at the time in Limerick market; in future years it was to be a corn rent, consisting of as many bushels of grain, and hundredweights of beef, pork, butter, etc. as were paid in the first year; and whatever improvements the society might make on the estate, no advance in rent was ever to take place, and as soon as they had acquired sufficient capital to purchase the stock, a long lease of the property was promised at the same rent.

Mr Vandaleur kept possession of the stock, crops, and premises, until the society should be able to purchase them; the rent and interest being more than he had ever been able to realise from the land himself. In 1831 the rent and interest were paid in money. In 1832 the value of the produce was nearly £1,700; the advances made to the society for food, clothing, seed, etc., that year being about £550. The
extra advances made for building cottages, furniture, etc., absorbed the surplus produce; but comfort was increasing, and a foundation laid for future prosperity and happiness.

The members of the society were to work as many hours, to do as much labour, and to draw no more from the common fund, than he would have paid them for wages as common labourers; and they were to continue to do so until they had a capital of their own. To effect these objects, a regular account was kept by the secretary, of the time and labour of every individual each day, and at the end of the week, the same sum was paid to each for his or her labour as Mr Vandaleur formerly paid for wages. The prospect of a share of the surplus profit of the crops afforded a strong motive to industry, and these people did twice as much work in a day as any hired labourers in the neighbourhood. The money advanced from the fund was in labour notes, payable only at their own store. This enabled the proprietor to support them without actual advances in cash, and tended to prevent intemperance, as no intoxicating drinks were kept at the store, and their money would not pass at the dram-shops. The store was furnished with goods of the best quality, charged to the people at wholesale prices. According to Irish custom, potatoes and milk constituted the chief articles of food, and the allowance which was received from the subsistence fund was proportionately low; but the advantages which the members of the society received from their union, raised their condition far above the common standard of their class. Agricultural labourers received 4s per week; their expenditure was, for vegetables, chiefly potatoes, 1s; milk, 10 quarts, 10d; washing, etc. 2d; sick fund, 2d; clothing, 1s 10d. The women received 2s 6d per week; their expenses were, for vegetables 6d; milk, 8d; washing, etc. 2d; sick fund, 1 1/4d; clothing, 1s 0 3/4d. Married members, living in cottages by themselves, paid 6d per week rent to the society, and perhaps 2d more for fuel. All the children from 14 months old upwards were supported from the fund without care or expense to their parents. They were provided for in the infant school until they were eight or nine years old, and afterwards in the public dining-room with the unmarried members. The adults had nothing to pay out of their wages for rent, fire, lectures, school, or amusements. They purchased every article on an average 50 per cent cheaper, and they had better articles in their own store than they could buy elsewhere. Every member was insured full work, and the same amount from the fund every day in the year, and the price of food was always the same at their store. The sick or incapacitated received out of the sick fund as much as when at work. If a father died, his family were
The society gradually increased to double the original number. Their dwellings and furniture were clean and neat, their cooking was done well and economically, and they availed themselves as much as possible of machinery in every department. The youth of both sexes, under the age of 17, fulfilled the usual offices of servants by turns. The hours of labour were from six in the morning until six in the evening in summer, with one hour of intermission for dinner. The Committee met every evening to arrange the labours of the following day in such a manner as should best suit individual tastes and capacities. The youth were engaged to learn some one useful trade besides agricultural labour; and each individual was bound to assist in field labour, particularly in harvest-time. The storekeeper distributed the food, clothing, etc.; the gardener the produce of the garden. Mr Vandaleur sold the surplus produce, and purchased articles for the farm and for the store. All disputes were settled by arbitration amongst themselves, and no instance occurred during the three years they were together of an appeal to a lawyer or a magistrate. Mr Craig, the zealous and able assistant of Mr Vandaleur, relates the admiration of the visitors to Ralahine, at a system 'which could tame the wild Irish and make them forsake poverty, rags, and misery, for cleanliness, health, and comfort.'

It is painful to record the abrupt breaking up of this Society at a time when it was progressing rapidly, and the melancholy cause of such a termination. Mr Vandaleur was allied to the aristocracy, and, with all his excellencies, he shared one of their vices. A habit of gambling reduced himself, his family, and his system, to ruin. He fled from his country, and his creditors, seizing upon his property, without staying to inquire into the justice of the claims of the labourers at Ralahine, disposed of all they found there to satisfy their own. The society was not enrolled, nor had Mr Vandaleur given them a lease of the premises, therefore the law afforded them no protection or redress. (Bray, The Philosophy of Necessity, II, pp. 580-4).

No less important are the communist societies of North America, which show what excellent results can be attained through cooperative modern agriculture. Nordhoff makes repeated reference to the fact that the agriculture of these communes far exceeds that of their neighbours in intensity and the rational use of their available forces. Their success is in no small measure attributable to their superior agriculture. 'They are excellent farmers and keep fine stock', writes Nordhoff of the Amana Community, 'which they care for with German thoroughness:
The Agrarian Question

stall-feeding in winter' (Nordhoff, The Communistic Societies of the United States, p. 40). The Shakers usually have

fine barns and the arrangements for working are of the best and most convenient. In their farming operations they spare no pains; but working slowly year after year, redeem the soil, clear it of stones, and have clean tillage. They are fond of such minute and careful culture as is required in raising garden seeds. They keep fine stock, and their barns are usually admirably arranged to save labour. (ibid., p. 149)

The Perfectionists' farm

has been put in excellent order ... I must not forget to say that (in the Aurora Communities) the culture of their orchards, vineyards, and gardens is thorough and admirable. And I do not doubt that they made Aurora with its orchards and other valuable improvements for half what it would have cost by individual effort. (ibid., pp. 319 and 323)

In 1859 the Bishop Hill Colony 'owned 10,000 acres of land, and had it all neatly fenced and in excellent order. They had the finest cattle in the state' (ibid., p. 346). And these were not exceptional cases. In a summary Nordhoff makes explicit reference to superior agriculture being one of the noteworthy features of the communistic colonies (ibid. p. 415).

This should suffice to show that agricultural labour is by no means inherently opposed to the cooperative form. Clearly, if peasants do not make any serious efforts to exploit this form in their own sphere of activity, despite this, then the true explanation must be along the following lines.

No one would seek to maintain that the cooperative form is not the best way to organise industrial labour. However, handicraft workers, like peasants, show no sign of passing over from individual to cooperative production. And like peasants, their only attempts to derive the benefits of the large enterprise via cooperative organisations are in commodity circulation and credit. Here too, the cooperative large-scale enterprise is merely intended as a means of prolonging the life of the irrational small-scale unit, instead of easing its transition to large-scale production.

This is understandable enough. Handicraft workers cannot take up cooperative production without abandoning private property in the means of production. The more they individually own, the more capable they would be of establishing a competitive, well-capitalised large enterprise through joining together. But correspondingly, the more they own, the less inclined they are to put their property into a common fund
and especially so under current circumstances, since such a step would be a leap into the dark, an experiment in which, unlike the enterprising merchants, the individual participants cannot rely solely on their own abilities. Their welfare is entrusted to the skills, common feeling and discipline of others – the latter two being very undeveloped attributes amongst handicraft workers, accustomed to working on their own. 

The same applies – but even more so – in the case of the peasant. Peasant property fanaticism has become a term ·of abuse, but merely expresses a well-known fact. Peasants are much more attached to their own land and soil than are handicraft workers to their solitary workshops. And the greater the demand for land, as a consequence of a growing population, the more this tenacity increases. In America, at least until recently, the small independent farmers were prepared to leave their farms without any great heart-searching once they stopped producing an adequate yield, and move West, where new land was plentiful. But in Germany and France, peasants will tolerate any privation to cling on to their parcel, and no price is too high to supplement it. One only has to reflect on the problems encountered in even such essential and beneficial operations as consolidating individual scattered plots, in which all the participants gain through the exchange. Such an operation can also be forced upon unwilling minorities. The 'enlightened despotism' of the eighteenth century already set off down this road – although possibly sometimes in a rather ruthless fashion. But the consolidation of holdings is still far from complete in Germany. One can appreciate the hopelessness of attempting to establish a peasant producers' cooperative involving not simply the swapping of plots, but their surrender to the cooperative – an operation which cannot be imposed on non-cooperative elements.

Peasants, who are inclined to be suspicious anyway, would feel all the more so towards the cooperative, since their way of living and organizing work is even more isolating than that of the handicraft worker, with a correspondingly lower level of development of the cooperative virtues. Only those who have nothing to lose but their chains can introduce the cooperative method into production – that is, individuals schooled in socialised labour by the capitalist enterprise, and in whom the organised struggle against capitalist exploitation has fostered the virtues of cooperation: trust in one's comrades and voluntary submission to the collective.

One cannot simply leap over a stage of development. Under normal circumstances, the vast bulk of ordinary folk cannot pass directly from the craft or peasant enterprise to the large-scale cooperative. Private property in the means of production stands in the way. It takes the
capitalist mode of production to create the preconditions for the large-scale cooperative enterprise, not only by bringing into existence a class of labourers for whom private property in the means of production has been swept away, but also by socialising the production process, and creating and accentuating the class antagonism between capitalists and wage-labourers, forcing the latter to struggle for the replacement of capitalist property by social property.

Only the propertyless, not those with property, can effect the transition to cooperative production. This does not necessarily mean that peasants and handicraft workers can only achieve cooperative production by passing through the transitional stage of being proletarians; or that they will necessarily be expropriated by capital, and that socialist production will be impossible as long as there are peasants and handicraft workers. Nothing could be further from the truth. All we are claiming is that the victory of the proletariat, and their will to cooperation, has to prevail in order to create the conditions which will allow handicraft workers and peasants to take up cooperative production in practice, rather than, as now, simply as an ideal.

If the socialist – we will no longer be able to term them proletarian – cooperatives succeed in proving themselves, then the risk which presently accompanies any economic enterprise, the threat of proletarianisation, will no longer haunt the peasants who surrender their land. Private property in the means of production will be seen for the obstacle that it is to the adoption of a higher form of cultivation, an obstacle gladly relinquished.

On the other hand, it would be absurd to expect that peasants will undertake production under the circumstances of present-day society. This in effect rules out the cooperative system as a means by which the peasant can obtain the advantages of large-scale farming under the capitalist mode of production and thus strengthen and reinforce peasant property, this tottering pillar of the existing social order. Any peasant who sees that the only road to survival is via cooperative agricultural production would also realise that such a form of production can only be achieved in a society in which the proletariat has the power to change social relations in accordance with its interests. But this would make the peasant a Social Democrat.
The Limits of Capitalist Agriculture

Statistical Data

The main finding of Chapter 6 was broadly as follows: the large farm is superior to the small farm in the major branches of agriculture, although this superiority is not as marked as that between large and small enterprises in the major branches of industry. This is not a novel situation. As early as the mid-eighteenth century, when the mechanisation of agriculture was still in its infancy, and agriculture still lacked a basis in the natural sciences, Quesnay, the founder of the Physiocratic school, demanded that the land devoted to the growing of grain be consolidated as much as possible into large tenancies, to be exploited by rich farmers, since the expenditure on the maintenance and repair of buildings, and, comparatively, the costs of production are much lower in large agricultural enterprises, and the net product much greater, than in small. (Quesnay, 'Maximes générales du gouvernement économique d'un royaume agricole')

In the same period, economists in England also overwhelmingly advocated the large farm (Young, for example). Adam Smith's observation that the great proprietor was seldom a great improver was not directed at the capitalist large-scale farm but at the feudal latifundium, with its innumerable small, dependent tenants, obliged to provide both a variety of services and money payments to their lord, on whose caprice they were completely dependent. Smith, in contrast, emphasised the advantages of free peasant property, although he added: 'After small proprietors, however, rich farmers are in every country the principal improvers' (Smith, Wealth of Nations, p. 495).

It was soon generally admitted that large-scale capitalist – not feudal – agriculture produced the highest net yield. Nevertheless, although English agriculture became the model for agriculture in Europe, the circumstances in which it flourished did not always appear quite so attractive. In particular, the expropriation of the peasantry to
the advantage of the large farm seemed especially dubious. The peasantry represented the core of the army—sufficient reason for monarchs and politicians to think twice about sweeping them away. The English did not retain a large standing army, and could manage perfectly well without peasants. But a continental nation without peasants would be hard put to hold its own against a neighbour with a large peasantry. There was also a further consideration: in England the peasantry had been replaced by a large proletariat, as restive as it was poor, with no counterweight in a propertied working class. Those bourgeois philanthropists, like the Utopians, whose lack of courage caused them to stop short of socialism, together with champions of capitalist exploitation eager to give the private ownership of the means of production a secure popular basis, therefore emerge as eulogists of the small rural enterprise—Sismondi and J.S. Mill as much as the 'Total Freetraders' and their counterpart, the agrarian lobby. No technical superiority was claimed for the small farm: in fact, they conceded that the large farm produced the greater yield. They merely pointed to the political and social dangers associated with large enterprises.

Sismondi declaimed:

The new political economists on the one hand, and the most seasoned agronomists on the other, never tire of praising the richest and most intelligent tenants who manage large farms: they are full of admiration for the extent of their buildings, the perfection of their implements and tools, and the beauty of their livestock. But in the midst of their admiration for things, they forget the people: they even forget to count them. An English square mile consists of 640 acres: this is approximately the size of a fine, and rich, English farm. Earlier farms, which could be cultivated by a family with their own labour without outside assistance, without day-labourers— but also without unemployment— and which provided secure work for every member of the family, every day of the year, did not amount to any more than 64 acres. One would need ten such establishments to make up a modern farm. Ten peasant families have been driven away to make room for one tenant under the new system. (Sismondi, Études sur l'économie politique)

Since then, modern large-scale agriculture has developed enormously; yet we are now confronted with the spectacle of economists rushing forward to claim that the small farm is the equal of the large. In fact, some of the same economists who pronounced the small farm no longer
viable in the 1870s are now prophesying the demise of the large – Dr Rudolf Meyer being one such example. At the least, they claim that which of the two is the most rational is still an open question. We commenced this work with a quote from Sombart, a scholar of undoubted even-handedness on this issue, and an individual who would not have written what he did without access to quite specific facts.

What are these facts? They are not to be found in the realm of agronomy, but rather in the realm of statistics. Contrary to expectations that developments on the Continent would follow those in England they show that the small farm has not lost ground to the large since the 1850s. In fact, in terms of overall acreage, small farms seem to be growing in some areas. The German Agricultural Census revealed the following:

<table>
<thead>
<tr>
<th>Agricultural establishments</th>
<th>Number of establishments</th>
<th>Increase or decrease</th>
<th>Cultivated area in hectares</th>
<th>Increase or decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1882</td>
<td>1895</td>
<td>1882</td>
<td>1895</td>
</tr>
<tr>
<td>Under 2 hectares</td>
<td>3,061,831</td>
<td>3,236,367</td>
<td>+174,536</td>
<td>1,825,938</td>
</tr>
<tr>
<td>2-5 hectares</td>
<td>981,407</td>
<td>1,016,318</td>
<td>+34,911</td>
<td>3,190,203</td>
</tr>
<tr>
<td>5-20 hectares</td>
<td>926,605</td>
<td>998,804</td>
<td>+72,239</td>
<td>9,158,398</td>
</tr>
<tr>
<td>20-100 hectares</td>
<td>281,510</td>
<td>281,767</td>
<td>+257</td>
<td>9,908,170</td>
</tr>
<tr>
<td>Over 100 hectares</td>
<td>24,991</td>
<td>25,061</td>
<td>+70</td>
<td>7,786,263</td>
</tr>
</tbody>
</table>

Developments in France did not follow quite the same course:

<table>
<thead>
<tr>
<th>Agricultural establishments</th>
<th>Number of establishments</th>
<th>Increase or decrease</th>
<th>Cultivated area in hectares</th>
<th>Increase or decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1882</td>
<td>1895</td>
<td>1882</td>
<td>1895</td>
</tr>
<tr>
<td>Under 1 hectare</td>
<td>2,167,667</td>
<td>2,235,405</td>
<td>+67,738</td>
<td>1,083,833</td>
</tr>
<tr>
<td>1-5 hectares</td>
<td>1,865,878</td>
<td>1,829,259</td>
<td>-36,619</td>
<td>5,597,634</td>
</tr>
<tr>
<td>5-10 hectares</td>
<td>769,152</td>
<td>768,299</td>
<td>+19,147</td>
<td>5,768,640</td>
</tr>
<tr>
<td>10-40 hectares</td>
<td>727,222</td>
<td>711,118</td>
<td>-16,104</td>
<td>14,845,650</td>
</tr>
<tr>
<td>Over 40 hectares</td>
<td>142,088</td>
<td>138,671</td>
<td>-3,417</td>
<td>22,296,105</td>
</tr>
</tbody>
</table>

Whereas in Germany medium-sized farms (in terms of area) expanded the most, in France it was the very largest and the very smallest which gained in land area. Medium-sized farms declined both in number and overall acreage. However, with the exception of peasant farms proper (10-40 hectares), this was not a substantial decline, or at any event, not a rapid one.

In Great Britain we find:
### Agricultural establishments

<table>
<thead>
<tr>
<th>Agricultural establishments</th>
<th>Number of establishments</th>
<th>Increase or decrease</th>
<th>Cultivated area in hectares</th>
<th>Increase or decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 acres (0.4-2 ha.)</td>
<td>135,736</td>
<td>-17,768</td>
<td>389,677</td>
<td>-22,885</td>
</tr>
<tr>
<td>5-20 acres (2-8 ha.)</td>
<td>148,806</td>
<td>+1,012</td>
<td>1,656,827</td>
<td>+10,880</td>
</tr>
<tr>
<td>20-50 acres (8-20 ha.)</td>
<td>84,149</td>
<td>+1,514</td>
<td>2,824,527</td>
<td>+40,449</td>
</tr>
<tr>
<td>50-100 acres (20-40 ha.)</td>
<td>64,715</td>
<td>+1,910</td>
<td>4,746,520</td>
<td>+138,683</td>
</tr>
<tr>
<td>100-300 acres (40-120 ha.)</td>
<td>79,573</td>
<td>+1,672</td>
<td>13,658,495</td>
<td>+217,429</td>
</tr>
<tr>
<td>300-500 acres (120-200 ha.)</td>
<td>13,875</td>
<td>-307</td>
<td>5,241,168</td>
<td>-127,223</td>
</tr>
<tr>
<td>Over 500 acres (over 200 ha.)</td>
<td>5,489</td>
<td>-270</td>
<td>4,029,843</td>
<td>-226,807</td>
</tr>
</tbody>
</table>

As in Germany, medium-sized farms are also increasing in number and acreage in Great Britain. But whereas in Germany holdings between 5 and 20 hectares gained the most, in England the greatest increase was in those between 40 and 120 hectares, hardly small-scale enterprises. In contrast to Germany, the smallest farms fell in number. At the same time, the number of the largest farms fell too.

A number of economists — including Schaffle, Meyer and others — have tried to use American statistics to prove that the small farm there is supplanting the large. Such a claim certainly merits a closer look. The average size of farm has certainly been falling since 1850.

<table>
<thead>
<tr>
<th>Year</th>
<th>Size of Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850</td>
<td>203 acres</td>
</tr>
<tr>
<td>1860</td>
<td>199 acres</td>
</tr>
<tr>
<td>1870</td>
<td>153 acres</td>
</tr>
<tr>
<td>1880</td>
<td>134 acres</td>
</tr>
</tbody>
</table>

Nevertheless, the figure had risen back to 137 acres by 1890.

This temporary drop in the average size of farms is mainly attributable to the break up of the large plantations in the South, a result of the emancipation of the slaves. Between 1860 and 1890 the average size of farm in Florida fell from 445 acres to 107, in South Carolina from 488 to 115, in Alabama from 347 to 126, in Mississippi from 370 to 122, in Louisiana from 537 to 138, and in Texas from 591 to 225. In general, the average size of farm in the Southern seaboard states fell from 353 to 134 acres between 1860 and 1890, and in the Southern Central states from 321 to 144. No one with any knowledge of the relevant
circumstances could regard this as a victory of the small farm over the large. On the other hand, there was a marked drop in the acreage of farms in the relatively old cultivated lands of the North Atlantic states, where the average size has also continued to drop over the last decade. However, this fall is not due to any reduction in the scale of farming as such, but a reduction in the amount of uncultivated land. In the North Atlantic states this amounted to:

<table>
<thead>
<tr>
<th>Overall size of farm</th>
<th>of which uncultivated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850 113 acres</td>
<td>43 acres = 38.05 per cent</td>
</tr>
<tr>
<td>1860 108 acres</td>
<td>39 acres = 36.11 per cent</td>
</tr>
<tr>
<td>1870 104 acres</td>
<td>36 acres = 34.62 per cent</td>
</tr>
<tr>
<td>1880 98 acres</td>
<td>31 acres = 31.63 per cent</td>
</tr>
<tr>
<td>1890 95 acres</td>
<td>31 acres = 32.63 per cent</td>
</tr>
</tbody>
</table>

The percentage increase in uncultivated land over the last decade coincides with a period of agricultural decay, in which the amount of farming land has retreated in general. In the North Atlantic states it fell from 67,985,640 acres in 1880 to 62,743,525 in 1890 – more than five million acres all told.

In contrast, in the true wheat-growing states of the North Central area average farm size increased from 122 to 133 acres between 1880 and 1890.

The number of large farms has followed the same course as the changes in average size, falling slightly within the Union as whole. Unfortunately, the 1870 figures cannot be compared with the later ones, as the earlier figures classified farms by the extent of their cultivated land, whereas the 1880 and 1890 censuses were based on total land occupied.

The figures were:

<table>
<thead>
<tr>
<th></th>
<th>Farms (total)</th>
<th>Between 500-1,000 acres</th>
<th>Over 1,000 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>4,008,907</td>
<td>75,972</td>
<td>28,578</td>
</tr>
<tr>
<td>1890</td>
<td>4,564,641</td>
<td>84,395</td>
<td>31,546</td>
</tr>
<tr>
<td>Increase</td>
<td>13.8 per cent</td>
<td>11.0 per cent</td>
<td>10.3 per cent</td>
</tr>
</tbody>
</table>

As the figures show, the growth in large farms lagged behind that of
The Agrarian Question

others – but this too is simply a consequence of developments in the former slave states, where the old, backward plantation economy became impossible, and of agricultural decay in the exhausted areas of the North East.

The figures for farms in the North Atlantic states were:

<table>
<thead>
<tr>
<th>Year</th>
<th>Farms (total)</th>
<th>Between 500-1,000 acres</th>
<th>Over 1,000 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>696,139</td>
<td>4,156</td>
<td>964</td>
</tr>
<tr>
<td>1890</td>
<td>658,569</td>
<td>3,287</td>
<td>733</td>
</tr>
<tr>
<td></td>
<td>Reduction</td>
<td>5.4 per cent</td>
<td>20.9 per cent</td>
</tr>
</tbody>
</table>

The number of large farms fell more rapidly than the number of small farms; the latter made a more tenacious effort to hang on, despite their hopeless position. Whether this can be classified as an advantage of the small farm remains to be seen.

For the Southern seaboard states the figures were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Farms (total)</th>
<th>Between 500-1,000 acres</th>
<th>Over 1,000 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>644,429</td>
<td>25,037</td>
<td>9,718</td>
</tr>
<tr>
<td>1890</td>
<td>749,600</td>
<td>20,736</td>
<td>8,030</td>
</tr>
<tr>
<td>+/-</td>
<td>+16.3 per cent</td>
<td>-17.2 per cent</td>
<td>-17.4 per cent</td>
</tr>
</tbody>
</table>

In the South Central states:

<table>
<thead>
<tr>
<th>Year</th>
<th>Farms (total)</th>
<th>Between 500-1,000 acres</th>
<th>Over 1,000 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>886,648</td>
<td>25,872</td>
<td>11,659</td>
</tr>
<tr>
<td>1890</td>
<td>1,086,772</td>
<td>26,666</td>
<td>12,195</td>
</tr>
<tr>
<td>Increase</td>
<td>22.5 per cent</td>
<td>3.0 per cent</td>
<td>4.6 per cent</td>
</tr>
</tbody>
</table>

In contrast, in the West:

<table>
<thead>
<tr>
<th>Year</th>
<th>Farms (total)</th>
<th>Between 500-1,000 acres</th>
<th>Over 1,000 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>83,723</td>
<td>5,299</td>
<td>3,247</td>
</tr>
<tr>
<td>1890</td>
<td>145,878</td>
<td>9,269</td>
<td>6,020</td>
</tr>
<tr>
<td>Increase</td>
<td>74.2 per cent</td>
<td>74.9 per cent</td>
<td>85.3 per cent</td>
</tr>
</tbody>
</table>
Finally, in the North Central states, the true wheat states:

<table>
<thead>
<tr>
<th>Year</th>
<th>1880</th>
<th>1890</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,697,968</td>
<td>15,608</td>
<td>13.3 per cent</td>
</tr>
<tr>
<td></td>
<td>1,923,822</td>
<td>23,437</td>
<td>50.2 per cent</td>
</tr>
<tr>
<td></td>
<td>2,990</td>
<td>4,468</td>
<td>49.4 per cent</td>
</tr>
</tbody>
</table>

There is certainly no evidence of a decline in the number of large farms in these figures. Wherever modern agriculture is advancing in America, the area occupied by large farms is expanding rapidly. The small farm only remains dominant in areas of agricultural decay, where pre-capitalist large agricultural enterprises are in competition with smallholders.

Nevertheless, although agricultural development in America has been faster than in Europe, and although this development has favoured the large farm, one still cannot really claim that the small farm is being supplanted by the larger.

On the other hand, it would be premature to conclude from these and similar figures that economic development in agriculture is following a completely different course to that of industry.

Statistics never lie! Maybe, but the question is what do they actually prove? Firstly, simply what they actually directly state – which is not usually a great deal as far as most statistics are concerned. Consider, for example, those figures which are supposed to prove that the welfare of the mass of the population is increasing under the capitalist mode of production. One favourite is the growth in savings-bank deposits. The figures themselves are incontrovertible. But what do they incontrovertibly prove? That savings deposits are growing. No more and no less. They give no hint of what the cause of this increase might be. This process may, but does not have to involve an increase in welfare. Other factors might bring about the same result.

For example, an increase in the number of opportunities for putting savings in savings banks would have to lead to an increase in deposits. Hindus once buried their savings in the ground. Now that savings banks have been opened in East India they prefer to place their savings there. Does this prove that they save more, that their welfare has increased? The chronic famines in India would seem to indicate the opposite.

Although banks have a longer history in Europe, the opportunities for easy and convenient saving in banks are still steadily multiplying both through the proliferation of rural savings banks and rising population in the towns, where the best opportunities exist for encountering a savings bank.

An increase in the number of wage-labourers, state officials, and other
types of white-collar employee can also produce an increase in deposits. Small peasants will use their savings for buying land, and independent handicraft workers will devote theirs to improving their workshops. But someone working for a wage or salary has no better alternative than to place their savings in a savings bank. The displacement of small independent enterprises by capitalist enterprises will therefore be accompanied by a growth in savings deposits. This product of increasing proletarianisation is quite compatible with a fall in the welfare of the mass of the population.

Finally, an increase in savings can simply be the result of changes in economic habits. Under commodity production, every firm or household is occasionally required to make large payments, which necessitates setting money aside from regular earnings. Prior to the development of the savings bank, such sums were condemned to lie idle. Now they can earn interest until required for payment. The larger the sums which individual firms and households have to put by for such payments — for rent, or periods of unemployment in the case of workers — the greater the tendency to save any sum not required for everyday consumption, no matter how small, in order to obtain interest. Savings deposits will increase without any increase in welfare.

Statistics on savings-bank deposits on their own can offer no answer as to whether welfare has increased: far from solving a problem, they pose one.

The same applies for income tax statistics, which are claimed to provide irrefutable proof that welfare has risen. In fact, all they prove in their own right is what they actually state: that, under certain circumstances, the number of lowest taxed incomes, and those incomes exempted from tax, grows less rapidly than the next highest group of incomes. Of course, this can indicate an increase in welfare, but this does not have to be so. If the prices of food, shelter and so forth are rising faster than incomes, then an increase in incomes is quite compatible with a fall in welfare.

Other circumstances can produce the same effect. Consider the situation of a small peasant family earning 400 Marks, paying no rent, and producing the bulk of their own food — and living quite adequately. An accident propels them into the proletariat, necessitating a move to the town, where a job turns up paying 800 Marks a year. The peasant's income has doubled, but the family's true situation may have worsened. Rent now has to be paid, and possibly a daily rail journey to and from work has to be financed. Milk, eggs, vegetables, and pork, which once cost nothing, are now expensive items. The children can no longer run around barefoot, and the poorer hygienic conditions mean higher
outgoings on doctors and medicines. But as far as income tax is concerned, this individual is now twice as well off as before – irrefutable proof that the welfare of the population is steadily rising. In fact this is a typical case: the transition from a natural economy to a money economy, and an increase in the urban population at the expense of the rural, is a steady and unbroken process – quite sufficient to explain how incomes can rise without the slightest concomitant increase in real welfare.

We have already dealt with the question of interpreting the recorded increase in the consumption of meat.

Statistics provide irrefutable evidence that modern society is in a process of constant and rapid change, and can indicate some of the superficial manifestations, symptoms and effects of this change, providing – in some instances – valuable pointers to the underlying causes: in themselves, they cannot reveal what these causes are.

By the same token, statistics indicating no decline, or even an increase, in small farms do not themselves tell us anything about the direction of capitalist development in agriculture. They are simply a challenge to carry out more research. On first examination, what they do show is that development is not quite as simple as originally supposed, and that the situation in agriculture is more complex than in industry.

The Demise of the Small Enterprise in Industry

Although more straightforward than in agriculture, the course of development of modern industry is itself a very involved process. Quite disparate, but superimposed, tendencies operate in the same direction, making it difficult to identify the fundamental tendencies within the general confusion.

The large-scale enterprise does not appear in all branches of industry at one instant. Its conquest is a step by step process. Wherever it achieves preponderance, it supplants the smaller enterprise, but this does not mean that all small-scale entrepreneurs then become factory workers. Instead, they pack, usually to overflowing, those trades in which the large-scale enterprise has not yet achieved primacy. Capitalist competition can therefore even ruin branches in which large-scale industry is not the dominant force. But this process does not appear as a general reduction in the number of small enterprises. Just the opposite, in fact. In some instances, it actually causes them to increase in number. A view formulated purely on the basis of the statistical evidence might contend that the small-scale enterprise was enjoying a boom. Those branches with a large number of impoverished small enterprises are, at the same time, those in which modern,
capitalistically exploited domestic industry finds the best conditions for its emergence and rapid growth. Under such circumstances, the penetration of capital can lead not to a decrease, but in fact to a marked increase in the overall number of small enterprises. However, anyone acquainted with the social conditions which hide beneath the statistics would not conclude that the small enterprise has been successful in its competitive struggle against large-scale capital.

Similarly, the conquest of a particular branch by the machine does not necessarily mean that the advance of large-scale industry will lead to the disappearance of the small enterprise. It may ruin them, it may render them economically superfluous, but it is incredible how much tenacity such redundant existences can muster. Hunger and overwork prolong their death agonies: the poverty of the Silesian and Saxon handweavers has been proverbial for more than a century, and they still refuse to die out. If production itself becomes impossible, they take up activities which the large undertaking regards as trifling – repair work, or as agents and intermediaries for the bigger concerns.

The democratic forms of the modern state can also contribute to the preservation of obsolete small enterprises.

It is nothing out of the ordinary for the state to support social strata which have lost their economic footing on purely political grounds. Despite its superfluity, political considerations forced the state to maintain the lumpenproletariat in ancient Rome. A more recent example would be the 'noblest and best', aristocrats who became increasingly bankrupt and redundant after the seventeenth century: by subordinating themselves to the absolute monarchs, such aristocrats were able to sustain a parasitic existence, feeding off the vital core of society, and were only swept away by revolution.

The traditions of this parasitic life are nevertheless still very much alive in Eastern Europe, and our own Junkers are just as well-versed in knowing when to squeal, and how loudly, as the Roman lumpen-mob of 2,000 years ago. The only difference is that the former are less modest in their demands. They are not satisfied with dry bread and their circuses are much more expensive. All they supply, thanks to their particular sense of honour, are their gladiators.

When it comes to making demands on the state, this class has found assiduous pupils in parts of the petty bourgeoisie. Although some members of this class have acknowledged that they belong to the proletariat, and have joined with the waged labour force to fight for better living conditions – if not for itself, then at least for its children – others feel they have more to gain by selling their services to the government in return for state support. Given universal suffrage, the
ruling classes need such a broad popular social class as a counterpoise to the rising forces of the proletariat, and are prepared to buy any part of the petty bourgeoisie which is up for sale. It is not the best elements in the petty bourgeoisie who appeal to governments – they are monarchist to the hilt. At the same time, failure to furnish them with privileges at the expense of society as a whole could turn them Social Democratic. Such threats testify to a particularly shabby mentality. However, those in need of Praetorians cannot afford to be too fastidious. If the lumpenproletariat could be let loose against the working class in 1848, what's wrong with those sections of the petty bourgeoisie currently making themselves available for the same dirty work?

In fact, it is workers, not large enterprises, who bear the costs of prolonging the life of small enterprises through the privileged treatment granted to middlemen at the expense of retail cooperatives, through the favouring of company masters at the expense of their journeymen and apprentices by means of cheap credit, cheap insurance and the like, all at the expense of the taxpayer.

The more the class struggle intensifies and the more menacing the advances registered by Social Democracy, the more governments will be inclined to grant economically irrelevant small enterprises a more or less parasitic existence at society's expense. This may slow down their disappearance – the hopes awakened by the promises and measures made by governments must persuade a few to continue the hopeless struggle a little longer, a struggle which they would otherwise have long since abandoned. But no reasonable person would regard this as refuting Marx's 'dogma', which only refers to economic tendencies.

If 'state assistance' by the ruling classes enables the economically bankrupt to carry on a little longer, and hence disguise the demise of the small enterprise, the extravagance practised by these classes is often no less effective to the same end.

The development of the capitalist mode of production implies the growth of the mass of surplus-value, growth not only of accumulated capital, but also of capitalist revenues, and capitalist profligacy. One product of this is a revival of feudal forms which have long since ceased to have any economic relevance. For example, the efforts of finance barons and latifundium owners to create hunting preserves the size of medieval forests. Marx has already acquainted us with how the brutal wantonness of a class which did not need to care about money, and which sneered at the idea of caring about people, forced the agricultural population off huge tracts of Scotland, first to replace them with sheep, and then deer. The same process is now under way in parts of France, Germany and Austria. According to Endres, the forest area of Austria
The Agrarian Question has increased by almost 700,000 hectares since the middle of the century, almost 2.5 per cent of the total area, mainly in the Alps and Coastal Provinces, which between them account for 600,000 hectares of the increase. Between 1881 and 1885, 3,671 hectares of woodland was cleared compared with 59,031 hectares newly afforested.

Total private woodland covered 6 million hectares in France in 1781. By 1844 it had fallen to 4.7 million, but since then it has climbed back to 6.2 million hectares, despite the loss of Alsace-Lorraine.

Unfortunately, the 1895 Census is not comparable with the 1882 Census for Germany, as the earlier census only recorded forest land used for agricultural purposes: all forest land was counted in 1895.

Teifen's book on social poverty and the property owning classes in Austria provides numerous examples of the fact that pasture and arable land, as well as wasteland, are being afforested. Significantly, the stock of oxen fell by 10.6 per cent between 1869 and 1880 in the Salzburg district, and by a further 4.1 per cent between 1880 and 1890, essentially 'through the increasing sale of Alpine meadows to hunters' (Drill, 'Die Agrarfrage in Österreich').

Another feudal form given new life by the growth in capitalist revenues is that of the personal house servant, the servile class whose livery is both a reminder of earlier centuries and a sign of its antithesis to the spirit of the nineteenth century. This feudalisation also fits closely with the preference shown by persons of rank for hand produced, rather than machine produced, articles for their personal consumption. Machine production for mass consumption produces the same article for everyone - it does not respond to individual needs or temperaments, and is altogether too democratic for the money-aristocracy. The waste of labour-power involved in craft production is precisely what attracts its customers; it seems to be the ideal means for elevating them above the general rabble.

The most distinguished branch of modern industry, handicraft production, the production of high quality products, is now only one step above domestic industry, its poorest and most miserable branch. And like any other, it too becomes a domain of capitalist exploitation. The production of high quality products - whether this is clothing or shoes, paper or textiles, vegetables or fruit, demands first-rate knowledge, great expenditure of labour, and excellent means of production, all things which cost money, a lot of money. Although the workshops which produce choice goods may be small as far as the statistician is concerned, for the economist they are enterprises demanding a substantial outlay of capital, in which highly-skilled handicraft workers are exploited using capitalist methods. In many cases they are more a means of
lowering art to the level of capitalist industry, than of encouraging a craft revival.

Even if this were not so, it would be absurd to expect an increase in capitalist extravagance to lead to a revival of the small enterprise. The fact that this extravagance can increase at all presupposes the rapid growth of large-scale industry and mass production – and with it the unremitting displacement of the small enterprise and constant expansion of the proletariat. Although capitalist good-living might allow the small enterprise to flourish in isolated areas and very specific trades, it cannot do so for the nation as a whole: rather, it is the product of the advancing proletarianisation of the mass of the people of this and other nations. To recommend switching to high quality products as a means of saving the handicrafts is about as sensible as claiming that capitalist production tends to retransform any nation it conquers into a nation of hunting peoples. This could be easily proved statistically.

None of this refutes Marx's 'dogma': it merely shows that the demise of the small enterprise is a highly involved process, criss-crossed with a variety of countervailing processes. However, these can only disrupt and slow down the process – apparently sometimes appearing as their opposite. But they can never bring it to a complete standstill.

The Limited Nature of the Soil

The same countercurrents and tendencies which complicate the process in industry also operate in agriculture. The analogy is so evident that it is unnecessary to spend further time on it. However, some countertendencies in agriculture are not found in industry – making the overall process even more involved.

The prime distinction is that in industry it is possible to multiply the means of production at will: in agriculture, the decisive means of production, the land, constitutes a fixed magnitude under given circumstances and cannot be increased at will.

Capital exhibits two major movements: accumulation and centralisation. Accumulation is the result of the formation of surplus-value. Capitalists do not consume all the profits which accrue to them: under normal circumstances a portion is set aside and used to enlarge their capital. This movement is intertwined with another – the unification of a number of separate small capitals into one large capital in the hand of one owner – the centralisation of capital.

The position is quite different when we turn to land. The amount of land which can be gained for agricultural purposes in the older cultivated countries is minimal compared with the sums accumulated
year in, year out by the class of capitalists. Landowners can only extend their holdings of land by centralisation, the unification of a number of farms into one.

The process of accumulation in industry can proceed independently of the process of centralisation, and in fact usually precedes it. A large amount of capital can be constituted, or a large industrial enterprise established, without impinging on small capitals, or suppressing the independence of small enterprises. The fact that such suppression occurs is usually the consequence of, not the prerequisite for, the formation of a large-scale industrial enterprise. Establishing a shoe factory in a particular locality does not necessitate expropriating all the local craft shoemakers. The shoe factory only ruins the smaller producers and leads to their expropriation by the larger once it is in business and thriving. The large amount of capital required for setting up the shoe factory in the first place comes from accumulation, the piling up of fresh capital from non-consumed profits.

In contrast, where all land is private property, predominantly in the form of small-scale land-ownership, a large farm can only be established through the centralisation of a number of small property holders. The elimination of these farms is the absolute precondition for the emergence of a large farm. In addition, the expropriated small farms must also constitute an interconnected area. Forced land sales may enable a mortgage bank to obtain several hundred peasant farms every year; however, the fact that they are not adjacent prevents their consolidation into one large farm. The bank's only option is to sell them off in the same form it obtained them — and, if purchasers are easier to find for small parcels, to break them up into even smaller farms.

As long as the feudal lord had the final say, it was an easy matter for him to retain the land for the establishment of a large farm. Any peasants who stood in the way were quite simply driven off the land, with varying degrees of force.

However, the capitalist mode of production needs the security of property. Once having passed through its revolutionary period, and having firmly established its rule, only one ground for expropriation was recognised — inability to pay debts. As long as the peasants can pay the capitalists and the state what they owe them, their property is sacrosanct. Private property in land is firmly established. We shall see later what inadequate protection this provided for the peasantry: however, it did prove to be a highly effective obstacle to the formation of large-scale landed property, the precondition for the large-scale agricultural enterprise.

Large-scale land-ownership finds it difficult to get a foothold where
small-scale land-ownership still prevails irrespective of how moribund the latter may be compared to the former.

Even where a large farm borders on smaller holdings the former still finds it difficult to expand at the expense of the latter, since those small plots which do come up for sale, either through necessity or other reasons, are not always those needed to 'round off' or extend the estate.

A farmer who finds he is outgrowing his estate, and who has the wherewithal to cultivate a larger one, usually prefers the tedious and unpredictable process of buying up neighbouring farms rather than the more straightforward process of selling up and buying a different, bigger estate. As the principal method by which individual farms become extended, it is one reason for the great mobility of land-ownership, the large amount of buying and selling land in the capitalist epoch. The fact that those wishing to buy always encounter parties wishing to sell is accounted for by inheritance and indebtedness, which we discuss below.

Our main point here is merely that the unique nature of land under private ownership is a major obstacle to the development of large agricultural enterprises in every country with small-scale land-ownership, irrespective of how superior the large farm may be – an obstacle which industry never has to face.

The Larger Farm is not Necessarily the Better

A further distinction can be drawn between industry and agriculture. Under normal circumstances the large enterprise is always superior to the smaller in industry. Of course, even in industry every enterprise has its limits, beyond which it cannot go without risking profitability. The scale of the market, the size of the available capital, the amount of labour-power available, the supply of raw materials, and the limits of technology impose limits on every enterprise. However, within these limits, the larger enterprise is superior to the smaller.

In agriculture this is not wholly, or always, the case. In industry any expansion of the enterprise also represents an increasing concentration of productive forces, with all the advantages which this brings – savings in time, costs, materials, easier supervision and so on. By contrast in agriculture, other things being equal, any expansion of the enterprise means the same methods of cultivation being applied over a larger area – hence, an increase in material losses, increased outgoings on labour and means of production and greater delays associated with the transport of labour-power and materials. These are more significant in agriculture since most of its materials have a low ratio of value to volume – fertiliser, hay, straw, corn, potatoes – and methods are very primitive
compared with industry. The larger the estate, the more difficult the supervision of individual workers which, under the wages system, is an important consideration.

The following table drawn up by Thünen illustrates the extent to which these losses increase with farm size. Thünen was calculating the ground-rent of different plots at varying distances from the farm house.

<table>
<thead>
<tr>
<th>Distance of plot from farm house</th>
<th>In Marks</th>
<th>Ground-rent/per hectare with a rye-yield of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Metres)</td>
<td></td>
<td>(Hectolitres)</td>
</tr>
<tr>
<td>0</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>1,000</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>2,000</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>3,000</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>4,000</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>4,500</td>
<td>0.5</td>
<td>0</td>
</tr>
<tr>
<td>5,000</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

From this it might appear that the smaller the farm, the more profitable the agriculture. This is not of course the case. The enormous advantages of the large farm more than outweigh the disadvantages of great distance – but only for a certain overall area. After a certain point, the advantages of the larger farm begin to be overtaken by the disadvantages of distance, and any further extension of the land area will reduce the profitability of the land.

It is impossible to specify in general when this point will be reached. It varies according to techniques, soil-type, and type of cultivation. A number of factors are currently moving the point upwards, such as the introduction of steam or electricity as motive power, or light railways. Others push in the opposite direction. The greater the number of animals and workers per given area of land, the greater the number of loads which have to be moved – machines and heavy implements, fertilisers, the harvest itself – the more noticeable the effects of longer distances. In general, the maximum size of a farm beyond which its profitability declines, will be less the more intensive the type of cultivation, the more capital is invested in the soil: nevertheless, developments in technology can mean that this law is broken through
Limits of Capitalist Agriculture

from time to time.

The law according to which the more intensive the cultivation of the farm, the smaller its area must be for a given volume of capital also works in the same direction. An intensively farmed small estate represents a larger enterprise than a large, extensively cultivated one. Statistics which merely provide information on the acreage of the farm say nothing about whether any possible reduction in acreage represents a real reduction in the size of enterprise, or a switch to intensive farming.

Forestry and pasturage can be physically very extensive. Forestry does not require a focal point, a farmstead, around which it has to be organised. In its most extensive forms, the felling and transportation of timber, the harvest, is the only labour required. Timber is insensitive to the effects of the weather and does not have to be stored in barns. It can be left at the point of felling until time and circumstances favour its transportation to market. In the case of very large trees it moves on its own by river.

Similarly, given a favourable climate, cattle out to pasture do not need to be fed or kept in buildings: and whilst still alive, stock is certainly more easily transportable than timber.

As a consequence, as we have already observed, forestry and pasturage were the first forms in which capitalist large-scale enterprise undertook the exploitation of the land, given the emergence of the necessary markets. They did not require machinery, scientifically trained personnel for management, or an accumulation of capital.

All that was needed was the power of a few noble lords to monopolise the forests and pastures and dispossess the peasantry. And where circumstances favoured it, this took place on a grand scale.

The exploitation of forests, and especially of pastureland, also represented the first form of large-scale capitalist enterprise in agriculture in the colonies, where labour-power is scarce but land plentiful – as in the United States, Argentina, Uruguay and Australia. Individual tracts of pasture land sometimes reach the size of German principalities. One sheep station in Australia sheared 200,000 sheep each year.

Arable farming is much more limited in size than forestry and pasturage: but both the maximum and the average size of extensive farms exceed that of intensive farms.

The largest farms in extensive agriculture have been achieved by the North American wheat farmers, who combine a unique mixture of a high degree of extensiveness with the application of advanced technology.

American agriculture used to be overwhelmingly depredatory in operation. As long as ample and unclaimed virgin lands were available,
The farmer could find the most fertile soil, extract harvest after harvest, and, as soon as it was exhausted, abandon the farm and move on. This nomadic agriculture made use of the highest quality machinery and equipment advanced industry could supply, and since the farmer did not need to buy land, he could use nearly all his capital for purchasing these technical aids.

This type of agriculture did not require fertiliser; it did not require the keeping of large numbers of cattle, and where the climate permitted, it did not require stall-feeding. Crop rotation was also unnecessary. The same product was cultivated year after year - usually wheat: in fact, the farm was an out and out wheat factory. All its implements, machines and labour were directed at this one aim. The farm was easy to manage. Under such circumstances farms could reach an enormous size. The bonanza farms of Messrs Dalrymple, Glenn and so forth, which are 10,000 and more hectares in size, are well known.

In contrast, farms over 500 hectares are a rarity in England with its intensive cultivation, requiring plentiful stock, crop rotation, and a good deal of fertiliser: the maximum is 1,000 hectares.

Just as the large-scale capitalist farms in America exceed the dimensions of the European large-scale farms, small farms there are also larger than their European counterparts.

In Germany a peasant with 20-100 hectares would be labelled 'big'. In 1895 out of 5.5 million agricultural enterprises in the German Empire, the following were found in the range of 2-100 hectares.

<table>
<thead>
<tr>
<th>Size category \ Size \ Range</th>
<th>Number of Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-5 ha.</td>
<td>1,016,318</td>
</tr>
<tr>
<td>5-20 ha.</td>
<td>998,804</td>
</tr>
<tr>
<td>20-100 ha.</td>
<td>281,767</td>
</tr>
</tbody>
</table>

In contrast, out of 4.5 million enterprises in the United States, the distribution was as follows:

<table>
<thead>
<tr>
<th>Size category \ Size \ Range</th>
<th>Number of Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-50 acres \ (8-20 ha.)</td>
<td>902,777</td>
</tr>
<tr>
<td>50-100 acres \ (20-40 ha.)</td>
<td>1,121,485</td>
</tr>
<tr>
<td>100-500 acres \ (40-200 ha.)</td>
<td>2,008,694</td>
</tr>
</tbody>
</table>

The majority of small farms in America are therefore equal in size to German Junker estates.

The basis for such extensive farming disappears once all the land has
passed into private ownership, and fertile soils are no longer so plentifully available. Where arable and fallow land once alternated, farmers now have to introduce crop rotation and fertilise the soil instead of robbing it — that is, adopt more intensive stock-rearing and stall-feeding. More capital and labour-power have to be applied to the same area. If the farmer cannot get hold of sufficient capital and labour-power, he must reduce the size of his farm: the maximum size of large farms will come down, and bonanza farms will cease to be profitable. This is the general picture conveyed by current developments in America where the tendencies which operate in this direction are certainly at work, if not to the extent frequently claimed in recent years. As the Census figures testify, one cannot really speak of the 'approaching end' of the large agricultural enterprise in America.

Nevertheless, it is entirely possible that American agriculture might take on European dimensions were it completely to adopt European methods of cultivation. Bonanza farms could well disappear entirely, large farms would not exceed 100 hectares, and small independent farms would fall to the average size for Germany, unless technical developments, such as the introduction of electricity, were to create the conditions for raising the upper limits to the size of large enterprises. Such a fall in size would by no means imply that the small enterprise had defeated the large, but simply that the enterprise was being compressed into a smaller area — which can go hand in hand, and usually must go hand in hand, with an expansion of the capital sum invested in it, and often with a multiplication of the number of persons employed — that is, an actual expansion of the enterprise.

As with the transition from outright depredation to a form of regulated agriculture aimed at conserving the soil's fertility, the supplanting of extensive pasturage by arable farming must also tend to produce a fall in the average size of holding with a constant, or even growing, size of enterprise. The replacement of grain cultivation by intensive stock-keeping which is now a marked feature in all the older cultivated nations also operates in the same direction.

In 1880, the average livestock farm in England amounted to 52.3 acres, and the average grain producing farm 74.2 acres. The percentage of land occupied by each size category was as follows:

<table>
<thead>
<tr>
<th></th>
<th>Up to 50 acres</th>
<th>50-100 acres</th>
<th>100-300 acres</th>
<th>300-500 acres</th>
<th>500-1,000 acres</th>
<th>Over 1,000 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock-rearing</td>
<td>17.2</td>
<td>18.9</td>
<td>43.7</td>
<td>13.8</td>
<td>7.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Grain-growing</td>
<td>9.9</td>
<td>10.2</td>
<td>37.8</td>
<td>21.4</td>
<td>17.0</td>
<td>3.7</td>
</tr>
</tbody>
</table>
Clearly, the steady replacement of grain by livestock will tend to bring about a reduction in the size of farms: however, to conclude from this that the large-scale agricultural enterprise was in decline would be very superficial indeed.

Moreover, more recent figures do not indicate any average reduction in farm size. The average size of agricultural enterprises of more than 1 acre (smaller holdings were not recorded) was 61 acres in 1885, and 62 acres in 1895, a slight increase.

In East Elbia the transition to more intensive farming is also tending to reduce the acreage of large estates. Sering notes in his *Die innere Kolonisation im östlichen Deutschland*:

Most of our large estates are presently too extensive to allow a sufficiently intensive cultivation over their entire areas. They came into being and expanded during a time in which the general economic preconditions did not demand that concentration of capital and labour power on the individual parcel of land, which has now become necessary, both nationally and for individual economic reasons. Thus, more outlying areas are now almost exclusively extensively cultivated — often a fifth to a quarter of the whole area — with lupins or permanent fodder crops. It is considered that on the intensively cultivated estates of New Pomerania with their heavy soils, arable areas more than two kilometres from the main farmyard cannot be cultivated profitably at all. The widespread shortage of operating capital is partly caused by the excessive size of these estates.

The reduction in the size of estates (through sale or lease of their less accessible parts to small colonists) will therefore raise production in two ways. By covering the land with more economic foci, colonisation will also bring into cultivation those inadequately cultivated fields which were in an unfavourable location as far as the main estate was concerned. Those parts of the estate still remaining will have more labour and capital at their disposal, and their owners will soon obtain the same, or even a higher net yield, than previously from the undivided estate because of the reduced burden of interest. (pp. 92, 93)

As a consequence, the large estates in East Elbia are being reduced in size, and small peasant farms created alongside them, not because the small farm is superior to the large, but because the previous acreages were fitted to the requirements of extensive farming.
The Latifundium

Two things follow from the above. The first is that mere acreage statistics for farms prove very little. And the second, that the centralisation of land for the enlargement of an estate, which is anyway more difficult than the accumulation and centralisation of capital, also has certain limits given the circumstances of any individual enterprise.

Large landowners will only seek to extend their holdings indefinitely where there is widespread tenant-farming, where the farm and the holding do not coincide. If the holding is too large, the individual landowner does not rent out his estate to one single entrepreneur: the estate is divided into a number of tenancies, of a size which yields the greatest advantage. This is not only a matter of which of the potential tenants can offer the most rational system of cultivation, but also how well capitalised they are.

Where cultivation by the landowner or his employees predominates, where the farm and the landholding coincide, the tendency towards centralisation is no longer expressed in efforts to extend the farm further once it has been rounded off and has sufficient land: it is expressed in the trend towards buying a second farm.

Under certain circumstances this tendency can become very pronounced. Dr Rudolf Meyer’s interesting work on the fall in ground-rent provides an excellent illustration of this process. In his detailed study of the development of large land-ownership in Pomerania, Meyer found that in 1855, 62 rich aristocratic landowners possessed 229 farms; by 1891 their holdings had risen to 485 farms covering 261,795 hectares. The families to which these 62 owners belonged, numbering 125 members in 1891, owned 339 farms in 1855. By 1891 this figure had risen to 609 farms, covering 334,771 hectares. In addition, in 1855 62 well-to-do aristocratic landowners owned 118 farms and 203 by 1891 covering 147,139 hectares. Finally, 35 rich bourgeois owners had 25 farms in 1855, and 95 by 1891 covering 54,000 hectares: their families, numbering 47 members in all, owned 30 farms in 1855 and 160 by 1891. Meyer also cites 76 aristocratic owners with 182 farms covering 109,950 hectares, and a further 119 bourgeois owners with 295 farms covering 131,198 hectares where the previous ownership could not be ascertained.

These figures reveal a very powerful tendency towards centralisation, very marked in the case of a number of individual owners.
**Owner** | **Number of farms** | **Hectares** | **Net property tax yield**
---|---|---|---
| | 1855 | 1891 | 1891 |

Below-Saleske | 1 | 5 | 4,047 | 38,046 |
Count Douglas | 6 | | 1,592 | 22,815 |
Knebel-Döberitz-Dietersdorf | 3 | 8 | 5,629 | 24,356 |
Count Armin Schlagenth | 8 | | 3,692 | 25,101 |
Prince Bismarck | 1 | 9 | 9,047 | 31,658 |
Plötz-Stuchow | 4 | 10 | 6,214 | 51,937 |
Henden-Jürgen-Cartlow | 6 | 11 | 4,635 | 108,969 |
Prince Hohenzollern-Sigmaringen | 11 | | 10,998 | 44,350 |
Royal Family | 1 | 12 | 24,513 | 128,399 |
Count Behr-Negendank | 6 | 12 | 5,696 | 104,318 |
Lanken-Boldewitz | 3 | 13 | 4,183 | 95,382 |
Count Behr-Bandelin | 3 | 13 | 6,576 | 131,285 |
Count Krassow-Divis | 5 | 15 | 4,613 | 112,652 |
Lanken-Pluggentin | 6 | 16 | 2,648 | 68,355 |
Count Platen-Osten | 8 | 16 | 10,520 | 79,845 |
Count Flemming-Benz | 13 | 24 | 14,258 | 107,794 |
Prince Putbus | 53 | 85 | 17,113 | 302,892 |

Professor J. Conrad has published a number of valuable articles on this issue under the title of 'Agrarstatistische Untersuchungen' in his *Jahrbücher für Nationalökonomie und Statistik* which reveal the current extent of the Prussian latifundia. Landowners with more than 5,000 hectares were as follows (by province):

| Province | Total | Total holdings (hectares) | Arable land and meadow (hectares) |
---|---|---|---|
East Prussia | 11 | 67,619 | 34,000 |
West Prussia | 13 | 105,996 | 48,000 |
Posen | 33 | 300,716 | 147,310 |
Pomerania | 24 | 182,752 | 102,721 |
Silesia | 46 | 671,649 | 192,443 |
The 46 landowners in Silesia recorded in 1887 between them owned no less than 843 estates. They included:

<table>
<thead>
<tr>
<th>Holdings</th>
<th>Total area</th>
<th>Net property tax yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crown Prince Friedrich Wilhelm (later Emperor Friedrich III)</td>
<td>19</td>
<td>8,879</td>
</tr>
<tr>
<td>R. Friedenthal, Minister of State</td>
<td>24</td>
<td>9,090</td>
</tr>
<tr>
<td>King Albert of Saxony</td>
<td>50</td>
<td>31,072</td>
</tr>
<tr>
<td>Duke of Ujest</td>
<td>52</td>
<td>39,742</td>
</tr>
<tr>
<td>Prince Pless</td>
<td>75</td>
<td>51,112</td>
</tr>
</tbody>
</table>

Such figures show no sign of 'the approaching end' of big landownership.

Krafft provides the following figures for multiple ownership in Austria.

<table>
<thead>
<tr>
<th>Name of owner</th>
<th>Size in hectares</th>
<th>Constituents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moravian holdings of the Archbishop of Olmütz</td>
<td>54,500</td>
<td>?</td>
</tr>
<tr>
<td>Bohemian, Moravian and Lower Austrian holdings of Emperor Franz Josef</td>
<td>79,300</td>
<td>?</td>
</tr>
<tr>
<td>Hungarian holdings of the Counts Schönborn-Buchheim</td>
<td>134,013</td>
<td>2 domains with 44 farms and 10 forest tracts</td>
</tr>
<tr>
<td>Bohemian holdings of the Princes Schwarzenberg</td>
<td>177,930</td>
<td>20 domains</td>
</tr>
</tbody>
</table>
This type of centralisation of land, the unification of different estates into one hand, resembles centralisation via mortgage banks in that it leaves the size of the individual enterprise unchanged. One difference, however, is that the centralisation of the ownership of land is accompanied by a centralisation of its administration: this produces a new type of enterprise, the latifundium. The latifundium, not the enormous growth of the individual farm, is the form in which the modern giant enterprise develops in agriculture: and like the centralisation of capital, this form also acknowledges no limits.

Such a form prepares the way for the highest mode of production of which modern agriculture is capable. Sooner or later the unification of a number of enterprises under the ownership of a single individual leads to their fusion into one organic whole, to a planned division of labour and cooperation between the individual farms.

Some extracts from Krafft's *Betriebslehre* (pp. 167ff.) on the Austrian latifundia illustrate this:

The large-scale holding [Krafft's term for the latifundium - K.K.] is formed out of the unification of several large estates or domains. In the case of very extensive large-scale landholdings the domains are combined into groups, the 'domain districts'.

The administrative organism of the latifundium is structured as follows: at the top is the owner, who either assumes the role of senior manager him/herself or, more commonly, delegates it to a central administration.

The management of a domain or domain district is entrusted to an estate inspector ... Their job embraces supervision of the plans to be
executed in the individual domains, as sanctioned by the central administration. In order to regulate the relations between the individual domains, the inspector chairs the annual conference of all the individual management boards: they examine the returns from the previous year's results, together with proposals for economic improvements and changes, and the estimates for the coming year. These are then submitted to the central administration for the owner's approval. Within one domain grouping advantage can be derived from centralising certain tasks in one hand. The principles to be applied in stock-breeding and the overall management of breeding for each type of animal are often assigned to one specialist inspector. Such an organisation facilitates greater success than allowing the guidelines for breeding to be decided by a number of individual breeders: nevertheless, these continue to implement the guidelines in practice.

Where individual parts of domains are of a considerable size, these are also allotted their own central administration, either for a group of domains or for the entire holding. For example, a construction office will be established where there is a considerable amount of building of facilities such as sugar factories, breweries etc., or where major improvement works are in hand: this office will draw up plans and provide cost estimates for major buildings, and inspect the plans and costings submitted by the master builders on the individual domains, and supervise building operations. Similarly a central forestry department headed by a chief forestry officer will supervise forestry throughout the domains; the same applies to mining etc. The crucial element in administering the domains consists in establishing collaboration between the individual administrative branches of the domains with the long-term goal of maximum net yield. Apart from the organisation of the domains, one obvious next step is to make best use of the diversity in the location, social, climatic and soil differences between the various domains by uniting them into one organic whole by organising the entire holding in the interest of profit. The main factors here are facilitating low cost production and more efficient use of the products obtained, the simplification of administration, and linked with this, the better use of labour.

There are a number of ways to lower production costs: cheaper access to the means of production, in particular capital, via the cheaper credit available to large-scale landowners; labour-saving machinery, which can only be used where large-scale working is feasible, such as the steam plough in agriculture, modern timber hauling methods (cableways, railways, forest railways etc.) in forestry, up-to-date machinery in industries etc.; through the division of labour between
domains to take advantage of the special conditions on each in the interest of maximising crop production. These methods can be implemented by combining a number of domains to supply raw materials on a large scale to highly mechanised technical industries; through the establishment of seed, clover and grass nurseries on those domains and farms which produce particularly good quality seed, and which therefore can make a speciality of cultivating and supplying seed to other farms. The use of mobile presses can mean that in an emergency a plentiful supply of grass and straw in one domain group can be used to help out those lacking in these by rendering hay and straw, and even stall-manure, transportable.

Low cost production can also be achieved by raising farm animals according to a common plan. One domain would be selected for raising horses for use within the overall holding. For cattle-rearing a number of domains or farms would be designated for meeting the needs of the others. Fat-stock breeding is best concentrated on a central fattening station situated on a railway line in the vicinity of a technical industry: this can be supplied with unfattened, or where appropriate half-fattened animals if this enables good use to be made of local feed which may not, however, be sufficient for full-fattening. For milk, there are advantages in several dairy-farms setting up a small number of milk factories to reduce administrative costs, and operate on a large scale using milk centrifuges. At the same time, the separation of stock-rearing from dairy herd keeping will inevitably lead to savings in administrative costs. In sheep-raising, a separation can be made between the individual types. The demand for farms can be met from suitable herds of young animals.

The joint utilisation of the products obtained from a majority of domains can be organised through processing by the organisation as a whole or through sale to outside parties, through processing in the organisation's own oil and grain mills, sugar factories, breweries, saw mills etc., or sale on their own markets.

The construction of various types of transportation system, such as small branch lines, horse-drawn railways for linking to a main line of rail, cableways, tramways, logways, canals and so forth, either at the organisation's own expense, or by providing financial support to outside concerns, is highly recommended in the interests of the more effective marketing of products.

A simplification of administration can be achieved by extending the holding and using the neighbouring domains to introduce a division of labour.

Finally, one important aspect in the organisation of large-scale
land-ownership is the raising of the efficiency of labour. If an individual shows a particular aptitude for a particular activity they should be assigned to the area in which they are most productive. Periodic changes in administrative personnel should prevent the degeneration of farm management into repetitive routines. This is more difficult where the organisation and administration are small. The greatest problems in organising big holdings arise if their individual constituents, the domains, are located far from each other. Conversely, this type of organisation achieves its greatest successes where the individual domains are not spatially separated.

So, a veteran 'practician', but one well-equipped with the theoretician's knowledge and longer perspective, and one of the leading living agricultural authorities, sees the future of modern, rational agriculture not in the dwarf-holding but in these giant enterprises.

However, even such giant enterprises come up against a barrier which only holds back industry under the most exceptional circumstances: a shortage of workers.

The Shortage of Labour-power

The extension of the market, access to money, the necessary technical prerequisites – these in themselves are not enough for the creation of a large-scale capitalist enterprise. The most important thing is the workers. Even though all other conditions may be met, the absence of propertyless labour-power, forced to sell itself to the capitalists, will render capitalist activity impossible.

In the older established nations, urban industry is not subject to any shortage of labour. The proletariat multiplies, and provides plentiful fresh labour-power for growing capital.

In addition, the children of small peasants and the petty bourgeoisie, who cannot set themselves up independently, also predominantly turn to wage-labour in the towns, in company together with the mass of former peasants and petty bourgeois who have skidded down into the ranks of the proletariat. Large-scale industry can find a use for all of them, irrespective of their origins.

Matters are quite different when we turn to agriculture. Working conditions in the towns render workers unfit for agricultural labour. Anyone who has grown up in a town, or emigrated there during their youth, is lost to agriculture. Under present-day conditions, agriculture cannot supplement its labour supply from the urban, industrial proletariat.
The problem for agriculture is that the large agricultural enterprise is also unable to produce and retain the supply of wage-labourers it needs.

The reason for this lies in one special feature of agriculture which strongly differentiates it from modern industry. In marked contrast to the industry of the Middle Ages, in modern industry the economic establishment is completely separated from the household. Both were united in the medieval handicrafts, and still are in its offshoots. During the guild period, workers in a craft workshop belonged to the household, to the family of the master. Workers could not establish their own household, marry and raise a family without first establishing an independent economic unit – without becoming masters themselves.

In contrast, household and factory are separate in modern industry. Workers can set up their own homes and families without first having to become independent artisans – and, as we know, they make good use of the opportunity. Wage-workers multiply, and become a distinct class. The separation of household and factory also allows the proletarian to become a free individual outside work, and develop the qualities which make it possible for the proletariat to conquer, and retain, state power.

Wage-labourers have existed in previous periods of history: however, lacking their own household and family, they could not raise their own offspring. These were the children of craft masters or small peasants, and had to become masters themselves to be able to bring up their children. Like students, journeymen were a quarrelsome breed for authority and their masters, precisely because they did not have the responsibilities of a wife and children. But like students, it would not occur to them to conquer state power and reshape society in their interests. Such an idea can only take root and thrive in the mind of the modern proletarian, with their own household, and children, all of whom share the same proletarian fate.

Agriculture is still tied to the household. No farm exists without a corresponding household. And there is no permanent household in the country without some form of agriculture.

Part of the explanation may lie in the mere dispersion of the rural population – in contrast to their concentration in the towns. Tenements are not a practical proposition in the countryside – and no worthwhile living can be had out of exploiting the need for housing, except as a secondary line of business.

The most important factor is the close economic link between the household and agriculture, particularly on the small farm, most of the produce of which is intended for immediate consumption within the household. Conversely, household waste supplies manure and animal
feed, and the care of animals requires the constant presence of those people whose responsibility this is – that is, their membership of the household.

Under such circumstances, wage-labour on the land is quite different to that in the towns. A totally propertyless wage-labourer, living in his own household, is a rarity. Some wage-labourers on large-scale agricultural enterprises will be members of the household as maids or manservants. Others with their own households are also usually independent farmers, on their own or rented land, devoting only part of their time to wage-labour, and the rest to working their own land.

The so-called *Deputanten* represent a unique mixture, receiving a fixed annual wage, together with some payment in kind, a plot of land and accommodation on the main farm. Another such category are the *Instleute* who play an important role as labourers on the large estates east of the Elbe. They live on the main farm, but in their own accommodation; as remuneration, they receive, like the *Deputanten*, part payment in land which they have to cultivate, part in kind, and part in wages, although unlike the *Deputanten* they receive a daily wage or piece-rate (the *Erdrusch*, or share of the harvest).

No utterly propertyless labourer can take up work as an *Instmann*. In the first place the dwelling supplied to them is usually unfurnished; in addition, the *Instmann* also has to supply the tools they need, namely scythe and threshing-flail. Most of all, acceptance of a position as *Instmann* – or any other position as a married farm servant – requires the possession of a cow or a few goats, unless the master of the household is willing to advance the money to buy them. Finally, the *Instmann* must also be able to buy the seed needed to cultivate the land allotted to them: the manure will be provided by their livestock. (Weber, *Die Verhältnisse der Landarbeiter im ostelbischen Deutschland*, p. 13)

The *Instmann* is a cross between a servant and a tenant, usually subject to the Servants Ordinance (the *Gesindeordnung*), a remnant of the feudal period, in which the lord could think of no better use for his land than to lease it out to individual servants in return for obligatory services. The *Instmann* is incompatible with modern capitalist agriculture, and in Saxony, for example, beet cultivation spelt the end of the *Instmann* system.

The *Instmann* in the North East of Germany occupies a similar position to that of the *Heuermann* in the North West.
Heuerleute are rural worker-families who rent a dwelling and a plot of land from the employer at a low rent, often only half the local rate, and in return are obliged to make themselves available for work for a varying number of days, which may differ as between regions and even between farms, for a low daily wage, often only half the usual local rate. (Kärger, *Die Verhältnisse der Landarbeiter in Nordwestdeutschland*, p. 3)

Like the Instmann, this other feudal relic is also disappearing. 'Free' propertyless day-labourers, who lodge with peasants, can also be found on the land: these Einlieger, Losleute, Heuerlinge sell their labour-power wherever they find a buyer. They come closest to the position of the urban proletariat, but are nevertheless fundamentally quite different in that they constitute an appendage to someone else's household, and 'in peasant life too, dwelling under another's roof is always the basis for economic dependence' (Weber, *Die Verhältnisse der Landerbeiter im Ostelbischen Deutschland*, p. 38).

Such conditions do not favour the reproduction of a class of rural propertyless workers. House-servants usually have no chance of marriage and the establishment of an independent household — a situation highly prejudicial to bringing up a subsequent generation. However, this does not diminish the sex drive. Instead it is often diverted along unnatural pathways precisely to avoid the creation of such offspring. Should nature prove stronger than all such artificial precautions, the unfortunate mother may possibly resort to crime to rid herself of the fruit of her womb, knowing only too well that neither herself nor her child could expect an agreeable future. Children born out of wedlock have an uphill struggle: many die prematurely, equally as many later populate the nation's penitentiaries.

Wherever patriarchal, natural-economic relations still prevail, as on many large farms in the Alpine districts, a maidservant's child is just as much a part of the household as the maid herself. It grows up as a playmate to the farmer's children, eats with them at the same table, and only begins to be aware of the social difference when it is old enough to work; then, like its mother, it belongs with the other house-servants.

However, wherever commodity production and the pure wage-relation prevail, the child of a servant is an unwanted burden, something preferably to be got rid of if at all possible.

Fick's work *Die bäuerliche Erbfolge im rechtsrheinischen Bayern* shows the effects of the centralisation of property ownership on the frequency of illegitimate births. 'Grouping administrative districts by the number of illegitimate births, we obtain the following result, of
interest in appraising the connection between the distribution of property and illegitimate births.'

<table>
<thead>
<tr>
<th>Group</th>
<th>Illegitimate births as per cent of total births</th>
<th>Number of landowners as per cent of total residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I</td>
<td>3.4–5.0</td>
<td>28.2</td>
</tr>
<tr>
<td>Group II</td>
<td>5.1–10.0</td>
<td>20.2</td>
</tr>
<tr>
<td>Group III</td>
<td>10.1–15.0</td>
<td>17.0</td>
</tr>
<tr>
<td>Group IV</td>
<td>15.1–20.0</td>
<td>15.5</td>
</tr>
<tr>
<td>Group V</td>
<td>20.1–25.0</td>
<td>13.3</td>
</tr>
<tr>
<td>Group VI</td>
<td>25.1–30.0</td>
<td>14.9</td>
</tr>
</tbody>
</table>

Conditions amongst the *Einlieger*, free day-labourers lacking their own household, are no more conducive to the raising of a new generation. The best conditions for bringing up a plentiful supply of able-bodied labour are found amongst the owners (or tenants) of small farms on which an independent household is linked with independent farming. Not only does this group supply labour-power for itself, but also turns out a surplus. This takes place through two mechanisms. As cottagers their bit of cultivation does not take up all their time — and they hire themselves out as day-labourers on larger farms. Or, either as cottagers or peasants, they provide a surplus of workers via their children, for whom there is no room on the family farm, and who can therefore be taken on as house-servants or day-labourers by large farms.

These production sites for new labour-power progressively contract wherever the large-scale farm supplants the small. Clearing peasants off the land may release additional land for the large farm, but at the same time it reduces the number of people available to cultivate it. This in itself is sufficient to ensure that, despite its technical superiority, the large farm can never completely prevail within any given country. The large landowner may drive out all the free peasants from their land, but a portion of them will always celebrate their resurrection as small tenant farmers. A dictatorship of large land-ownership does not mean the sole rule of the large farm.

Even in Great Britain there were no less than 117,968 farms of less than 5 acres out of a total of 520,106 in 1895: 149,818 ranged between 5 and 20 acres, and 185,663 between 20 and 50 acres — that is, the vast majority were small farms.
The excessive elimination of the small farm steadily reduces the profitability of the large – and this too then begins to contract. This can currently be observed in a number of areas, and has led a number of prominent agronomists to pronounce the 'approaching end of the large-scale agricultural enterprise'. This would be throwing the baby out with the bathwater. Of course, under particular circumstances the shortage of labour-power can lead to a decline of the large farm and a multiplication of small enterprises, either through the parcellisation of part of the large owner's or farmer's land for sale or lease to small farmers, or the voluntary or forced sale, and break up, of large holdings into smaller holdings. However, there are limits to this process. The greater the number of small farms, the greater the volume of labour-power available to the large farm – enhancing its superiority over the small. The establishment of a substantial amount of small-scale agriculture alongside large-scale farms will revive the tendency for the large farm to advance – naturally, subject to other, disturbing factors which currently work in the opposite direction, such as the implantation of large-scale industry in the open countryside.

As long as the capitalist mode of production continues, there is no more reason to expect the end of the large-scale agricultural enterprise than that of the small.

Far from contradicting Marx's 'dogma', Marx himself recognised this constellation at an early stage in his work. In Volume 4 of the Neue Rheinische Zeitung (1850), he discusses a text by Emils de Girardin, 'Le Socialisme et l'impôt', proposing a capital tax, which amongst other things, would attract capital from the land, where its yield is low, to industry, where its yield is higher, bring down land prices and transplant to France the concentration of land, Britain's large-scale agriculture and therewith all of Britain's advanced industry.

In contrast, Marx noted that, 'English concentration and English agriculture had not come about via a withdrawal of capital from agriculture but through industrial capital hurling itself at the land.' He continued: 'The concentration of landed property in Britain has furthermore swept away whole generations of the population. The same concentration, to which the tax on capital will of course necessarily contribute by hastening the ruin of the peasant, would in France drive the great mass of the peasants into the towns and make revolution all the more inevitable. And finally, if in France the tide has already begun to turn from fragmentation to concentration, in Britain the large landed estates are making giant strides towards renewed disintegration, conclusively proving that agriculture necessarily proceeds in an incessant cycle of concentration and fragmentation of the land, as long as
bourgeois conditions as a whole continue to exist' (Marx, 'Discussion of "Le socialisme et l'impôt'', Collected Works, X, p. 326).

Admittedly, this cycle is not as rapid or acute as Marx imagined in 1850, when he still considered that a swift and powerful revolutionary development was in progress; leaps in science and technology have allowed the tendency towards the enlargement of farms to continue longer in England than Marx anticipated. It has only recently come to a halt. On the other hand, a number of countertendencies have emerged which we shall encounter later.

Nevertheless, the tendency to which Marx refers continues, and asserts itself whenever and wherever concentration or fragmentation exceed certain limits.

For the majority of bourgeois economists, the most desirable state of affairs is represented by a mixture of large and small farms. Only a few petty bourgeois democrats and socialists work up any enthusiasm for the total supplanting of the large farm by the small.

Friedrich List, and after him von Schütz, von Rumohr, Bernhardi, Hanssen, Roscher and many others have all said that the ideal distribution of landed property under present circumstances – private property and free competition – consists in the correct mixture of large, medium and small farms, so that the large farms stand, as it were, at the apex of the pyramid with the smaller as their foundation. (Miaskowski, Das Erbrecht und die Grundeigentumsverteilung, p. 108)

Buchenberger's latest work, Grundzüge der Agrarpolitik, takes a similar line. All these economists agree that large-scale landed property is indispensable as the bearer of technical progress and rational cultivation. Large peasants are seen as being desirable primarily for political reasons – they, not the small peasants, are the bastion of private property. At the same time, their methods of cultivation are superior to those of the small peasants. The latter are required as a supplier of labour-power. Wherever the large farm encroaches too far on the small, the more far-sighted conservative politicians and large landowners themselves attempt to wield both state and private means to increase the numbers of small farms once again.

In all European countries with a well-developed large-scale land-ownership, the pressure of industrial change, the excessive emigration of agricultural workers to industrial districts, and
agricultural crisis and indebtedness, have given rise to a movement which seeks to tie down agricultural labour by giving them land and to multiply the rural middle strata by establishing new and enlarging undersized peasant plots. Germany, England and Russia have passed the appropriate legislation almost simultaneously, and Hungary and Italy are on the verge of doing the same. (Sering, Handwörterbuch der Staatswissenschaften)

As far as Prussia is concerned, the relevant measures are the 1886 laws on the promotion of German settlement in Posen and West Prussia, and the 1890–1 laws on the formation of rent-fee farms (Rentengüter) using state credit and other forms of state aid. 'It is fair to suppose', writes Sering, 'that the formation of rent-fee farms has already caused an area of land as large as that lost to the peasantry in the course of this century to large landowners through the free market in land to be returned to them – around 100,000 hectares in the six eastern provinces.'

The artificial creation of small farms did not have to be forced on the large landowners against their will. In fact, it is the work of a government and parliament which can conceive of no higher duty than to serve the well-being of Junkerdom.

The large landowner obtains the highest gross and net yields if large numbers of small and medium landowners are settled in the vicinity, able to supply labour-power and provide a secure market for the produce which the large estates produce in abundance. (Goltz, Handbuch der gesamten Landwirtschaft, p. 649)

Small land-ownership will not disappear in present-day society, to be totally supplanted by large-scale land-ownership. In fact, where the concentration of land-ownership has advanced too far, a tendency towards fragmentation sets in – with the state and large landowners providing a helping hand should it encounter too many obstacles.

However, such efforts show that nothing could be more mistaken than to imagine that the continued existence of the small farm is a product of its competitiveness when compared with the large. Rather, the small farm continues to exist because it ceases to be a competitor, and ceases to figure as a seller of those agricultural products produced by the large farm. Instead, it is transformed from a seller into a buyer of the products of large-scale farming 'produced in abundance'. The commodity which the small farmer produces 'in abundance' is precisely that means of production urgently required by the large farm – labour-power.

Once things have reached this state, large and small-scale farming
Limits of Capitalist Agriculture 167

are not mutually exclusive. In fact, like capitalist and proletarian, they require each other, with the small farm increasingly assuming the latter role.
The Proletarianisation of the Peasantry

The Tendency Towards the Dismemberment of the Land

Chapter 2 referred to the fact that the destruction of peasant industry forces peasants who at most produce sufficient food for themselves, but not a surplus, to look for secondary employment. Small peasants can manage this since their own agriculture only takes up part of their available working time. Their need for money is met by selling surplus labour-power rather than surplus produce. The peasant appears on the market for commodities in the same guise as the propertyless proletarian. The role of landowner, of a producer of food on their own land, is confined to the peasant's own household, which is closely bound to the operation of the farm.

Of course, the household is not subject to the laws of competition. Irrespective of how superior the large household might be compared with the smaller, irrespective of how much labour the smaller may waste, there is no discernible trend towards the centralisation of households, towards the replacement of many small households by a few large households.

Nevertheless, the household is not untouched by economic development: instead, economic development expresses itself by detaching the functions of the household, one after another, and transforming them into independent branches of production – gradually whittling away the amount of labour and number of workers in the household. Any development here as far as size is concerned is from large to small – directly the opposite to the tendency prevailing in commodity production.

Large peasant domestic communes are a feature of the Middle Ages, or today of peoples whose agriculture remains at the medieval level, as in the Southern and Eastern Slavic regions.

The removal of the small peasant farm from commodity-production, and its relegation to a mere part of the household also removes it from the ambit of the centralising tendencies of the modern mode of production. As irrational and wasteful as such parcel-farming may be, the peasant clings on to it. The same applies to the woman of the
household: despite the enormous outlay of labour-power required for an infinitesimal result, she nevertheless hangs on to her wretched household as the only sphere in which she is not subject to the dictates of others, and is free from exploitation.

The money needs of the peasant grow in proportion to economic and political development – the more rapid the latter, the greater the demands of state and local commune on their purse. The increasing pressure to acquire money leads to the growing neglect of agriculture and more time devoted to the supplementary occupation. The degeneration, but not collapse, of the household which followed women's participation in wage-labour now repeats itself for the small peasant's involvement in wage-labour or capitalistically exploited domestic industry. Their agriculture becomes increasingly irrational: at the same time, the farm begins to seem too large to manage – its size has to be reduced.

Finding buyers for such surplus parcels is no problem.

A vigorous peasantry can regulate the population and this characteristic, along with its conservative attitudes and military subservience, represents one of the most important features of the peasantry, making it so valuable to bourgeois economists and politicians. The peasantry is the ideal breeding-ground for a plentiful supply of children: this is of inestimable value where labour-power and soldiers are in great demand. At the same time, the peasantry can put a check on the growth of population, and is able to comfort the hearts of the Malthusians. Where peasant economy is the sole prevailing institution, with no opportunity for other types of employment, the limitation in the supply of land is sufficient to enforce a reduction in the numbers of the next generation. This occurred under the two-child system, where the inheritance was divided equally, and under primogeniture, since the other offspring could not set themselves up independently, establish their own household and obtain a legitimate succession with title to inheritance.

The position is quite different where there are a large number of opportunities for employment off the farm. The increase in population takes on a more proletarian character; opportunities for becoming independent are greater, and every child comes into the world equipped with its most important inheritance – its arms. Population grows rapidly, and with it the demand for land, not as a means of producing for sale but as the basis of an independent household. The growth in supplementary employment both allows, in fact requires, a reduction in the size of individual farms, and therefore allows a larger number of small farms to exist in close proximity, and produces the rapid expansion
in population which demands the multiplication of such enterprises.

Instead of centralisation, the need here is for fragmentation, including even the fragmentation of large farms.

In Chapter 5 we noted that the price of a piece of land intended for capitalist commodity-production is determined by the level of ground-rent it provides. By and large, selling price is equal to the capitalised ground-rent. A higher price would expose the capitalist entrepreneur to the risk of not earning the customary profit. In general, competition will not push the price over this level. We disregard here any non-economic considerations which might cause the price of land to increase above the level of capitalised ground-rent.

The peasant who, although selling agricultural produce does not employ any or only a little wage-labour, and who is not a capitalist but a petty commodity producer, calculates very differently. As a worker, the peasant does not live from the yield on his property but from the yield of his labour: his standard of living is that of a wage-labourer. Land is not a means for producing a profit or ground-rent, but for providing, through the medium of labour, the means for the peasant's existence. As long as the receipts from the sale of produce provide a wage and cover expenses, the peasant can continue to exist. He can manage perfectly well without profit or ground-rent. The country dweller can therefore pay more for a particular plot under simple commodity-production than under capitalist production, other things being equal. However, this calculation can often put the peasant into a very tight corner should he have kept the custom of paying a very high price for land but in practice, if not formally, have advanced beyond simple commodity-production and become engaged in capitalist production, albeit not as a capitalist entrepreneur but as a worker exploited by capital. If the peasant buys land but only pays for it immediately in part, or not at all, and raises a mortgage, he not only has to make the farm yield up a wage, but also ground-rent. As with the capitalist entrepreneur, an excessively high price for land can prove very destructive. High land prices only benefit farmers when they cease farming – that is, on the sale of the land. At the outset of and during a farming career, they simply compound the burdens. However, the only suggestion our agrarians have for saving our imperilled agriculture is to raise the price of land. These supposedly patriarchal gentlemen do not calculate as farmers, but as land speculators. We shall come back to this in a different connection later.

The situation is quite different again for those small farmers for whom agriculture is exclusively, or predominantly, a mere part of the household, and who satisfy their need for money entirely, or
predominantly, by labour in the service of another. As far as the buyer is concerned, any connection between the price of land and commodity-production, that is, the law of value, disappears. For the seller, capitalised ground-rent constitutes the minimum price of land; for the buyer, the only consideration is their purchasing power and principally their need. The faster the growth in population, the more difficult an outflow of population, the greater the absolute necessity to obtain a patch of land as the basis for achieving a minimum of subsistence, possibly even social independence. And consequently the higher the prices or rents which have to be paid to obtain a tiny plot. As with the household, agricultural labour for the families' own consumption is not calculated as an expenditure; it does not cost anything. Everything which cultivating the soil contributes to the household therefore appears as pure gain. Not only is it virtually impossible to calculate the money value of the yield, and divide it into wages, interest and ground-rent: such a calculation would never be undertaken since money plays no role in this type of farming.

Small farms are well known to be more expensive than large farms. Meitzen's treatment of mortgage indebtedness in Prussia notes that the price of large landholdings is 52 times the net property tax yield, that of medium farms 65 times, and that of small peasant plots 78 times.

A few enthusiasts for small landed property have viewed this increase in the price of land as proof of the superiority of the small-scale agricultural enterprise. However, not even the greatest admirer of the small enterprise, at least not one wishing to be taken seriously, would claim that the dwarf-holding is superior to the medium-sized holding. Yet such a superiority would have to exist if the higher price of land were the result of a higher yield.

The higher price of land for small farms finds its analogies in the cities, where it is well known that in terms of living area the price of dwellings is in inverse proportion to their size. Following Isidor Singer's lead, Bücher has demonstrated this in Basle.

<table>
<thead>
<tr>
<th>No. of rooms</th>
<th>Cost per cubic metre</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.04</td>
</tr>
<tr>
<td>2</td>
<td>3.95</td>
</tr>
<tr>
<td>3</td>
<td>3.56</td>
</tr>
<tr>
<td>5</td>
<td>3.36</td>
</tr>
<tr>
<td>6</td>
<td>3.16</td>
</tr>
<tr>
<td>9</td>
<td>3.21</td>
</tr>
<tr>
<td>10</td>
<td>2.93</td>
</tr>
</tbody>
</table>
Both phenomena, the higher price of land and higher price of accommodation, can, in part, be attributed to the same cause – the greater need of the potential buyers, and their smaller capacity to fight the monopolists. Anyone attributing the higher price of land of the small farm to its higher yield would also have to attribute the higher price of smaller dwellings to their inhabitants' higher incomes.

Of course, the higher price of land for small farms provides a strong motive for breaking up large farms wherever circumstances favour population growth and the taking up of supplementary employment outside the farm. The butchering of estates and the fragmentation of landed property can take on massive dimensions under such circumstances.

The smaller the farm, the greater the pressure to look for supplementary employment. And the more this feature grows in importance, the smaller farms can become – with a consequent decline in their ability to feed the household. This is accentuated by the fact that farming becomes rather irrational on this type of dwarf-holding. The lack of sufficient draught animals and implements prevents rational cultivation of the soil, especially deep ploughing; the number and choice of crops is determined by the needs of the household, not the retention of soil fertility; the lack of cattle and money also means a lack of natural and synthetic manures. And on top of this comes the shortage of human labour-power. The growing importance of working for a cash-income relegates work for the household into a secondary activity: the best labour-power in the family takes up wage-labour, including at those times when labour is most desperately needed on the farm, such as harvest. Labour on the small plot is increasingly delegated to the women, small children and, possibly, elderly invalids. The father and more grown-up children have to go out and 'earn'. The agriculture of the dwarf-holding, a mere appendage to the household, and the proletarian household begin to share the common characteristic that both only produce their wretched end-result through the drudgery and squandered energies of the housewife.

The diminishing scale and growing inadequacy of the small farm render it increasingly unable to meet all the needs of the household. Income from money-earning activities is not only required to pay state and local taxes and purchase the products of industry and foreign agriculture, such as coffee and tobacco. It also has to be used for buying the products of indigenous agriculture, in particular grain. Although the small farm can manage to supply potatoes, cabbages, milk from a few goats, or if the peasant is lucky, a cow, the meat of a pig, eggs from poultry, it cannot provide sufficient grain. Such farms are by no means
exceptional. According to the 1895 statistics, there were 5,558,317 agricultural enterprises in the German Reich. Of these 3,236,397 were less than 2 hectares, 58 per cent of the total: a further 1,016,318 were between 2 and 5 hectares - 18.29 per cent. Altogether 4,251,685, 76.51 per cent, were 5 hectares or less in size.

If we calculate that, in general, farms of between 2 and 5 hectares produce about as much grain as they consume, whilst those smaller have to buy in grain - and this is the common view - then only one quarter of all agricultural enterprises have an interest in the existence of grain duties: considerably more than one half of all agricultural enterprises, and over three quarters of small farms, have to buy grain and suffer direct damage through this imposition.

Not only is this a weighty argument against grain duties, but it also shows that the vast majority of the agricultural population no longer appear on the market for commodities as sellers of foodstuffs, but as sellers of labour-power, and buyers of foodstuffs. The small farm ceases to compete with large farms: in fact, as we have already shown, it fosters and supports them by providing wage-labourers and a market for their produce.

We noted that in 1895, 58 per cent of all agricultural enterprises in Germany were less than 2 hectares in size; in other words, too small to feed their holders. This tallies with the figures from the 1895 Occupational Census, according to which in agriculture proper (excluding horticulture, stock breeding, forestry and fishing, the latter curiously thrown in with farming) the number of independent farmers without supplementary employment totalled 2,026,374, and those with supplementary employment 504,164. However, in addition, there were also 2,160,462 persons who practised independent cultivation (that is on their own farms, not as wage-labourers) as a supplementary occupation. The total number of persons practising agriculture as their principal or supplementary occupation was 4,691,001 (the number of agricultural enterprises in 1895 was 5,556,900), with independent farmers carrying out another occupation as their principal or supplementary occupation numbering 2,664,626: this is 56 per cent, the majority of the aggregate figure.

It is also noteworthy that the number of those practising agriculture as their principal occupation, but who also have another occupation, has grown rapidly. In all other occupational groups, the number of economically active persons with a supplementary occupation has fallen (see table overleaf).
### Number of persons in occupational category with supplementary occupation

<table>
<thead>
<tr>
<th>Occupational Category</th>
<th>1882</th>
<th>1895</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Agriculture</td>
<td>671,404</td>
<td>8.15</td>
</tr>
<tr>
<td>Industry</td>
<td>1,693,321</td>
<td>26.47</td>
</tr>
<tr>
<td>Commerce</td>
<td>397,927</td>
<td>25.34</td>
</tr>
<tr>
<td>Domestic service</td>
<td>55,960</td>
<td>14.08</td>
</tr>
<tr>
<td>Army, public service, the professions</td>
<td>142,218</td>
<td>13.79</td>
</tr>
<tr>
<td>No occupation</td>
<td>179,679</td>
<td>13.27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,140,509</td>
<td>16.54</td>
</tr>
</tbody>
</table>

Where opportunities for supplementary employment outside agriculture are growing rapidly, the parcellisation of estates can reach incredibly high levels — sufficient to overwhelm, at least for a time, the opposing tendency towards centralisation.

Belgium is a classical example.

### Farms (hectares)

<table>
<thead>
<tr>
<th></th>
<th>1846</th>
<th></th>
<th>1866</th>
<th></th>
<th>1880</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per cent</td>
<td>Number</td>
<td>Per cent</td>
<td>Number</td>
<td>Per cent</td>
</tr>
<tr>
<td>Up to 2</td>
<td>400,517</td>
<td>69.9</td>
<td>527,915</td>
<td>71.1</td>
<td>709,566</td>
<td>78.0</td>
</tr>
<tr>
<td>2-5</td>
<td>83,384</td>
<td>14.6</td>
<td>111,853</td>
<td>15.1</td>
<td>109,871</td>
<td>12.1</td>
</tr>
<tr>
<td>5-20</td>
<td>69,322</td>
<td>12.1</td>
<td>82,646</td>
<td>11.1</td>
<td>74,373</td>
<td>8.2</td>
</tr>
<tr>
<td>20-50</td>
<td>14,998</td>
<td>2.6</td>
<td>15,066</td>
<td>2.0</td>
<td>12,186</td>
<td>1.3</td>
</tr>
<tr>
<td>Over 50</td>
<td>4,333</td>
<td>0.8</td>
<td>5,527</td>
<td>0.7</td>
<td>3,403</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>572,554</td>
<td>100.0</td>
<td>743,007</td>
<td>100.0</td>
<td>909,399</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Between 1846 and 1866 the absolute number of all these categories increased, although the smaller enterprises grew faster than the larger. In contrast, between 1866 and 1880 all the categories shrank, with the exception of the smallest, which cannot really be included in independent agriculture. The reduction in average size in this category is hardly attributable at all to increasing intensification, and can be primarily explained by the growing fragmentation of land-ownership and the increase in supplementary employment.

Almost four-fifths of all agricultural enterprises in Belgium are dwarf-holdings whose owners are dependent on wage-labour or another supplementary occupation, and which no longer produce food for the market. They have doubled in number since 1846: over the same period, the number of larger farms (those over 20 hectares) has fallen considerably. Whether this is a cause for excitement amongst the admirers of the peasantry is another matter.

This is not the universal path of development, however. The excessive fragmentation of small farms presupposes that opportunities for supplementary employment can be found. Where the only source of such employment is the large-scale agricultural enterprise, fragmentation will reach a limit as soon as it begins to encroach on the larger units. At the same time, as we have seen, such a fragmentation of small-scale land-ownership can serve as a prop for the large farms. Both the smallest farms and the largest can therefore grow at the same time - not only where the cultivated area is being extended, but also where this has ceased being possible. In such circumstances, parcellisation is at the expense of medium-sized enterprises.

In general, this is what has happened in France. As the data on p. 135 showed, the overall area occupied by the largest and the smallest farms both rose whilst that of the medium-sized fell. In Germany this tendency was very evident quite early on. In 1882 Miaskowski concluded that the marked increase in moveable capital in connection with other contemporary factors led, on the one hand, to an enlargement and rounding off of landed property, and on the other, to diminution and dismemberment. Although these two tendencies appear mutually exclusive at first glance, closer observation reveals that this apparent contradiction resolves itself quite harmoniously through the fact that the opposed tendencies are found either at different times or in different parts of Germany. Or, where they do occur at the same time in the same place, it is through the erosion of the position of the medium holding.

Whilst the process of agglomeration takes place mainly, if not exclusively, in the north and north east of Germany, the dismemberment of
estates is mostly confined to the south and south west, if sporadically turning up in other areas. Both these antithetical and spatially diverse tendencies share one thing in common, however. Both enlargement and diminution of landed property primarily occurs at the expense of the medium-sized holding. The medium holding is under pressure from two sides. (Miaskowski, *Das Erbrecht*, pp. 130, 131)

The extent to which large and small holdings grow simultaneously at the expense of medium holdings can be seen in the following Prussian data, taken from Sering (and covering the Eastern provinces of Prussia, Pomerania, Brandenberg, Posen, Silesia, together with Westphalia and Saxony).

Between 1816 and 1859 the number of peasant holdings capable of supporting a team of oxen [*spannfähige Bauerngüter*] declined as follows:

<table>
<thead>
<tr>
<th>Reduction</th>
<th>Net area lost through free market transactions with:</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Smallholdings</td>
<td>Larger holdings</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Per cent</td>
</tr>
<tr>
<td>Eastern Provinces</td>
<td>6,880</td>
<td>2.50</td>
</tr>
<tr>
<td>Westphalia</td>
<td>810</td>
<td>2.25</td>
</tr>
<tr>
<td>Saxony</td>
<td>2,183</td>
<td>5.30</td>
</tr>
<tr>
<td>Total</td>
<td>9,873</td>
<td>2.80</td>
</tr>
</tbody>
</table>

No figures are available for the period 1860–64. Between 1865 and 1867 the picture was as follows (gains marked +, losses -):

<table>
<thead>
<tr>
<th>Medium estates</th>
<th>[spannfähige] holdings</th>
<th>Small holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Morgen</td>
<td>Number</td>
</tr>
<tr>
<td>Eastern Provinces</td>
<td>+4</td>
<td>+81</td>
</tr>
<tr>
<td>Westphalia</td>
<td>0</td>
<td>+5,510</td>
</tr>
<tr>
<td>Saxony</td>
<td>-1</td>
<td>+8,206</td>
</tr>
</tbody>
</table>
In addition, several thousand *morgen* have passed into urban ownership or been used for public purposes. Again, it is the medium peasantry who have had to bear the costs of this.

The displacement of the medium-sized landholding via the processes of parcellisation and consolidation has recently virtually come to a halt in the German Reich. In fact, between 1882 and 1895 medium-sized peasant farms of 5–20 hectares have gained the most (560,000) as the table on page 135 showed. However, one should not conclude from this that the opposite process has now set in, and that the middle peasantry is pushing back the dwarf-holding and large estate. We obtain a very clear picture of the true situation if we separate out those farm sizes which have experienced considerable change from those which exhibit hardly any change.

<table>
<thead>
<tr>
<th>Holdings</th>
<th>1882</th>
<th>1895</th>
<th>Loss or gain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per cent</td>
<td>Number</td>
</tr>
<tr>
<td>Under 1 hectare</td>
<td>2,323,316</td>
<td>+205,816</td>
<td>+8.8</td>
</tr>
<tr>
<td>1-5 hectares</td>
<td>1,719,922</td>
<td>+3,631</td>
<td>+0.2</td>
</tr>
<tr>
<td>5-20 hectares</td>
<td>926,605</td>
<td>+72,199</td>
<td>+7.8</td>
</tr>
<tr>
<td>20-100 hectares</td>
<td>305,986</td>
<td>+270</td>
<td>+0.0</td>
</tr>
<tr>
<td>Over 1,000 hectares</td>
<td>515</td>
<td>+57</td>
<td>+11.0</td>
</tr>
<tr>
<td>Total</td>
<td>5,276,344</td>
<td>+281,317</td>
<td>+5.3</td>
</tr>
</tbody>
</table>

Holdings between 5 and 20 hectares have markedly increased, but the *smallest* and *largest* increased by even more in percentage terms. The intermediate sizes have scarcely increased, and have fallen back in relation to the whole.

The fact that the smallest, the largest and medium holdings could all increase at the same time is explained partly by the increase in cultivated area, and partly by the losses of those farms in the intermediate categories. The total area occupied by each category was as follows (in hectares):
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<table>
<thead>
<tr>
<th>Holdings</th>
<th>1882</th>
<th>1895</th>
<th>Increase or decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1 hectare</td>
<td>777,958</td>
<td>810,641</td>
<td>+32,683</td>
</tr>
<tr>
<td>1-5 hectares</td>
<td>4,238,183</td>
<td>4,283,787</td>
<td>+45,604</td>
</tr>
<tr>
<td>5-20 hectares</td>
<td>9,158,398</td>
<td>9,721,875</td>
<td>+563,477</td>
</tr>
<tr>
<td>20-1,000 hectares</td>
<td>16,986,332</td>
<td>16,899,523</td>
<td>-86,809</td>
</tr>
<tr>
<td>Over 1,000 hectares</td>
<td>708,101</td>
<td>802,115</td>
<td>+94,014</td>
</tr>
<tr>
<td>Total</td>
<td>31,868,972</td>
<td>32,517,941</td>
<td>+648,969</td>
</tr>
</tbody>
</table>

The reduction in the area occupied by farms of 20 to 1,000 hectares, which has been more than compensated for by the increase in the area of farms with more than 1,000 hectares, is not the result of any decline in the large enterprise but rather of its intensification.

Up until the 1870s the slogan of the large landowners was 'more land!' Today it is 'more capital!' However, as we already know, aside from the latifundia this can often even signify a reduction in landholdings.

We noted above that the number of agricultural steam engines quintupled in Prussia between 1879 and 1897. Over broadly the same period (1882-95) the number of agricultural clerks of the type only employed on large farms in Germany (stock managers, inspectors, supervisors, book-keepers and so on) rose from 47,465 to 76,978, an increase of 62 per cent. The number of women employed as agricultural administrative or office workers increased especially rapidly. In 1882 they numbered 5,875, 12 per cent of the total number of white collar workers in agriculture; by 1895 this figure had risen to 18,057, 23.4 per cent.

These are all clear indicators of the increasing intensification of capitalist large-scale agriculture since the early 1880s.

Why medium-sized peasant farms have gained so much land is a topic we shall reserve for the next chapter. Our concern here is the fact that the proletarianisation of the rural population in Germany, as everywhere else, continues despite the fact that the tendency towards the parcellisation of medium-sized farms has come to a halt. Between 1882 and 1895 the number of all agricultural enterprises increased by 281,000. However, by far the bulk of these were accounted for by proletarian farms of under one hectare. These increased by 206,000.

Agriculture quite obviously pursues a unique path, quite unlike that of industrial and commercial capital. Chapter 7 noted that in agriculture the tendency towards centralisation did not lead to the complete
elimination of the small enterprise. Wherever this process went too far, it generated an opposing tendency. We now see that both tendencies towards centralisation and towards fragmentation can work alongside each other. The number of small farms whose owners appear on the market for commodities as proletarians and sellers of labour-power is increasing. But their landholdings are only relevant outside the sphere of commodity-production, in the sphere of production for the household. As sellers of labour-power the central interests of these small farmers are also those of the industrial proletariat, a community of interest unaffected by their ownership of land. Although owning land may largely liberate peasants from the food-merchant, it does not free them from exploitation by the capitalist entrepreneur, irrespective of whether the capitalist operates in industry or agriculture. Once this stage is reached, any increase in small rural enterprises simply becomes one particular form in which the number of proletarian households increases - a process which runs hand in hand with the multiplication of large-scale capitalist enterprises.

The Forms of Peasant Supplementary Employment

Agricultural wage-labour represents the most immediate form of supplementary employment for the small farmer. It has existed from as early as the feudal period, once inequalities in the village had reached a point at which some farms had grown too small to feed their owners adequately, whilst others had grown too large for adequate cultivation by the labour-power available within the peasant family.

Modern labour by the small peasant on large estates also has another analogue - the feudal obligations which compelled peasants to work for a certain number of days in the year on the lord's demesne.

For the peasant, the most desirable employment is naturally one which can be carried out during the quietest time of the agricultural year - in winter. Such work can be found most easily where there are large woodlands in the vicinity requiring numerous workers in winter for felling and transporting timber. But such work is not available everywhere, and is not always sufficient to satisfy the small peasants' need for money. They must then look for agricultural labour in the narrower sense of the term. The demand for labour by agricultural enterprises is, of course, very variable; at times, especially during the harvest, the permanent workers on a large farm are not sufficient, and additional hands are required. However, the times when a small peasant is most likely to find supplementary employment in agriculture are precisely those when they are most urgently needed on their own
farm. The need for money forces them to neglect their own farm – which small size and lack of means already subject to very erratic cultivation. Agricultural work on the peasant's farm is delegated to the children: the peasant can only work, at most, after the end of the working day and on Sundays.

Not all farms which become dependent on secondary employment are necessarily dwarf-holdings. Kärger reports, for instance, from the Westphalian districts of Coesfeld, Borken and Recklingshausen:

the land owned or rented by free-day labourers varies between 1 and 5 hectares, but is usually between 1 and 3. Anyone with more than 5 hectares – and according to some figures more than 3 hectares – does not normally seek daily labour, but tends to live exclusively from their own farm. However, in one report, the extent of the holdings of such day labourers has been cited as up to 6 and in another up to 8 hectares. This naturally depends on the fertility of the soil. (Kärger, *Die Verhältnisse der Landarbeiter in Nordwestdeutschland*)

The same author describes a typical Heuerling farm in the Osnabrück area as consisting of a dwelling house and outbuildings with stalls for 3 cows and several pigs and sheep, a garden of 10 to 15 ares, arable land of around 2 hectares, meadow land of half to one-and-a-half hectares, share of the common pasturage of 1 hectare, and cutting rights in the common woodland over an area of one-and-a-half to 2 hectares (Kärger, ibid., p. 64).

A farm with 3 cows, and several sheep and pigs constitutes quite a substantial undertaking. Yet despite this, its owner is forced to take up wage-labour.

However, large estates offering the possibility of a supplementary income are not always on hand. Far from being regarded as competitors, such estates are often strongly desired. A report from the Eisenach Oberland, for example, observes:

the establishment of a large estate through the recent purchase of the required area of land, together with the proposed establishment of a sugar factory in Wiesenthal, will be certain to exercise a favourable influence over the conditions of the peasantry in the area. A number of day-labourers and small landowners will find worthwhile employment. (Verein für Socialpolitik, *Bäuerliche Zustände*, I, pp. 40, 57)

In contrast, a report from the Eisenach Unterland observes that the
majority of landholders in that area have less than five hectares. Their circumstances are less favourable. 'The large local estates are not sufficient (with 12.5 per cent of the total area) to guarantee the local smallholders adequate employment and earnings through the use of their labour-power as day-labourers or in other capacities' (ibid., I, p. 66).

The lack of large estates is also cited as one of the causes of distress amongst the small peasantry in the Grand Duchy of Hesse. Dr Kuno Frankenstein reports:

In those villages with right of inheritance in natura, that is where the plots of land are divided up in proportions corresponding to the number of children, where the small size of the parcels permits this at all, there is no real shortage of workers as all the numerous small owners, often with only 5 to 10 morgen or even less, are prepared to offer themselves as workers where necessary. However, where peasant holdings are so small, the demand for labour is not very great, especially in the absence of a large estate. The holders of small day-labourer plots can neither use their labour-power on their own farms, not sell it for wages. The plight of the owners of such dwarf-holdings is therefore especially sorry. (Auhagen, Die ländliche Arbeiterverhältnisse in der Rheinprovinz, II, p. 232)

Whereas the previous chapter showed how the small farm was a prop for the large farm, this chapter has illustrated how the large farm appears as a prop for the small.

Chronic undernourishment so enervates the small farmers in Hesse that they eventually become incapable of taking advantage of those meagre opportunities for wage-labour which do present themselves. 'Their sparse diet prevents them from taking on heavy work for any length of time. In a number of districts this has led the owners of large estates to bring in labour from outside, despite the inadequate use made of local labour.'

A population too weak for agricultural work can, however, always resort to that other supplementary occupation favoured by the small peasant denied access to agricultural wage-labour – domestic industry.

Domestic industry also has its origins in the feudal period. Originally peasants were both farmers and industrialists. The development of urban industry eventually forced them to devote themselves exclusively to agriculture. Nevertheless, the peasant family retained a number of manual skills. Wherever agriculture begins to fail as the sole source of income these can be resurrected, but not as handicrafts working directly for the customer. The isolated peasant cannot compete with the urban
handicrafts, which have access both to larger markets and all the other advantages of the town. As commodity-production, rural industry can only develop as production for a capitalist, a merchant, or putter-out, who establishes the link with distant markets inaccessible to the peasant. And it can only develop in spheres in which simple skills and tools suffice. Such an industry most commonly develops where raw materials are easily available - wood-carving near forests, slate-making and pencil-making near quarries, basket-making in low-lying areas with marshes and meadows, small-scale iron making where ores are available, and so on. Nevertheless, the presence of large amounts of cheap, unutilised labour is often sufficient to induce a shrewd capitalist to set about exploiting it in domestic industry. The capitalists themselves often supplied the raw materials, such as cotton or silk yarn for weaving. Rural domestic industry is most developed where the soil is least fertile and where, at the same time, the technical prerequisites for large-scale farming are most unfavourable - in particular where political obstacles also stand, or stood, in the way of large land-ownership. Typical areas are the mountainous districts which form the border of Bohemia, Silesia and Saxony, Thuringia, the Taunus, the Black Forest, and also in Switzerland, with its watchmaking in the West, silk-weaving in the Central area and embroidery in the East.

Initially these domestic industries were warmly welcomed. Their founders were regarded as benefactors to the poor peasants to whom they offered the opportunity of making profitable use of their free time, especially in winter. It was expected that their increased income would allow them to organise their farms more rationally, and raise their incomes still more as a result. Alternating between industrial and agricultural labour was thought to keep a domestic rural industrial workforce strong and healthy compared with industrial workers in the towns, and intelligent and wealthy compared with the peasants who were restricted to their own farms, and had to leave so many precious hours unutilised.

Schönberg, for instance, painted the rosiest picture of domestic industry in those areas where it had not been supplanted by competition from the machine. The entire family worked together, 'the father can supervise the bringing up of his children, and oversee their education; the wives can care for their household and family; the young girls remain under the control and protection of the family.' Working time is at the discretion of the workers; they are free,
and healthy agricultural work, at the same time avoiding the concentration of masses of wage-labourers in one place, with all its disadvantages both for the workers and for the common good. Finally, domestic industry allows the use of all the productive earning powers of the family and allows an increase in family income without endangering either individuals or family life.

However, these 'undeniable' advantages have to be set against a number of disadvantages which even Schönberg cannot completely avoid seeing. Despite them, he concludes that, 'all these disadvantages, serious as they may be, are not sufficient to prevent domestic industry, by its nature, appearing as the more favourable form of enterprise for the social situation of the workers' (Schönberg, Handbuch der politischen Ökonomie, p. 428). The only situation in which it is inappropriate is where they have to compete with factory industries.

Reality provides us with a different picture, even when we consider those domestic industries which have not yet had to wage a struggle against mechanised large-scale industry - such as basket-weaving, cigar or toy-making.

First and foremost, the sheer speed of its spread means that no other type of rural secondary employment is more conducive to the parcellisation of the land. Like mines, there is a limited number of large farms. Even factories cannot be expanded in the countryside simply at will. Opportunities for wage-labour are therefore subject to particular limits. This is not so with domestic industry. Its only limit is the number of available workers; it can be carried out in the smallest of enterprises, with the most primitive means, without any, or scarcely any, outlay of capital. And if the market is favourable, the capitalist runs no risk at all in expanding as fast as possible. There is no need to acquire fixed capital, buildings and machines which can wear out and become useless if not used productively; no ground-rent or other costs have to be paid, which continue regardless of the fortunes of the business. All the burdens which account for the bulk of capitalist risk are borne by the exploited domestic workers. And the fact that the capitalist can so easily dispose of them makes any crisis particularly devastating when compared with workers in large-scale industry. By the same token, their number can be more rapidly expanded in favourable times. However, periods of prosperity are almost as ruinous as periods of decline.

The number of marriages increases: families are started - and with them grows the demand for small farms, the indispensable precondition for running an independent household on the land. The price of land goes up, parcellisation increases, the small farms become even smaller and at
the same time, their cultivation becomes poorer and poorer. Part of the explanation lies in the fact that they get smaller and smaller. But in addition, flourishing domestic industry bringing money into the house increasingly swallows up all the household labour available, and takes it away from agriculture. Should this continue for any length of time, this sedentary life will undermine industrial workers' physical ability to undertake any prolonged agricultural activity. They cease to be capable of properly cultivating their fields, and the smallness of their farms becomes a physical necessity. Farms become so small that they are no longer sufficient to sustain a single cow. Milk disappears from the table, to be replaced by chicory broth. The disappearance of the cow also means the disappearance of manure, and of draught animals for ploughing. The fields become less and less fertile, and unsuited for grain growing. Moreover, grain has to be milled and baked before it can be eaten. The family begins to choose crops that are less demanding and which produce not more nourishment, but a higher weight of crop for the same area: cabbages, beet, and especially potatoes, which can all be used in the kitchen without too much preparation.

The domestic industrial worker is reduced to drinking chicory broth and eating potatoes - a diet more fitted to fool their stomachs than provide them with adequate nourishment. The effects of industrial work are now compounded by those of undernourishment. The physical capacities of the worker atrophy to the minimum needed to manage the manual operations required by industrial labour.

Cultivation suffers no less a degeneration than the erstwhile cultivator. The small, poorly cultivated, unfertilised parcels bear the same crop year in, year out. Agriculture slumps to a level below that of the Germans at the close of their migratory period. Schnapper-Arndt reports of five villages in the high Taunus:

A substantial element of three-field cultivation has only been retained in Seelenberg. In the other villages necessity acknowledges no law: many fields are expected to produce potatoes year in, year out, because a more rational rotation is simply not possible for peasants lacking both land and other means.

These five villages had only 463 cows between 758 households: 486 households had no cow at all, and 117 only had one.

The physical ruin of the land and the people on it is accompanied by their economic demise. Domestic industry is only capable of limited technical progress. Like the capitalists who exploit them, rural domestic industrial workers can only wage their competitive struggle by
imposing even greater strains on their capacity to work and by cutting wages. In fact, this type of competitive struggle is facilitated by the isolation and dispersion of individual workers and their families which makes it almost impossible for them to organise. Added to this, they lack other opportunities for earning money in their areas, and are tied to the soil, which prevents them from escaping excessive exploitation and swapping it for less acute exploitation elsewhere. The putter-out is sure of his rural workers. Even the longest spells of unemployment will not drive them away. As a consequence, capitalist exploited domestic industry exhibits the longest, most exhausting working time, the meanest payment, the most children's and women's labour, and the most appalling living and working conditions, in one word the most outrageous conditions which our mode of production has to offer. It is the most shameful system of capitalist exploitation and the most degrading form in which the peasantry becomes proletarianised. Any attempt to help the small peasantry unable to secure its existence through pure agricultural labour by incorporating it into domestic industry will, after a short and very problematic recovery, inevitably plunge them into the deepest and most hopeless misery. Such attempts should be strenuously resisted.

Fortunately, domestic industry is merely a transitional stage on the way to large-scale industry. Sooner or later the bell will toll for it: modernisation renders it technically superfluous, and the quicker that domestic industry develops and specialises, the more it advances the division of labour, the earlier this time will come. However, the tolling of the bell for domestic industry does not mean that the domestic workers' hour of redemption has arrived. It is just the beginning of their sufferings on the way to the cross. Forced to work as never before, forced to accept even lower payment, forced to step up the drudgery imposed on their families, they struggle not to slip too far behind in the competition against the machine. And history provides a number of examples of how long this dreadful race can continue before the hopelessly overtaken competitor finally collapses exhausted.

The key to the prolongation of this hopeless race lies in the rural domestic industrial producer's agriculture.

Wherever agriculture is directed at the needs of the household rather than commodity-production, it is not subject to the motor force of competition: it constitutes a conservative element which allows the survivors to enjoy what is in fact merely an illusory existence. It is agriculture which draws out the death struggle of domestic industry and which will not allow, to take one example, the hand-weaver to die out, although they ceased to be truly viable more than half a century ago.
The reason why this branch continued undiminished despite its unceasing convulsions is in no small measure due to the fact that the bulk of the weaving population had a little land which served to supplement their income from industry in good periods. And in bad periods this was at least enough to provide them with the means to struggle through the tribulations of the crisis. (Braf, *Studien über nordböhmische Arbeiterverhältnisse*, p. 123)

Nevertheless, in recent times rural domestic industry has been retreating rapidly everywhere where large-scale industry has ventured out into the countryside, not with the aim of competing with workers in domestic industry but of opening up new opportunities for employment.

The development of large-scale industry requires large numbers of propertyless, exploitable, skilled and disciplined workers and the proximity of a large market. These conditions are most fully met in the large commercial centres. In turn, their development is a constant attraction to fresh masses of workers, and encourages movement between the districts in which industry is thriving. The tendency towards large-scale industry means the progressive concentration of the mass of the population and economic life in large cities.

A number of factors nevertheless operate to stem the flood of growing industry into the cities: a few rivulets are diverted to fertilise the open countryside. These factors are partly natural and partly social in character. Of the former, the most important is large-scale industry's growing need for raw materials which can only be produced in the open countryside, and because mass consumption must be produced *en masse*. Mines are the prime example. The growth of mining is a powerful means for revolutionising rural life. Raw materials with a low value to weight ratio which cannot be transported very far, should also clearly be fabricated in the locality in which they are produced: hence iron-works, brick-works and sugar factories in rural areas. Powerful and easily tamed water power also tempts some industries to quite remote valleys.

A number of social factors are also relevant. Living standards in the towns are higher than in rural districts and, with the same standard of living, the costs of maintaining labour-power are greater because of higher ground-rents for dwellings, transport costs for food, and the absence of plots for workers for their own cultivation. As a consequence, wages in the towns have to be higher than in rural areas.

The concentration of the workers in large numbers in a small area is also important. Workers can communicate and organise themselves more easily in towns. They are more difficult to control and discipline. The multiplicity of opportunities for employment means that someone who
has been disciplined can always expect to find a new job elsewhere. Matters are different in the countryside; workers are less able to resist capital, they are more compliant and expect less. This is a major inducement for large-scale industries to shift their factories to rural areas, and if suitable labour-power is available – which to their regret is only sporadically the case – with all the other conditions of a successful operation being met, the attractions of the country will grow in step with the advance of the workers’ movement in the towns.

The shift of large-scale industry to the open country also grows in proportion to the development of the transport system – canals, railways, wireless telegraphy. These enable close contact to be maintained with large markets. At the same time, the emergence of these large enterprises in the country is a powerful motivation for the extension of modern means of communication: in turn, the construction, maintenance and use of such facilities provides a number of employment possibilities for the rural population.

Initially, the consequences for the small farmers and their farms are less favourable than under the regime of domestic industry. The large farms producing food for the market gain, at least inasmuch as there is an enormous expansion in local demand for their products. However, this advantage is usually more than outweighed by the shortage of workers which industry creates, a subject we deal with elsewhere. Both large and small farms suffer from the rise in land prices. Large-scale industry brings with it a rapid growth in population not merely, as was the case in domestic industry, as a result of easing marriage and the establishment of a household, but by bringing in workers from outside: a large rurally located capitalist enterprise is seldom able to make do with the labour in the immediate vicinity. The demand for housing and parcels of land increases, and with it their price. However, the higher the price of land, other things being equal, the fewer means left to the buyer for agriculture – reducing the quality and quantity of equipment. We come back to this topic in the next chapter.

As a rule, large-scale industry also makes quite different use of its workers than domestic industry. Domestic industry at least occasionally allowed the whole family to interrupt its industrial activity to devote itself to agriculture, at harvest time for example. Admittedly, this was not always the case. In some domestic industries, high season in the industrial sphere coincided with harvest time.

The most intense period of the harvest, when country dwellers can work up to 20 hours a day, is also the time when the toy makers have to be at their busiest, with not a minute to spare to attend to the
necessary agricultural work. (Sax, *Die Hausindustrie in Thüringen*, I, p. 48)

Where this is the case, domestic industry and agriculture go their separate ways: it is impossible for the same individual to practice both. However, this is far from the general rule.

The situation is different in large industrial establishments. The mere fact that they contain a large amount of fixed capital, which will wear out without yielding a return if not used, forces the entrepreneur to avoid major interruptions to the labour process. Very few large industrial establishments only work for part of the year; and those that do, do so at times when labour is not needed in agriculture, or is not pressing. Sugar factories begin their 'campaign' after the beet harvest in autumn, and work through the winter for around four months. The pace is fast, as the beet will start to rot towards the New Year.

Work in the sugar factories does not therefore restrict the necessary labour time which the agricultural worker and dwarf-holder require for their own agriculture.

Even work in the coal-mines is reconcilable with agriculture under some circumstances. The demand for coal is greater in winter and more coal is worked then. The institution of the night-shift also leaves some miners 'free' for the day, and although they should use it for rest, they often use it to tend their plots – no doubt as a result of the high spirits engendered by their fantastic wages, and to get rid of any surplus energy which they have not managed to expend in their overly short period of working time inside the colliery.

Kärger reports, for example:

in the Recklingshausen area an alternation between agricultural and non-agricultural labour takes place with the landowning free day-labourers often working from the beginning of the harvest until the end of November on the land, and the rest of the time in the pits. (Kärger, *Die Verhältnisse der Landarbeiter in Nordwestdeutschland*, p. 124)

In the mining districts of Gelsenkirchen, Bochum and Dortmund, landowning agricultural labourers have almost disappeared.

Although non-landholding day-labourers are sometimes employed, these are mostly miners who, because of the short period of working time in the colliery, have sufficient time, especially when working night-shift, to spend a few hours each day in agricultural work. Or,
these may be miners who have taken up lodgings with peasants in return for the obligation to help them during the harvest. Alternatively, they may have rented a potato plot in return for the same obligation. And finally, there are those who are unfit for work in the mines. Occasionally we hear reports of day-labourers having an income from their own farm, but these usually turn out to be miners who also carry out supplementary agricultural work. Such individuals sometimes rent a small house with a little garden, and keep one or two goats and obtain permission to plant as many potatoes as they can fertilise on the landlord's plot. (ibid., I, p. 132)

Finally, an example from the Eastern mining district of Silesia.

In the coalmining and industrial districts, agricultural workers frequently look for work for part of the time in the mines and in industry, especially the building trades or in the factories, and return to the land at harvest time. This is especially common with the small plot holders. (Weber, Die Verhältnisse der Landarbeiter im ostelbischen Deutschland, p. 502)

Under some circumstances work in the mines can become a major prop for the peasant economy. 'The effect of the mixed open field on peasant property', so we read in a report from Westphalia, 'is very damaging wherever the holder is expected to live from their plot. Where the peasantry still has substantial supplementary earnings from mining and foundry work, as do 80 per cent in the Siegen area, such damage is not seen' (Verein für Socialpolitik, Bäuerliche Zustände, II, p. 8).

However, even though some branches of industry require or allow seasonal work, in general work in large-scale industry demands the unbroken attendance of the worker throughout the year – though in contrast to domestic industry, it does not demand the labour of the entire family. The exploitation of children under 14 is already legally prohibited. It is more difficult to make use of the housewife in large-scale industry than in domestic industry since the former requires her to leave house and hearth, but not the latter. Whereas participating in the work of domestic industry would have seemed obvious, it is a difficult decision for her to leave her children and home – all the more so on the land than in the town due to the enhanced role of the household there. The rural household has not yet been deprived of its functions by public kitchens, nurseries and kindergarten.

Those workers who remain in the household and its associated agricultural activities under the regime of large-scale industry are
joined by those too incapacitated for industrial work. Domestic industry can use any, even the weakest, workers; in contrast, large-scale industry demands so much from its workforce that, as a rule, only workers in the full flush of their strength can be employed – and this is rapidly exhausted. The family’s dwarf-holding offers employment to the class of industrial invalids which this situation constantly reproduces.

As with domestic industry, although in a different way, large-scale industry brings about a deterioration in the labour-power available for the small-farm, at the same time as it accelerates the reduction in its size, and as a result, worsens the actual technique of cultivation. And like domestic industrial capital – and for much the same reasons – large-scale capital in rural areas encounters scarcely any noteworthy resistance from the workers, and pushes their exploitation and degradation to the extreme.

Herkner has provided us with a typical picture of such a rural large-scale industry in his excellent work on the cotton industry and its workers in Upper Alsace. Although the conditions in Mulhouse described in his book are bad, those in the textile factories located in the open countryside are even worse. 'Working time is generally long. Even Grad reported 13–14 hours.' Night-work, even by youths, is common.

The young female workers are exposed to the same moral dangers as in Mulhouse. The punishment system and wage deductions apply throughout. The high degree of dependency of the workers gives these an added sting. In most towns in the industrial region the factory provides the only opportunity for work. In addition, the rural worker is usually, or usually appears to be, wedded to the land through ownership of a small plot (the so-called Krüter), which is tended by wife or parents. Workers have no influence on their terms of employment. On average wages are usually a third lower than those in Mulhouse, a difference greater than the difference between the prices of basic articles, so that the standard of living is, in fact, much lower. The diet is dominated by potatoes with at best meat on Sundays. Consumption of spirits is even greater than in Mulhouse. It is claimed that the 800 residents in one industrial village in the Vosges consume 300 hectolitres a year.

The prevailing truck system makes the worker's position even worse.

The poor standard of living also corresponds to a much more extensive degeneration. The local doctor (in Thann) reports: 'In factory villages
where everyone from their youth onwards works in the factories, almost all those liable for military service were unfit, and we believe that if this continues there will soon be no point in sending the enlistment commission to this village. Despite their low physical resources, the population is very industrious. The older people who no longer work in the factories still work on their small fields, which in view of the high and steep location of the Krüter means considerable exertion'. (pp. 349–52)

As gloomy as this picture may be, it is nonetheless more hopeful than that presented by domestic industry. Children are excluded from factory labour and the production process is carried out if not in the fresh air as in agriculture, then at least outside of the house in more roomy premises which, despite all their defects, surpass the hygienic standards achieved in most of the hovels inhabited by domestic workers. And precisely because the worker in the factory is not free, because they cannot begin and end work when they want to, because all the workers are subject to the same conditions, it is more tightly constrained than domestic industrial work, and can be more easily brought under legislative control. And by bringing together the dispersed workers, the factory promotes their mutual communication; by developing the system of transportation and bringing more intellectually developed workers from the towns into the village, it brings the factory village into closer contact with the outside world. It is, therefore, a means for bringing part of the rural population closer to the urban proletariat, of gradually awakening their interest in and understanding of the latter's struggle for emancipation. And finally, under favourable circumstances, it allows them to participate in this struggle.

The rural proletariat therefore swells the ranks of the proletariat without expropriating the small farmers, without breaking their tie to the land. In fact, it provides the means by which the imminently bankrupt dwarf-holders can maintain their property. In addition, it provides the numerous propertyless members of the rural population with the means to purchase their own small farm, be this on their own or on rented land.

The three types of peasant supplementary employment cited here are not mutually exclusive. They can coexist and often do. For example,

for the inhabitants of the Eisenach Oberland, especially the small farmers of the poorer districts with a meagre holding, the running of a domestic industry as a supplementary employment is particularly important. Such domestic industries are: the making of cork-stoppers,
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Weaving belts and plush-weaving, whip-plaiting, shoe-making, brush-making and wood-carving (pipe bowls). These industries provide a supplementary income of one or two or three marks for a family, and are often practised by peasants with eight to nine hectares. Forestry work and working the rich local basalt deposits also provide a passable income, especially when no agricultural labour is needed. (Verein für Socialpolitik, Bäuerliche Zustände, I, pp. 50, 51)

Heitz provides one example from Southern Germany in his study on conditions in the districts of Stuttgart, Böblingen and Herrenberg.

It would be wrong to think that agricultural labour is sufficient to meet the needs of the plentiful rural population. For the two western districts in particular the many opportunities for supplementary earnings are of crucial importance. Of these the most important is the forest, which employs a substantial contingent of workers permanently and many people temporarily. Ascertaining the state of domestic industry [weaving and embroidery] would also be instructive. Large-scale industry has now located itself alongside this. In the course of the last few years, a few large establishments have grown up, older ones have been expanded, and the number of small establishments has multiplied, the latter being designed to catch the cheapest opportunities for work. An additional factor is the retail trade in milk, eggs and poultry and a few industrial products. Apart from the villages in the immediate vicinity of Stuttgart, the following village can be viewed as being characteristically sources of day-labourers: Möhringen, Bonlanden, Plattenhardt, Baihingen, Rohr, Musberg, Birkach. Some workers make the daily journey to the spinning mills in Esslingen from Ruith, Heumaden, Kemnath, Scharnhausen, and even from as far afield as Plieningen.

Not all areas offer quite as many opportunities for supplementary earnings, and they are not always sufficient to satisfy the small farmer's need for cash. If these additional earnings do not come to the peasant, then the peasant must go looking for the earnings - and in pursuit of them must sometimes tear himself away from the land for a while. The greater the development of modern transportation, with railways making travel easier, and posts and newspapers providing information about distant places, the more easy it is for country dwellers to take temporary leave of their village, and the further they will venture. Part of the small peasant family, naturally those most fit for
work, periodically migrates, or emigrates, both to feed themselves and beyond that to earn money for the entire family. We concentrate here only on temporary migrations, since our concern is not with those easily observable forms in which the peasant becomes a proletarian, but rather the more important ones in which the peasant appears to remain as a peasant, but at the same time takes on proletarian functions.

Naturally, the most obvious activity for the migrating peasant is agricultural labour. And there is no shortage of work in areas where the local population is insufficient to meet the demand for agricultural wage-labour. The previous chapter referred to the shortage of workers in areas with large-scale agricultural enterprises: but the small peasant farm is no less affected. Agricultural migrant labour is sought all over Germany, partly for the entire summer, and partly just for the harvest. And not only in East Elbia, but also in the Rhineland, Bavaria, Württemberg, Schleswig and Holstein.

The migratory movements within Bavaria provide a good example.

There is a frequent exchange of workers between wheat and hop growing areas at their respective harvest times. Apart from this, the following migrations of rural workers can be observed. During the summer months Upper Bavaria draws its workers mainly from the Bavarian Forest, and in turn itself supplies labour to Swabia from localities where the harvest is finished early. In Swabia there is an exchange between the upland and lowland. The Tirol also sends large numbers of shepherd boys into this area. Lower Bavaria sometimes gets labour from the Bavarian Forest and Bohemia, and itself sends workers from the Vilshofen district to the Ostenhof district for about six weeks during harvest time. Straubing despatches workers to the hop areas during their harvest. The Upper Palatinate sends male labour from the Weiden area for the grain harvest to Upper and Lower Bavaria, with women workers going hop-picking. Neustadt am Aisch and its locality also sends workers to the hop harvest. Neumarkt and Stadtamhof mostly use women and also children for hop and potato picking drawn from the eastern part of the Upper Palatinate, the Bavarian Forest and Bohemia. Upper Franconia sends workers to Thuringia and Saxony, in particular from the Bayreuth area: and itself takes in women and children from the mountainous areas where the grain ripens for the harvest. In Middle Franconia there is a substantial exchange of workers between areas with grain and areas with hops; Hersbruck obtains a large number of men and women workers for the hop harvest from the Upper Palatinate and Bohemia. In Lower Franconia areas in the neighbourhood of...
Ochsenfurt and Schweinfurt obtain labour for the grain and potato harvest, both male and female, from the Rhön, Spessart and Odenwald. On the large beet farms labour is brought in from Poland in the spring, and is employed through the autumn. In the Rhineland Palatinate the Sickinger Höhe obtain mainly women workers for the potato harvest from the northern part of the Homberg district, the so-called musician villages, and in turn itself sends workers to the Worms and Osthof district for the harvest, and in the autumn to the Saarbrücken district for six weeks' threshing. Recently large estates have begun to obtain labour from East Prussia for the April to November period. (Auhagen, Die ländliche Arbeiterverhältnisse in der Rheinprovinz, II, pp. 151, 152)

This list could be extended for all the parts of Germany.

Migration by Italian workers has also reached a large scale. They work in Europe in the summer, and in winter when the southern hemisphere has its summer they ship out to Argentina to do field work there. The migration of the Chinese is on an even vaster scale: they migrate to the United States, Canada, Mexico, West Indies, Australia and the Sunda Islands, have already reached South Africa, and represent the ideal German migrant worker for our own agrarian lobby – they do not only migrate for a season, but for several years although never for their entire lives.

Migratory labour is not confined to agriculture. The development of large-scale industry, towns and transport also offers more worthwhile employment. As with agriculture, some of this is only seasonal work. Unfortunately for the farmer, this is mainly in the summer, as in railway construction, canal-building, quarrying and construction work in general in the towns. But they also provide longer term employment for those looking for work as servants, day-labourers, drivers and so forth.

Some areas have developed unique specialities for migration. Kuno Frankenstein reports from Wiesbaden.

The western Dillkreis areas and Westerwald and the north west of the Oberlahnkreis bordering on the Westerwald have a large surplus of labour. Many workers travel from these areas to the industrial regions of the Rhineland and stay there from spring until winter. Other travel as 'rural hawkers'. One narrator from the Lower Westerwald reports: 'In spring the so-called Landgänger – pedlars – appear in the villages and recruit their salesforce from the youth of both sexes. In February they move off to all points of the compass:
Holland, Switzerland, Poland, Saxony and so on. Those recruited are assigned a salespatch in such centres as Leipzig, and given their wares, which they are allowed to sell at set prices, and subsequently have to remit their takings to the master. Depending on their skill they earn 300-400 Marks and are given money for board and lodging. As a rule they return to their homes around Christmas time with quite a lot of cash. It has long been noted that those areas in which a number of such pedlars have been recruited gradually start to exhibit economic improvements, since the children's earnings are passed on to the parents for general use. The money is used to provide better equipment for the farm, such as buying in cattle and in particular cows, artificial manures for increasing the harvest, to enlarge the holding – and in addition for savings with savings banks. In some areas the numbers of those recruited is so large that only the necessary minimum number of workers remain at home. The so-called Landgängerei brings a number of financial advantages, although morally it has its more dubious aspects, especially for the girls. (Auhagen, p. 27)

The poor mountain villages of the Palatinate send their excess workers as musicians.

The local land, resting on Vosges sandstone, is not very fertile. Even with a holding of three or four hectares the peasants live in very poor conditions, and are often forced to take up supplementary work to provide themselves with the income they need to live. In such communities the employer [K.K.] has to look for earnings in other districts and migrates as an itinerant musician or journeyman mason, and less often as a servant. The itinerant musicians are generally thrifty and usually send so much money home that the family can live without worry and by and by can purchase a small farm. The position is usually less favourable with the masons, and the servants have the least left over. (Auhagen, p. 193)

Seasonal workers regularly return home and invest their earnings from wage-labour in the farm – yet again an instance of how the large enterprise in both town and country, industry and agriculture, gives renewed strength to the small enterprise. Other remittances come from those who have moved off for longer periods. These, mostly unmarried people, do not always return. Many settle where they find work; but despite this a large number still send their savings home to support the family which cannot live from its own agriculture. Of Ireland it is claimed that the rent of its dwarf-holders is paid for by the savings of
Irish servant girls in America. Matters are not much different with the taxes paid by many German peasants. But despite rural poverty, many do return to the land where they were born, either to marry or inherit. On taking over the patriarchal farm they bring with them their savings, and for a while these help some bankrupt farms, and allow a few dwarf-holdings to expand their land, buy a cow, or renew worn-out buildings.

For the areas to which they migrate, these workers represent a barrier to development. They migrate from economically more backward and poorer areas, and therefore have lower expectations, and are often in addition less educated and more servile. Their lack of resistance is increased by the fact that they are away from home, and lack any anchorage amongst a population only too disposed to regard the incomers – whose language they often do not share – with hostility. They supply the most willing strike-breakers and helpers in wage-cutting: they are the most difficult to incorporate into a trade organisation. But these same obstructionists turn into highly effective pioneers of progress on their return home. Despite all their resistance to their new environment, they cannot fully prevent it having an effect. They acquire new needs, new ideas, which backward as they might be for their new environment are revolutionary in their old. The same elements who appear as servile accepters of exploitation and oppression in one place, seem rebellious instigators of discontent and class-hatred in another.

'The expansion of the mental horizon', complains Kärger,

the greater mobility and excitability which the Sachsengänger picks up away from home coincides with a noticeable reduction in respect for authority. They become impertinent, defiant, insolent and overbearing, and by their example loosen those patriarchal ties which, in complete harmony with the economic and social conditions on the majority of farms in the east, still exist between master and worker. (Kärger, 1890, p. 180)

Migrant labour therefore has the same effect as the relocation of large-scale industry into the open countryside. It bolsters small landownership, this supposedly conservative element, but at the same time thoroughly transforms the conditions under which the small landowners live, filling them with needs and perspectives which are anything but conservative.

Those who believe that simple statistics exhaust the infinite complexity of social life may draw some comfort from the Census of Farms which shows that, despite developments in the towns,
everything in the country remains just as it always was: no particular movement in any direction. But anyone who looks beneath the cover of these figures, and is not merely hypnotised by the ratio of large to small farms, will come to a different judgement. The number of large farms may not be changing; the small farm may not be being swallowed up by the large: but thanks to the development of industry, both are passing through a complete revolution – a revolution bringing the small landowner into closer contact with the propertyless proletariat and shaping the interests of both to an increasingly convergent extent.

But economic development does much more than this. It also creates a number of other factors which strike at the heart of commodity-producing agriculture – that is, agriculture producing a surplus for society.
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The Growing Difficulties of Commodity-Producing Agriculture

Ground-rent

The modern large-scale enterprise has been the vehicle by which the capitalist mode of production rescued agriculture from the depths to which it had sunk towards the close of the feudal period and elevated it to its present outstanding heights. This same mode of production also generates powerful forces which obstruct the development and expansion of the large-scale enterprise, preventing it from attaining sole dominance within agriculture in the prevailing social order. Not only do these forces hold agriculture back from the highest level which it could attain under given technical conditions: by encouraging the parcellisation of land they can even lead to technical regression.

The constraints placed on the large-scale farm are not the only means by which the capitalist mode of production impedes the development of agriculture: ground-rent is no less damaging.

The purchase price of land is, in essence, nothing more than capitalised ground-rent: this is, of course, the price of the land, not the estate. Prices of buildings, live and dead stock are determined in the same way as any other commodities, in the last instance through the socially necessary labour-time required for their production.

Even an industrial capitalist has to pay ground-rent. But its cost only represents a small part of the total amount of money advanced in production.

Matters are different in agriculture. So-called ground-capital, that is, capitalised ground-rent, represents the bulk of the sum of money which farmers have to spend if they wish to practise agriculture on land which they own.

On the middle-sized and larger farms of Central Europe, combining farming and stall-feeding, working capital only amounts to between 27 and 33 per cent of the initial capital. This can fall to 15 per cent or rise to 40 per cent, depending on the intensity of farming. The average level of working capital in the Kingdom of Saxony is 410 Marks per hectare, with an average purchase price of 1,930 Marks per hectare (Krämer, in Goltz, Handbuch der gesamten Landwirtschaft, I, pp. 277-79, and
Buchenberger cites the example of a large peasant holder in Baden whose farm was valued at 46,233 Marks. Of this, 6,820 Marks (14.72 per cent) were stock, buildings accounted for 5,480 Marks (11.9 per cent), and the land 33,923 Marks (73.4 per cent) (Verein für Socialpolitik, Bäuerliche Zustände, 1883, III, p. 249).

Of the total expenditure of capital only a quarter is actually active in the process of production.

Only a proportion of the farmer's capital is therefore available for the actual operation of the farm. By far the bulk of it, two-thirds to three-quarters, has to be handed over to the previous landowner merely to obtain permission to undertake farming at all. The farm will, therefore, always be either smaller or less intensive than would otherwise be possible given the size of the total available capital. Theory notwithstanding, the practician nevertheless tends to prefer a larger estate, even if it is indebted, to a small unencumbered one, given an equal investment of capital within the constraints noted above. In fact, it is very rare for a farmer to pay for an estate in cash. The farmer will regard virtually all his available capital as working capital, and fix the desired size of the farm accordingly. The land is not bought outright, or only a small part of it: the farmer goes into debt for the price of the land and this is registered as a mortgage on the estate. That is, the buyer takes on the obligation to pay ground-rent to the mortgage creditor, the real owner of the land.

Every change of ownership therefore encumbers the estate with debt. Although it would be overstating the point to claim that change in ownership is the sole source of the excessive mortgage indebtedness weighing down on land-ownership and that the need to carry out improvements is negligible in comparison, it is nonetheless the major cause of the increase in mortgage debt.

Under tenant-farming, the agricultural entrepreneur can use all his capital for agriculture. Agriculture can most fully take on a capitalist character. In fact, tenant-farming is the classical manifestation of capitalist agriculture.

Apart from the full utilisation of entrepreneurial capital, the tenant-system also has the advantage of allowing the owner of the land to select the most assiduous and best-capitalised tenants from those competing for land. Under the system of owner-farming, the identity of the farmer is largely a matter of accident of inheritance.

This is not desperately important with the small enterprise. Peasant farming remains a simple and routinised affair. The peasant's children have to work on the farm from a very early age and can acquire the
Difficulties of Commodity-Producing

necessary experience. Although differences in ability may develop between individual farmers, these remain within fairly narrow limits and do not have too much effect on the running of the farm.

Matters are different when we turn to large-scale agricultural enterprises. The large farm is a complex structure whose management requires both all-round practical experience and basic scientific and commercial training. However, as capitalist development proceeds, large landowners tend to become more and more of an urban breed, a class with urban tastes and inclinations: they live in towns, and give their children an urban upbringing. The sons of large landowners can no longer be assumed to have grown up in an agrarian environment. They do not receive a solid agronomic or commercial education. And despite its urban character, land-ownership is still utterly steeped in feudal traditions. The offspring of large landowners receive their schooling at court and in the military. Accident of birth may often bequeath the role of farmer on to a young man whose 'studies' have been confined to the racetrack and grand restaurants, and whose abilities, at best, merely embrace connoisseurship of wine and a knowledge of horseflesh – not the best fitted person to demonstrate the practical superiority of the large agricultural enterprise. But ownership of land, especially with rising ground-rent, can keep his head above water for quite some time before the onset of bankruptcy.

The tenant is in a different position. Ground-rent cannot make up for any shortfall in profits. And ownership of land cannot be used as security against debts. The annual rent has to be paid on time. The ability to pick the most competent tenants has its counterpart in the rapid bankruptcy of the incompetent. Competition is felt much more severely than in the case of farmers who are also landowners.

And since the tenant does not have to spend money to buy land, or often buildings too, the entire capital can be given over for farming. The largest estate possible can be farmed at the maximum level of intensity for any given capital. Under the capitalist mode of production, the tenant system therefore yields the highest net product. Nevertheless, the tenant system also has its gloomier aspects. The tenant has the greatest interest in extracting the highest possible yield from the soil, and is also best fitted to do so: but they have little interest in the constancy of yields, an interest which diminishes in proportion to the length of the tenancy agreement. The quicker they suck the fertility out of the soil, the more profit they make. Although the contract can forbid methods of cultivation which deplete and impoverish the land, and tenancies do contain very detailed regulations on such matters, at best this causes agriculture to stagnate at a given level. The tenant system is
less suited for achieving agricultural progress. Tenants have no interest in effecting improvements, or introducing initially expensive methods of cultivation whose beneficial consequences may either partly, or even wholly, only be felt long after the agreement is terminated, and which would probably simply provide an excuse for raising rents – increasing ground-rent rather than boosting agricultural profits. The tenant will avoid undertaking any improvements unlikely to pay back the capital cost plus interest during the duration of the tenancy agreement.

Under the tenant system, agricultural progress is favoured by long tenancies. However, rising ground-rents encourage landowners to shorten tenancies as much as possible to ensure that increased ground-rents disappear entirely into their own pockets. Just as with owner-farming, ground-rent also emerges as a powerful obstruction to rational agriculture under the tenant system.

The law of inheritance ranks alongside it.

The Law of Inheritance

The feudal shackles which constricted both agriculture and industry could only be broken by the introduction of full private property in land, and the lifting of privileges, not only of rank but also of birth. Bourgeois society not only demands the complete equality of all its citizens before the law, but also the equality of all children in the family, and hence the division of parental property into equal parts. However, these same institutions which allowed a rapid advance of agriculture soon became shackles themselves.

The division of parental property in the form of capital is also a major obstacle to the accumulation of capitals in the hands of one owner. Nevertheless, the concentration of capital is not merely a product of the centralisation but also of the accumulation of fresh capital: this latter process is so powerful that despite the continuation of divided inheritance, the concentration of capital continues to make rapid progress.

In those countries with long-established cultivation, where all land is already in private ownership, there is nothing in the sphere of land-ownership to correspond with the accumulation of fresh capital. The centralisation of ownership also encounters much greater difficulties than the centralisation of capital. The division of inheritance is a strong factor in the progressive dismemberment of land ownership. However, despite the powerful and profound influence which juridical relations have on economic life, in the last analysis it is always the latter that emerges as the decisive force. The
dismemberment of land-ownership can only become a reality where economic relations allow it, relations which have been sketched out in the previous chapter. And where this is the case, the division of inheritance in fact proves to be a highly effective means for accelerating development.

In contrast, where a farm serves commodity-production rather than production for the household, that is, is subject to competition, and where the large farm is superior to the smaller and the fragmentation of ownership implies direct and obvious disadvantages – for example, where grain-growing predominates and there are no opportunities for supplementary employment for the farmer – the dismemberment of estates \textit{in natura} on the division of inheritance is both difficult and rarely sustainable. The more common form is that one inheritor receives the estate undivided and pays the co-heirs for the shares. But since such an inheritor does not usually possess the necessary capital, the property has to be mortgaged. This is essentially an instance of buying an estate with insufficient capital. The specific difference is that inheritance is an involuntary transaction, and one that is necessarily repeated from generation to generation. The law of inheritance forces heirs to take over their inheritance encumbered from the very outset: instead of using any surpluses to accumulate capital and improve the estate, they have to pay interest on the mortgage. And even if one heir succeeds in paying off the debts, his successor will be back in the same position, and maybe even in greater debt should ground-rents have risen, or interest on capital fallen in the meantime – or possibly both factors may combine to increase the value of the estate.

Rising prices for estates are an advantage for those who cease farming, who sell their estates, but not for those who are turning to farming, who are buying an estate or inheriting one in company with others. Nothing could be more mistaken than to suppose that a steep increase in the price of estates and the artificial maintenance of such high prices is in the interests of agriculture. The short-term landowner, the mortgage bank, and the speculator all gain – but not agriculture, and least of all agriculture’s future: the next generation of farmers.

\textit{Fragmentation}, or the increased \textit{encumberment} of estates – this is the alternative which bourgeois inheritance offers the farmer.

In some areas, in particular in France, the rural population attempts to sidestep this alternative by means of the two-child system. Although this undoubtedly offers a means for avoiding the disadvantages of the existing law of inheritance, like other means designed to help the peasant it does so at the ultimate expense of society as a whole. The development of capitalist society requires vigorous population growth.
Any nation with a relatively slow-growing labour force will be left behind in the international competitive struggle. And it also runs the risk of forfeiting its political power because it will no longer possess the necessary military might, based essentially on the number of people of military age it can throw on to the scales.

In France, the prominence of the two-child system is not only leading to a decline in the country's relative military strength – population only grew by 2 million, from 36 to 38 million, between 1872 and 1891 and since 1886 has scarcely grown at all, compared with Germany which grew by 9 million from 41 to 50 million over the same period – but is also forcing capitalists to import Belgians, Italians, Germans and Swiss to provide the labour-power which their own rural populations cannot supply. In 1851 France had only 380,000 foreigners within its borders, 1 per cent of the population: by 1891 this had risen to 1,130,000, 3 per cent. In contrast, in 1890 the German Empire contained only 518,510 persons born abroad, 1 per cent of the population. At best the unburdening of land-ownership through the two-child system is at the expense of military power and industrial capacity. France’s politicians and economists are not especially enthusiastic about rescuing agriculture through such a device.

**Entailment**

In France, revolution made a very thorough job of sweeping away the feudal economy and the feudal law of inheritance. In contrast, large land-ownership in England and Germany managed to retain a significant amount of its power within bourgeois society. One expression of this is the particular form of the law of inheritance which it preserved for itself, or at least the most favoured of its members, namely the _Fideikommiss_. Under this system of entailment an estate ceases to be the free property of an individual owner and becomes bound to a family: although usufruct falls to one individual member of the family (usually the deceased's first born) they may not sell or diminish the property. Their siblings share equal title only to moveable property: they are excluded from the entailed property of the _Fideikommiss_. The number of entailed estates has grown markedly in Prussia since the onset of the agrarian crisis.

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<tr>
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<td>1871/1880</td>
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<td>1881/1886</td>
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Within the space of the 16 years since 1871, more property was entailed in this way than in the first 70 years of the century, and the process is still on the increase: 13 more estates in 1896, and 9 more in 1897 as this work was in preparation. It is quite evident that these foundations are not for the 'welfare of agriculture', but the well-being of a few aristocratic families.

The peasant form of entailment [Anerbenrecht] represents a kind of peasant sub-species of Fideikommiss: it does not bind property ownership so strongly and allows the owner a little more freedom of movement. Both forbid the division of the inheritance. In certain parts of Germany and Austria, where large peasant holdings predominate, this law has been maintained, if not as statute then as custom. More recently, a number of legislative provisions have given this custom a more secure basis in law – the reason being that conservative politicians and economists regard it as a powerful means for conserving the peasantry, and hence a bulwark for private property.

Entailment is undoubtedly capable of warding off those dangers to land-ownership threatened by the division of inheritance, at least where the practice is carried through with some conviction. But in effect this means nothing other than disinheriting otherwise entitled children, saving peasant agriculture at the expense of the majority of the peasant population, saving private property through the confiscation of the rights of entitled heirs and erecting a dam against the proletariat by multiplying the proletariat.

With entailed large-scale land-ownership the disinheritance of younger sons, as is common in England, is not a particularly serious matter: the Church, the Army, the Civil Service are all entrusted with the task of supplying a sufficient number of sinecures for the disinherited sons of the aristocracy. Peasants are not so well provided for. They have no influence with the state or the Church, and cannot use it as a welfare institution for their younger offspring. Entailment means nothing more than condemning all the peasants' children, bar one, to wage slavery.

Entailment also encourages the proletarianisation of the rural population in another way – all the more so, the more it comes to resemble the Fideikommiss: that is, the more it prevents the fragmentation of the land and its encumberment with debt as a result of the division of inheritance. It gives a powerful boost to those tendencies which favour centralisation rather than fragmentation of the land. It therefore encourages opportunities for extending and more rationally organising the farm, at the same time ripping a large number of small landowners from the soil which previously bound them to their homes.
Entailment applies to the smallest of holders neither as custom nor as statute. It would merely be a fetter on them: their wellbeing is based less and less on their landholding and more and more on their money earnings outside the farm. The law of entailment is intended to protect the large peasant. In Austria it only applies to estates of 'medium size', in Mecklenburg to holdings which are at least 37.5 bushels, in Bremen to estates of at least 50 hectares, in Westphalia and Brandenburg to estates with a net land tax yield of at least 75 Marks.

The large peasants' right of entailment not only proletarianises their younger siblings and children, but also tends to proletarianise their smaller neighbours. Inasmuch as this acts as a spur to the flight from the land, the ensuing depopulation of the countryside will hamper the development of rational cultivation. For example, we read in the case of 'districts with closed inheritance' in Hesse:

For many years, complaints have been heard about shortages of labour. Emigration to the industrial districts by young people and able-bodied men who have nothing to call their own has increased very considerably: only the women, children and elderly remain and the farmers – both peasant and estate owner – have to choose their workers from amongst these individuals. (Auhagen, Die ländliche Arbeiterverhältnisse in der Rheinprovinz, p. 233)

The same applies, but even more so, with Fideikommiss, one of the most potent means for establishing and extending latifundia. However, claims that the tendency towards decentralisation is the sole tendency in agriculture, and that this can only be combatted by artificial barriers are utterly false. Wherever commodity-production predominates in agriculture, both tendencies will coexist. According to Conrad, there were 2,498 private landowners with over 1,000 hectares each, with a total land-ownership of 4,684,254 hectares in the eastern provinces of Prussia in the late 1880s. Of these 308 were subject to Fideikommiss, and owned 1,295,613 hectares, around a quarter of the land area comprising holdings over 1,000 hectares. In France this system does not exist. Despite this, the large farm is growing there even more so than in Germany, as the table on p. 135 clearly showed. In 1895 in Germany, farms over 50 hectares accounted for 32.65 per cent of land in agricultural use: in 1892 in France farms with more than 40 hectares accounted for 43.05 per cent. Unfortunately, the French statistics only show the number and not the area of farms of 40 hectares and above. However, the largest farms have grown considerably.


<table>
<thead>
<tr>
<th>Farms over 40 hectares</th>
<th>142,000</th>
<th>139,000</th>
<th>-3,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>of which 40-100 hectares</td>
<td>113,000</td>
<td>106,000</td>
<td>-7,000</td>
</tr>
<tr>
<td>over 100 hectares</td>
<td>29,000</td>
<td>33,000</td>
<td>+4,000</td>
</tr>
</tbody>
</table>

Admittedly, these are only farm statistics and not ownership statistics: nevertheless, they illustrate the general trend. Land-ownership statistics would show more, certainly not less, centralisation.

Although the protection offered by fee-tail is not the sole reason for large-scale land-ownership, the protection it does provide is certainly highly favourable to its emergence and growth; and in doing so, it creates the preconditions for the highest stage of agriculture attainable within the capitalist mode of production.

The great size of the latifundia enables the individual farms on them to be arranged in accordance with their specific nature, and their land tailored accordingly. A number of farms can be merged into one planned economic organism. And entailment also facilitates the accumulation of capital which can be used to intensify the operation of the enterprise, since it shields the farm from the burdens which accompany the division of inheritance. According to the survey of indebtedness carried out in 42 Prussian administrative districts in 1883, recorded debt per Thaler of net property tax yield (without deduction for the mortgaged value of buildings) was as follows:

<table>
<thead>
<tr>
<th>Estates held under Fideikommiss or through a foundation</th>
<th>Holdings with net property tax yield of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.30 Marks</td>
<td>Over 100 Th. 100-500Th. 30-100 Th.</td>
</tr>
<tr>
<td></td>
<td>84.40 Mks 54.10 Mks 56.20 Mks</td>
</tr>
</tbody>
</table>

The security of ownership unique to entailment encourages extensive improvements, and also encourages the development of tenant-farming which flourishes the most where tenants feel sure that their rights will not be curtailed by change of ownership or insolvency on the part of the owner.

It is therefore no coincidence that the latifundia system, protected by entailment, has produced the two highest forms of capitalist agriculture: the capitalist tenant system in England, and the giant
conglomerate enterprise in Austria.

Nevertheless, although the latifundium form of ownership, more than any other, makes capitalist farming in the fullest sense possible, the protection provided by entailment releases it from regarding rational agriculture as necessary.

First and foremost, the owners do not have to defend their holdings in the competitive struggle. Although we do not share the view that the competitive struggle on the market is one with the struggle for existence, a nature-given necessity, a certain degree of rivalry between the members of society and the selection of the fittest does seem to be an indispensable prerequisite both for social progress in society and for maintaining the level already attained. There is no reason to suppose that the essentials of a socialist society would be irreconcilable with such rivalry and selection. The elimination of class differences, the equalisation of living standards between classes in no way implies the elimination of every other social difference, some of which can serve to stimulate individuals. Consider contemporary trade unions: their members are not divided by class differences or differences in standard of life, but there certainly are differences of opinion, power, individual behaviour and, as a consequence, both rivalry and a process of selection in determining those called on to represent and administer the whole. A complex structure such as a modern socialist society would inevitably display even greater diversity and difference. Far from equality in living standards suppressing rivalry, and making it impossible to choose the fittest for the most responsible, important and difficult posts, such equality would constitute its foundation. A race between horses who begin at different starting points along the racetrack is a nonsense: the same is true of rivalry between people who are unequal to begin with. The selection of the fittest can only take place amongst equals.

Such rivalry and selection are not competition as understood by bourgeois economics: they already exist within the capitalist enterprise, not under the sway of competition as conceived by the economists, but where planning and cooperation prevail. Competition begins to rule and regulate economic life at the point at which planned cooperation ends. The relationship between individual, independent establishments engaged in commodity-production is determined by competition. Within the individual firm or enterprise, production is regulated in a planned and maximally economic fashion. Production within society is unplanned: this situation is only rescued from degeneration into utter chaos by the fact that those products produced to excess are devalued, and those which use too little labour time, and which therefore do not meet the demand for them, are paid above their
The lack of planning within commodity-production corresponds with the methods used to select who shall own and manage enterprises. Under the rule of private property in the means of production, accident of birth is the main route. Competition only comes into play after this selection process is over: and then it operates less by elevating the virtuous than by eliminating the unfit, not by dismissing them – as in the case of a poor manager – but by ruining the entire establishment, a method which in terms of cruelty and waste is indeed comparable with the struggle for the existence of the individual organism, although it has little else in common with it.

As brutal and wasteful as this method may be, it is the only possible way to bring about maximum economy and rationality in the arrangement of production in the individual establishment under the system of commodity-production and private property in the means of production.

These dictates have been abolished as far as entailed property is concerned – the very private property in the means of production which makes such dictates so essential. The owner of such an estate can manage it appallingly, their earnings may fall, but their title to the land will never be put in jeopardy.

It would be absurd to try and protect industrial or commercial capital by entailment. Such capital is far too mobile and changeable to tolerate such a fetter. Capital is engaged in an unceasing metabolism: one day it exists in the form of money, the next in the form of means of production, the day after that as commodities contracting and expanding, alternating between crisis and prosperity and so on. Land, in contrast, regardless of how often it may be equated with capital, is subject to quite different laws. It does not represent a value which has been created by labour, and is not subject to a process of circulation. In material terms, it is quite different to those means of production which represent capital. These wear out – land cannot be destroyed. Means of production are constantly rendered obsolete by new discoveries – land remains the natural basis of all production. Competition between capitals grows as capital accumulates, as industry and population expand; the same processes increasingly give land the character of a monopoly.

Irrational as it would be for a family to seek to secure its capital through entailing a factory or a bank, such a step is very much in the interests of a landowning family – despite the fact that entailment is the least conducive form of land-ownership for rational cultivation. A passing owner can only damage himself by a poor standard of farming by causing a temporary reduction in ground-rent: he cannot destroy the basis
of the family's income. This will survive the generations.

That _Fideikommiss_ and a poor standard of farming go together is evident from the start. Modern entailment requires that the state take a strong interest in individual landowning families, since it is the state which permits and protects this system. It is the families of court nobles who enjoy this privilege - families whose occupation keeps them away from agriculture and makes them unsuitable as farmers. The fact that, despite this, latifundia held under this system of inheritance do not number amongst the poorest farmed estates - and in fact occasionally contain model farms - is due to two factors: first, the capitalist tenant system, the development of which is favoured by such estates, and second, the modern system of agricultural training, which produces more than enough competent administrators, cheaply available to the noble latifundia owners, in whose employ they find the best circumstances in which to apply their knowledge and skills.

Of course, a neglectful or incompetent landowner can still easily make serious mistakes in choosing their tenants or estate managers. At any event, the superior cultivation practised on a number of latifundia does not testify to the advantages of entailment but to the superiority of the large-scale agricultural enterprise - a superiority which still manages to show through under the most unpropitious circumstances.

Entailment also hampers rational agriculture in another way. Such property is either a latifundium from the outset or, as we saw, becomes one by overruling the tendencies towards the decentralisation of ownership, leaving free rein to the centralising ones. However, the larger the land-ownership, the greater the mass of ground-rent which it generates, and hence the greater the landowner's luxury. The most obvious such luxury is luxury in land, and in particular, land subject to entailment, on which feudal traditions remain strong. The larger the holding, and the better farmed one part of it, the larger the ground-rent, and the greater the desire to devote the rest of it to the pursuit of pleasure - mansions, ornamental gardens, parks, game enclosures - and consequently the smaller the part devoted to growing food.

Capitalist exploitation in the towns is heading in the same direction. The more this exploitation and the mass of surplus-value grows, the greater the luxury of the bourgeoisie, expressed - among other things - in the purchase and establishment of country seats, ranging from the magnificent castle of the finance baron to the simple small country house of the small merchant or manufacturer, country seats designed primarily for pleasure and in which agriculture is merely an adjunct. The more the means of communication develop, the easier the link between town and country, the more such country seats will encroach into the countryside.
and drive the peasants off their plots.

The increase in the mass of surplus-value and the easing of communication between town and country is not only expressed in the establishment of country seats, but also in the increase in hunting, which undergoes a transformation from feudal privilege into bourgeois pleasure. This not only leads to an expansion in forests at the expense of peasant holdings, but also encourages the excessive protection and multiplication of game stocks even where woodlands are not increased in size. And as far as the game is concerned, the fodder offered by arable fields and pasture is far preferable to what they can find in the woods.

Both the increase in woodland and the increase in game ruin peasant farming. Despite this, peasants may often welcome the extension of hunting for sport. They can rent out their cottages and huts, and where demand exceeds supply, rents have leapt up enormously. The odd hare can be very expensive for peasants; instead, it may pay them to deliberately feed their produce to hares and partridges rather than people and cattle. Some peasant localities do very well out of renting out their hunts. But the extension of hunting for sport always obstructs rational agriculture.

Even the increase in surplus-value in the towns joins with ground-rent and the laws of inheritance to damage agriculture. The problems caused by the law of inheritance are most clearly recognised by economists the more of an inkling they have of agriculture. But as representatives of the interests of bourgeois society they do not generally go as far as actually urging the abolition of inheritance in land and its replacement by common ownership. In theory common ownership in land is not incompatible with bourgeois society: nevertheless, bourgeois instincts are sharp enough to realise that the individual spheres of society are closely interrelated – and react upon one another. Despite the fact that common ownership of land would liberate agriculture from a number of its most oppressive burdens – burdens which are growing from generation to generation – they consequently maintain a resolute defence of private property.

Bourgeois economics prefers to attend to the symptoms – such as easing the indebtedness caused by inheritance – by dreaming up new forms of credit. Its customary position is that both the equal division of inheritances and monopolisation of the inheritance by one member of the family are equally damaging: and then concludes that both are in fact essential. Each serves as the antidote to the other. If England is the country of entailment, and France of equal inheritance, then Germany will draw praise for having both systems running parallel. Whether this will give German agriculture a lead over English or French is far
But this is not the end of the story. The capitalist mode of production either creates or fosters a host of other processes inimical to agriculture.

The Exploitation of the Country by the Town

We saw how ground-rents and farmers' indebtedness grow. But only part of ground-rent and debt interest are retained – to be consumed or accumulated – in the country: the bulk flows into the towns, and this portion is steadily increasing.

Rural backwardness forces farmers to look for potential lenders in their immediate locality – their creditors not only include the village Jew, corn and cattle merchants, grocers and innkeepers, but also highly Christian large peasants, who are as skilled at blood-sucking as the next. In the course of development, as the incurring of debts ceases to be a matter of accident, ill luck or poor farming – an act usually performed surreptitiously as it would be seen as a sign of distress – and becomes a necessary part of the process of production, as commodity exchange develops between town and country, such primitive, furtive usury is supplanted by specific institutions for the open granting of credit as a normal act, not a desperate resort. Extortionate rates of interest are replaced by normal rates. Such institutions are either based in towns from the outset – banks, the numerous cooperatives and so on – or they borrow the required capital from urban capitalists. This transformation of the credit system is a necessary development. But although it is useful for the individual peasant, taken as a whole it represents an increase in the country's tributary obligations to the towns. An ever-growing portion of the values created on the land pour into the towns, without any compensating flow of value travelling in the opposite direction.

The same is true of ground-rents. The more that capitalist development advances, the greater the cultural differences between town and country: the more the country gets left behind, the greater the means for pleasure and amusement which the town can offer in comparison. Small wonder that owners whose estates are large enough to be cultivated by tenants or hirelings, and who enjoy high enough ground-rents, prefer to spend a good deal of time – and their rent income – in the city. Under extreme circumstances this leads to absentee landlordism – the complete decamping of the owner from their estate. This is seen, for example, in Ireland or Sicily, where centuries of mismanagement of a system of enormous latifundia have engendered a barbarism which makes even a short stay by the owner into something
far short of a pleasure – and pleasure is the sole aim of such an individual's life. Irish and Sicilian agriculture illustrate the pernicious consequences of the protection provided by entailment in a context in which the large-scale agricultural enterprise has not developed to a stage where it can overcome such consequences.

Even where the extremes of absentee landlordism are not seen, the periodic absence of the large landowner in the town, accompanied by part of their ground-rent, is the rule. And while their rural luxuries – hunting, pleasure palaces – are ruining agriculture, cutting back the cultivated area and removing peasant workers, their urban enjoyments encourage industry and trade, increase employment, draw in labour-power and promote the accumulation of capital.

Money taxes also work in the same direction: these are steadily growing, and fall most heavily on the peasantry.

From its beginnings, production in the towns is predominantly commodity-production. Money taxes are a product of its development. Production in rural areas, especially in smaller establishments, is still, even now, primarily for direct consumption. Urban development imposes money taxes on the countryside. Such taxes are not the product of this form of production: in fact, they stand in contradiction to it, but nonetheless act powerfully to transform it. Money taxes are one of the driving forces behind the development from production for direct consumption to the production of commodities: however, money taxes, and the other cash needs of the peasant, usually grow much faster than rural commodity-production and the institutions of commerce and credit corresponding to it. In many instances this is still the source of the perpetual financial embarrassment of the peasant farmers and their dependence on middlemen and usurers.

The taxes which are such a burden to the peasantry are not intended to serve the development of the countryside: instead, they serve the towns – and in particular the large cities. Only a fraction of tax income is spent in rural areas: the barracks and arsenals are in the towns; the ministries and courts – and with them the lawyers whom the peasant has to pay – are in the towns; state secondary and higher schools are in the towns; museums, state-subsidised theatres and so forth are all in the towns. Both peasant and town-dweller have to pay their share of the costs of civilisation – the difference is that the peasant has precious little access to it.

Hardly surprising then that peasants show no understanding for culture and are hostile to what is – as far as they are concerned – merely a burden. This is all highly gratifying to those reactionary demagogues who, out of supposed concern for the public purse, call for the cutting of
all expenditure for cultural purposes rather than the export of culture into the countryside, and the abolition of the antithesis between town and country. This will be one of the most important tasks of the society of the future.

The concentration of government in the towns is not a product of hostility to agriculture but rather economic forces much stronger than the will of politicians. In fact, present-day governments are very much the friends of agriculture, and the powerful support they give through tariffs, gifts and grants is only too familiar.

Despite the enormous movements in wealth which state policy brings about, it neither halts nor hinders the flow of unrequited commodity-values from country to town. In the final analysis, the sole beneficiaries are the landowners. State policy is essentially a means for increasing ground-rents. As we already know, these constitute a burden on agriculture, clearly visible in the tenant system, indirect and hidden in the mortgage system, but no less effective for all that. Under the tenant-system such state support enables the tenant to pay a higher rent. Where the landowner and the farmer are one and the same person, both gain so to speak; but the increase in ground-rents leads to an increase in the price of estates. This can raise the burden of debt even on the present owner, and will certainly encumber his successors by purchase or inheritance. After a while state support to agriculture simply becomes state support to the real owners of the land, the mortgage creditors.

Most of the latter live in the towns; even the larger landowners consume the bulk of their rents there. The increase in ground-rents through tariffs and subsidies does not therefore tax the town to help the countryside, does not serve to reciprocate any inflow of values. Rather, the increase in ground-rents means that along with agriculture the mass of urban consumers are also fleeced to benefit a few landowners, most of whom live in the towns, together with their urban creditors.

The outflow of so much value into the towns, uncompensated by any flow of counter-values, corresponds to a constantly mounting loss of nutrients in the form of corn, meat, milk and so forth which the farmer has to sell to pay taxes, debt-interest and rent. At the same time the increased demand for industrial products from the town and the steady demise of rural domestic industry for local consumption increase the outflow of values for which there is a counterpart. Although such a flow does not signify an exploitation of agriculture in terms of the law of value, it does nevertheless lead – as with the other factors cited – to its material exploitation, to the impoverishment of the land of its nutrients. Technical progress in agriculture, far from making up for this loss, is, in essence, a method for improving the techniques of wringing
the goodness out of the soil and increasing the mass of nutritional material removed each year for despatch to the towns.

But doesn't modern agronomy emphasise the maintenance of agricultural equilibrium and the replacement of nutrients removed from the soil by the application of appropriate fertilisers? Yes, but this does not contradict our claim in the slightest. That the soil is becoming exhausted is beyond dispute. Without supplementary fertilisers, and given the current relationship between town and country, and current techniques of cultivation, this would soon lead to the complete collapse of agriculture. Such fertilisers allow the reduction in soil fertility to be avoided, but the necessity of using them in larger and larger amounts simply adds a further burden to agriculture – not one unavoidably imposed by nature, but a direct result of current social organisation.

By overcoming the antithesis between town and country, or at least between the densely populated cities and the desolated open country, the materials removed from the soil would be able to flow back in full. Supplementary fertilisers would then, at most, have the task of enriching the soil, not staving off its impoverishment. Advances in cultivation would signify an increase in the amount of soluble nutrients in the soil without the need to add artificial fertilisers.

Significantly, despite all the advances in agronomy, wheat yields fell in England between the 1860s and the 1880s after a period of uninterrupted advance. Average annual yield per acre was:

<table>
<thead>
<tr>
<th>Year</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>1857-62</td>
<td>28.4 bushels</td>
</tr>
<tr>
<td>1863-68</td>
<td>30.8 bushels</td>
</tr>
<tr>
<td>1869-74</td>
<td>27.2 bushels</td>
</tr>
<tr>
<td>1875-80</td>
<td>22.6 bushels</td>
</tr>
</tbody>
</table>

This fall came to a halt after the 1880s. This is not attributable to any increase in soil fertility, however; merely that land less suitable for wheat-growing has been turned over to pasturage as a result of foreign competition, leaving only the most fertile in cultivation. Since the 1860s the area under wheat has fallen from 3,800,000 acres to 1,900,000 – virtually half.

The advance of capitalist methods of cultivation has also been accompanied by an increase in the various animal and plant diseases afflicting agriculture.

Some of these pests have assumed such dimensions over the last few decades that they threaten to devastate the agriculture of entire countries. One only has to reflect on the ravages of vine-pest and colorado beetle, foot-and-mouth disease, red murrain and swine fever.
The damages from phylloxera in France, on which a tax abatement was allowed, have been estimated at 125.9 million francs in 1884, 165.6 million francs in 1885, 175.3 in 1886, 185.1 in 1887 and 61.5 in 1888.

According to most recent reports, the devastation caused by phylloxera continues. Since its first appearance (1880) this dangerous insect has already spread through 63 Départements (1890) and laid waste hundreds of thousands of hectares of vine-growing land. (Juraschek, Übersichten der Weltwirtschaft, p. 328)

Foot-and-mouth disease affected the following numbers of farms and animals in Germany.

<table>
<thead>
<tr>
<th>Year</th>
<th>Farmsteads</th>
<th>Animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1887</td>
<td>1,242</td>
<td>31,868</td>
</tr>
<tr>
<td>1888</td>
<td>3,185</td>
<td>82,834</td>
</tr>
<tr>
<td>1889</td>
<td>23,219</td>
<td>555,178</td>
</tr>
<tr>
<td>1890</td>
<td>39,693</td>
<td>816,911</td>
</tr>
<tr>
<td>1891</td>
<td>44,519</td>
<td>821,130</td>
</tr>
<tr>
<td>1892</td>
<td>105,929</td>
<td>4,153,519</td>
</tr>
</tbody>
</table>

The disease abated somewhat after 1892, but in 1896 afflicted a further 68,874 farms with 1,584,429 animals.

These are horrifying numbers.

The main cause of the rapid increase in the danger of pests and diseases lies in the supplanting of natural breeds by 'refined' breeds, by the products of artificial selection. Natural selection leads to the selection and reproduction of those individuals most fitted to maintain the species. Artificial selection in capitalist society ignores this aspect, and is simply concerned with breeding individuals which offer the greatest profit, incur the least cost, mature early and in which the exploitable parts are as large as possible, and the non-useful organs as atrophied as possible. Such 'refined' strains yield a much higher profit than natural breeds, but their stamina and resistance is abnormally low.

Nevertheless, whilst their resistance may be declining, their numbers are on the increase. Thanks to the efforts to keep the small farmer going, and improvements made in their methods of cultivation, 'refined' plants and animals requiring great care and knowledge have now entered the small farmer's orbit. At the same time the character of farming is changing, a fact particularly evident in stock-rearing. Summer
pasturing, which refreshed and strengthened animals, is being abandoned: but the peasant’s lack of money means their stabling has not improved. The peasant stall which once provided confined and unhygienic winter shelter for the tough cattle of the Middle Ages now becomes a prison for the delicate modern breeds. Even in England, which maintains a high level of stock-rearing, the stalls are no longer adequate.

Mr Wilson Fox states, in his Lancashire report, that unhealthy and ill-constructed cattle-sheds and byres, with want of space and air, have contributed to the spread of tuberculosis. Instead of 600 cubic feet of air, in some cases a cow gets only 260 cubic feet, and there are no means of isolating diseased animals. One witness stated that if the Dairy and Cow Sheds Act was put into force in the Chorley district, seven-tenths of the buildings would have to come down. (Royal Commission on Agriculture, 1897, p. 363)

One of the factors favouring the devastation caused by pests is the disappearance of insect-eating birds, a result not only of hunting them out but also of the reduction in nesting opportunities prompted by the extension of cultivation. In forestry, the destruction of forests by pests is encouraged by modern large-scale operations, the replacement of a planting by a felling system, and the elimination of slow growing deciduous trees by rapid-growing, and more rapidly exploitable, conifers.

Whilst modern breeding reduces the resistance of plants and animals to the tiny organisms which threaten them, modern transport facilitates the rapid spread of these pests and allows them to devastate ever larger areas. As the land deteriorates, its products need more and more mollycoddling. The costs of fertilisers are joined by those of pesticides – and anyone who tries to save on these expenses is rewarded with crop failures: and then blights and pests arrive to complete the ruin of the farmer.

The Depopulation of the Countryside

The growth of towns and the expansion of industry, which increasingly exhausts the soil and imposes new burdens on agriculture in the form of the fertilisers needed to combat this exhaustion, does not rest content with this achievement. It also robs agriculture of its labour-power.

Chapter 7 noted how the growth of large-scale agricultural enterprises pushed out the peasantry, and with them the reservoir of
agricultural labour.

On the other hand, the previous chapter revealed the periodic migrations which arise from the peasant's need for supplementary employment. This also depletes the labour which agriculture needs for its rational operation. But workers also bring new capital into agriculture from industry, from the town, and this helps the rational organisation of farming.

However, the flight from the land generated by the attractions of the cities and industrial areas has quite a different effect.

Towns offer wage-labourers quite different opportunities for employment than rural areas, much more opportunity for establishing a household, more freedom and more culture. The larger the town, the more these advantages grow, and the greater its drawing power.

The establishment of an independent household and a family in the country requires the acquisition (by purchase or rent) of an independent agricultural enterprise. This is by no means easy where the large enterprise is developing, and such areas are marked by a particularly strong motivation to get off the land. But the establishment of a household also encounters difficulties in areas where the land is highly parcellised. House-servants, agricultural labourers and maid servants who lack sufficient savings have no chance at all. Not only are they condemned to a life in which they will never own any land, but also to a life of dependency as an appendage of another's household, excluded from marriage and a family. Their only road to freedom, to the marriage and family denied them by those protectors of the family, the pious big peasant or Junker, is - flight to the town, to the immoral Social Democrats, those enemies of marriage and the family.

How powerful this motivation is amongst those working in service can be gauged by a few extracts from a peasant's observations on the house-servants with whom he lived.

No greater injury to human freedom and dignity matches that inflicted on servants or propertyless agricultural labourers in this respect. The difficulties associated with marriage are sufficiently well known not to need reiteration here: we therefore pass straight to the consequences. Since by far the bulk of humanity cannot completely suppress its sexual drive, and contemporary social circumstances do not allow it to be exercised within ordered limits, it is impossible to expect anything other than that the limits prescribed in the interests of maintaining the current social order will be repeatedly transgressed. Extra-marital sexual intercourse is an unavoidable consequence of this impasse: this has now gradually become so
Difficulties of Commodity-Producing

entrenched in the ranks of rural servants that all the efforts to eliminate it by all the teachers of morals and religion put together would be utterly fruitless. Our present institution of marriage is for the most part unattainable for these classes: this is why they have to resort to lower forms of sexual behaviour. That the life of a servant or worker under such circumstances unavoidably becomes filled with the greatest humiliation, furtiveness, deceit, shame, duress and all manner of indignities is evident. Moreover, public feeling in rural areas is still highly moralistic: small wonder that so many prefer to escape this eagle-eyed fama in the hurly-burly of the town.

The vast bulk of those fleeing the land are simply driven by the lack of love or the limitations placed on it. Off they go to the towns, those dens of vice, only – with the exception of a fortunate few – to fall prey to poverty and complete degeneration. But the life of bliss awaiting the children of the rural proletariat in their homelands can also be summed up in very few words. Despite the urgent need for such human commodities, their existence is perceived, at best, as a burden by their creators. These can only rarely involve themselves with their children's upbringing, and have no idea of the real joys of parentage: in numerous instances their offspring face the dubious honour of being added to the burdens on the local exchequer. Their entry into life begins with distress and shame for their creators, it continues with a deficient upbringing, and their thorny path through life is crowned with the most gruelling wage-slavery – before coming to its loveless end. (Johann Filzer, Anschauungen über die Entwicklung der menschlichen Gesellschaft, pp. 161, 162)

The establishment of an independent household not only allows true marriage and a family, but also allows workers to conduct themselves as citizens outside work, to unite with those of common opinions – something favoured in urban large-scale industry by the concentration of large numbers of workers in a small area – and through the power of organisation and participation in local and national political life, to fight for better living and working conditions.

This also inevitably attracts rural workers into the towns. This, and other factors. The more intensive agriculture becomes, the more irregular the employment it can offer to its workers. Whereas some machines, such as threshers, can considerably reduce the number of workers employed and have been responsible for rendering the bulk of those employed in winter surplus to requirements, others require more labour, such as the drilling machine. Crop rotation also necessitates the cultivation of crops – so-called root crops, potatoes, turnips and so on –
which require regular attention in the form of weeding, hoeing and ridging throughout their growing period. Intensive farming generally tends to reduce the number of workers required in winter and increase the demand for labour for any given area in summer.

This leads both to a massive reduction in the number of servants and farmhands which the estate is obliged to keep on throughout the year, and greater fluctuations in the employment of free day-labourers. In areas where agriculture is often the only employment, this growing insecurity inevitably drives farm workers to the towns. And although employment is no more certain in the town, failure to find work in one trade can be offset by success in another.

Emigration into the industrial areas and towns grows in step with the development of the means of transport, the easing of links between town and country, and the discovery of town life by farm workers.

Easier transport between town and country, between the site of production and the market, is also an indispensable condition for the prosperity of intensive agricultural commodity-production. All farmers are eager advocates of improvements or extensions of the rail or postal system; but the same post that delivers reports on the state of the market and seed stocks, or business correspondence, also brings the rural worker letters from a relative in the town, a relative happy in freedom from rural slavery. It even brings newspapers, although admittedly only those with 'acceptable opinions'. But the more acceptable they try to be, the more they rail against the good living and excesses of urban workers, the more the yearning country-dweller's mouth will water. The same train which brings the farmer machines and fertilisers, and takes off their grain, cattle and butter to the urban consumer, also abducts the creators of these products.

Militarism has the same effect: it draws young people from the countryside into the towns and acquaints them with urban life. Anyone joining up is not only lost to agriculture for two years, but is gone forever. Strangely enough it is the large landowners and farmers, who suffer most from this state of affairs, who are the most energetic supporters of the military state.

Most susceptible to fleeing the land are propertyless labourers, and of these the unmarried. Yet the more the burden of taxation, indebtedness and soil exhaustion on agriculture grows, the more the peasant's farm has to compete with the large-scale enterprise (and with agriculture overseas, as we shall see below); the more the peasant is forced to fight the competitive struggle with overwork and the renunciation of every civilised need - sometimes including those vital to life itself - by descending of their own free will into the depths of barbarism, the less
power the peasant plot will have to bind the owner to the soil, and the more the flight from the land will insinuate itself into the ranks of the small peasantry.

This flight already exceeds the natural increase in population, and is producing an absolute decline in the rural population. Between 1882 and 1895 the number of agricultural establishments in the German Reich grew from 5,276,344 to 5,558,317; in the same period the area in agricultural use increased from 31,868,972 hectares to 32,517,941 hectares. However, the population living from agriculture fell from 19,225,455 to 18,501,307 – by no less than 724,148 persons. This decline hit areas with predominantly small peasants as much as with big peasants and latifundia; it occurs in every province in Prussia, and all the larger states of the empire with the exception of Brunswick, which registered an increase from 120,062 to 125,411.

The number of wage-labourers in Germany was as follows in 1882 and 1895.

<table>
<thead>
<tr>
<th></th>
<th>1882</th>
<th>1895</th>
<th>Increase (+)/Decrease (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>5,881,819</td>
<td>5,619,794</td>
<td>-262,025</td>
</tr>
<tr>
<td>Industry</td>
<td>4,069,243</td>
<td>5,955,613</td>
<td>+1,886,370</td>
</tr>
<tr>
<td>Commerce</td>
<td>727,262</td>
<td>1,233,045</td>
<td>+505,783</td>
</tr>
</tbody>
</table>

The same process can be seen in France, where the ratio of agricultural to non-agricultural population changed as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Agricultural population</th>
<th>Non-agricultural population</th>
<th>Percentage of population in agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>1876</td>
<td>18,968,605</td>
<td>17,937,183</td>
<td>51.4</td>
</tr>
<tr>
<td>1881</td>
<td>18,279,209</td>
<td>19,422,839</td>
<td>48.4</td>
</tr>
<tr>
<td>1886</td>
<td>17,698,432</td>
<td>20,520,471</td>
<td>46.3</td>
</tr>
<tr>
<td>1891</td>
<td>17,435,888</td>
<td>20,907,304</td>
<td>45.5</td>
</tr>
</tbody>
</table>

These figures also show an absolute drop in the rural population which is attributable to the reduction in the number of workers. The number of economically active persons in French agriculture was as follows:
The fall in the number of wage-labourers was even greater than in Germany.

The most glaring case of a drop in the size of the agricultural working population is that of England, the country with the most highly developed large-scale enterprises and the largest cities. In 1861 there were 1,163,227 agricultural wage-labourers, in 1871 996,642, in 1881 890,174, and in 1891 798,912. Within 30 years their number had fallen by 364,315, 31.3 per cent – almost a third.

But these figures do not reveal the full loss suffered by agriculture. We have already noted that younger independent people in particular tend to emigrate from the rural areas. Children and the elderly remain behind. This applies both for permanent and periodic migration. In practice, therefore, the fall in the rural population also means a fall in its capacity to work.

The most recent occupational statistics provide a good illustration of this state of affairs. In 1895 there were 8,281,220 workers in industry and 8,292,692 in agriculture in the German Reich. Both branches were almost equal. But the distribution of these numbers by age category shows a remarkable divergence:

<table>
<thead>
<tr>
<th>Under</th>
<th>70 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>14-20</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>135,125</td>
</tr>
<tr>
<td>Industry</td>
<td>38,267</td>
</tr>
</tbody>
</table>

Agriculture

| +/-    | +96,958 | -57,405 | -560,035 | -403,727 | +26,365 | +390,001 | +366,012 | +153,403 |

Agriculture has a deficit of a million workers in relation to industry in the 14-40 age group: and an equally large plus in the less able age groups.
Difficulties of Commodity-Producing 223

A table taken from Ballod's work *Die Lebensfähigkeit der städtischen und ländlichen Bevölkerung* shows an even more extreme situation. The distribution of the population in Prussia by age on 1 December 1890 was as follows:

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of persons per 1,000 inhabitants in each group</th>
<th>Rural +/-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural parishes and manorial districts</td>
<td>Towns over 2,000</td>
</tr>
<tr>
<td>0-15</td>
<td>379</td>
<td>313</td>
</tr>
<tr>
<td>15-20</td>
<td>94</td>
<td>100</td>
</tr>
<tr>
<td>20-30</td>
<td>143</td>
<td>210</td>
</tr>
<tr>
<td>30-40</td>
<td>122</td>
<td>149</td>
</tr>
<tr>
<td>40-50</td>
<td>100</td>
<td>105</td>
</tr>
<tr>
<td>50-60</td>
<td>79</td>
<td>66</td>
</tr>
<tr>
<td>60-70</td>
<td>54</td>
<td>38</td>
</tr>
<tr>
<td>70-100</td>
<td>29</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>1,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Goldstein's work on occupational structures and wealth also provides a number of illuminating statistics. He examined the percentage of the population in the 15–45 age group in the English counties. In order not to be too long-winded we simply cite the most extreme figures here for the eight most and eight least agricultural counties.

<table>
<thead>
<tr>
<th>County</th>
<th>Number of persons per 1,000 inhabitants in:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>agriculture 15–45 age group</td>
</tr>
<tr>
<td>Huntingdon</td>
<td>232</td>
</tr>
<tr>
<td>Cambridge</td>
<td>199</td>
</tr>
<tr>
<td>Hereford</td>
<td>186</td>
</tr>
<tr>
<td>Rutland</td>
<td>183</td>
</tr>
<tr>
<td>Lincoln</td>
<td>181</td>
</tr>
<tr>
<td>Suffolk</td>
<td>177</td>
</tr>
<tr>
<td>Norfolk</td>
<td>167</td>
</tr>
<tr>
<td>Wiltshire</td>
<td>149</td>
</tr>
<tr>
<td>Maximum</td>
<td>421</td>
</tr>
</tbody>
</table>
The differences in the age structure between the industrial and rural population are unmistakable. This is not only explicable through migration alone. The greater toughness of the agricultural population also certainly makes a contribution. At any event, however, these tables clearly show that with the same working population, industry has access to more of its stronger elements.

However, it is not simply the physically strongest but also the most energetic and intelligent elements who are most likely to leave the land: they tend to have the energy and courage to do so, and are also most sensitive to the contradiction between the growing civilisation of the town, and the growing barbarism of the countryside. Large landowners and peasants hope to cloak this contradiction by denying the rural population proper schooling. But the economic links between town and country are too close for the rural population to be fully protected from the 'suctions' of the towns. And however much the large landowners attempt to put a Great Wall of China around their people, their much-revered militarism will tear it down and lead off the young peasant men to the towns. Stunted school education, the obstruction of all attempts to obtain an education from newspapers and books, simply confuse rural people's ideas about town life. And the more intelligent country-dwellers are merely made all the more conscious of the barbarism of their surroundings and are therefore even more likely to flee to the town.

Statistically, this aspect of the flight from the land cannot be proved. But it is well known that farmers complain less about the absolute reduction in the number of workers available to them and more about the reduction in the number of intelligent workers.

This further widens the intellectual gulf between the countryside and the town, which has its roots in the greatly preferential treatment enjoyed by the latter as far as means for education and intellectual
stimulation are concerned.

Physical degeneration often joins depopulation and intellectual sclerosis. This is not only confined to factory districts. Undernourishment, unhygienic housing, overwork, dirt and ignorance, unhealthy secondary employment (domestic industry) frequently lead to the physical degeneration of the rural population.

Statistics have recently come to light claiming that the industrial population is generally fitter for military service – that is, physically better developed – than the agricultural population. Nevertheless, the conclusiveness of these figures is still highly disputed, and we therefore refrain from using them here.

Although it may be premature to talk about the general physical inferiority of the rural population, it is certainly losing its superiority. They are no longer even particularly distinguished in a peasant country such as Switzerland. Of 241,076 persons liable for military service between 1884 and 1891, 107,607 were agricultural workers or peasants.

<table>
<thead>
<tr>
<th></th>
<th>Exempt</th>
<th>Per cent</th>
<th>Unfit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peasants</td>
<td>18.9</td>
<td>61.7</td>
<td>38.3</td>
</tr>
<tr>
<td>Overall sample</td>
<td>19.8</td>
<td>63.0</td>
<td>37.0</td>
</tr>
</tbody>
</table>

A higher percentage of peasants was unfit compared to the general population.

The agricultural population is not only experiencing an economic, numerical, and intellectual decline, but is also now waning physically.

Capitalist development is not only placing ever-growing burdens on agriculture, but also undermining the 'original sources of all wealth' (Marx, Capital, I, p. 636).

The farm itself cannot, of course, escape these changes. But in contrast to the towns the problem posed by the 'labour question' is not how to control the workers, but where to get them.

Chapter 7 noted that large-scale land-ownership set about the artificial creation of small farms wherever the land has been cleared of them. And the stronger the pull to the town, the more the landowners will try to bind the workers they need to the land. But often the mere creation of small peasant plots is not sufficient to overcome the attraction of industry: legal compulsion also has to be used to keep workers on the large estates. New smallholdings are created which are
rented out by the landowner in return for the obligation to perform certain labour services. A new feudalism develops. But this does not last very long. The advance of industry brings it to an end. New tenancies carrying labour obligations only survive in the absence of local industry. Once this arrives, even the most tempting offers cannot induce workers to tie themselves down: they prefer to retain free disposition over their labour-power so as to be able to use every opportunity to sell it to advantage.

According to Kärgen, his study of agricultural workers in North West Germany provides 'irrefutable proof' that

the best working conditions for both employees and employers prevail where the bulk of agricultural labour is carried out by Heuerlinge as well as servant labour. Under such circumstances, employers always have sufficient labour to carry out all agricultural tasks in a proper fashion. Workers are also sufficiently well off to save as well as, ideally, to remain content.

Despite such a surplus of contentment there are numerous localities in which workers are sufficiently eccentric to be discontented. Two factors work against the generalisation of the Heuerling system.

On the one hand a mood of defiant independence amongst the population, which rejects any lasting obligation as serfdom. This explains why it has frequently proved impossible to establish Heuerling farms in the Westphalian districts of Paderborn, Büren, Marburg and Hörter. On the other, the immediate proximity of substantial industrial activity; this eliminated the existing Heuerling system in the coal-mining districts of Bergen-Mark and in the Hamburg-Harburg area, and has prevented its re-establishment.

The reasons lie in the high wages which mining and industry can pay. Agricultural workers no longer consider it rational to conclude long-term tenancy and labour agreements if an increased demand for industrial workers could be met, to their own advantage, by the supply of their labour-power.

Industry therefore ensures that the feudal ideals of Herr Kärgen will have no place in the future.

A more generally practical solution is to obtain workers from elsewhere, some of whom would be permanent and others periodic migrant labour. Whilst increasing proletarianisation of the peasantry
Difficulties of Commodity-Producing 227

stimulates the supply of such labour, the flow of rural workers into the industrial districts guarantees a rapidly rising demand for them. In many areas agriculture would cease to function without workers from outside. But as important as this type of labour has become, at most it can help in evening out the burdens which the shortage of labour imposes on agriculture over the whole nation, or, if foreign workers are used, over several nations: but it cannot add any new labour to agriculture as a whole. Labour drawn into one area deprives another: labour moves West, only to rob the East. The shortage of labour-power spreads to areas in which industry has not yet made its influence directly felt, and in the form of temporary migration prepares the ground for permanent emigration. Outside labour rarely fully makes up for those workers who have moved off to the towns. And as we have already observed, it is precisely the most energetic and intelligent workers who are most likely to turn their backs on the land. In contrast, the newcomers come from economically backward regions, regions in which both the level of popular education and often agriculture is much lower. The consequence is not merely a decline in the overall fitness and productivity of the agricultural working class, but often in the methods of agriculture as well. Kärger writes:

What is unique about the whole labour situation is the fact that there is simply no indigenous class of agricultural workers. Virtually without exception, workers' children turn to mining immediately after confirmation. Almost all the labour used in agriculture comes from outside the region: East and West Prussia, Hesse, Hanover, Waldeck, and Holland. Recruitment has to be constant as most will not put up with agriculture for more than one or two years once they have got to know about, or experienced, the higher earnings that can be obtained in the mines. At harvest time, migrant workers arrive by themselves, mainly from the Minden district – the so-called Bielefeld Cutters. However, anyone who can avoid it tries not to engage these highly-paid migrant workers if they can scrape by with their own servant labour. Such harvest workers are therefore seldom seen in Schwelm and Hagen where the holdings are generally smaller, in particular Schwelm where smallholdings predominate.

Although some reports state there is no shortage of agricultural labour in these areas, especially if industry is passing through a bad patch, there is nevertheless a complete lack of any permanent labour force, and a great shortage of good agricultural workers. Most reports conclude that it is difficult to obtain labour at all, and one official has claimed that the shortage of workers, in particular good workers, is so
acute that most farmers are utterly sick of farming. (Kärger, *Die Verhältnisse der Landarbeiter in Nordwestdeutschland*, 1892, I, p. 133)

A correspondent writes from the Grand Duchy of Hesse (Upper Hesse):

There was once a proper class of day-labourers who worked at their trade over many years and whose work showed their skill, experience and reliability. This group has now vanished. The large number of threshing machines deprived them of winter work; work was available all year in the industrial districts and in the mid-1870s they began to depart from Westphalia, Belgium and Paris, and in particular to 'seek their fortune' in America, Australia and Argentina. And to be quite honest, a good number of them have actually found it. Their friends, good workers, then followed. Their place has been taken by the so-called married servants, a collection made up of representatives of every nation: Swiss, East and West Prussians, Poles, Upper Silesians, and even Swedes. Some are indentured and imported, and others come of their own free will. In general they constitute a rough and completely degenerate mob, living in sin with the dregs of the female migrants, given over to drink and lacking in any occupational skill, intelligence or loyalty. But they always find work as grooms on tenant farms, or as so-called 'Swiss' cattle-feeders and milkers for high wages. At the same time, there are not enough local workers settled in areas with a heavy beet crop.

From early spring onwards large numbers of male and female migrant workers are therefore brought in from the Rhön area, Eichsfeld, Bavaria, the Black Forest, Upper Silesia, Poland and West Prussia. These have to be kept on at high wages until late in the autumn simply because the local population no longer likes to work for any length of time on tenant farms. (Auhagen, *Die ländliche Arbeiterverhältnisse in der Rheinprovinz*, 1892, II, pp. 230, 231)

Here is one final example to show how the advance of industry brings about the degradation of agriculture. In an article in *Die Neue Zeit* (XI, 2, p. 284), Dr Rudolf Meyer quotes from a number of reports prepared by the manager of a Bohemian domain embracing several thousand hectares of sugar-beet and corn.

We used to hoe the drilled grain several times with a horse-drawn hoe, but we no longer do this as an untrained worker could damage the crop. *Virtually none of the servants are now skilled in driving a team,*
and those few who are soon leave. Once experience in the military has taught the young men something about the world, they no longer want to perform onerous duties for us at low wages. The only members of the indigenous population we can retain are therefore the elderly, children, women and tenant serfs from the Czechoslovakian Tabor area. They are very rough and uneducated and unfit to work the machines. As a consequence, our horse-drawn hoe is rusting away in the barn.

Such reports show how difficult it is to apply what seems to be the most obvious method of dealing with the shortage of labour in the age of steam and electricity – machines. Farmers cannot always find labourers skilled enough to use machines, and those that are soon leave agriculture. Despite this the machine is still making substantial headway on the land, although not quickly enough to offset the drain of workers. Reports of farmers being able to alleviate their problems by introducing machines are rare. We leave aside here the fact that although agricultural machinery always saves labour in relation to the volume of products produced, it does not always do so in relation to the area under cultivation. Many agricultural machines require more workers for the same area than more basic implements. 'In some instances, the application of more or of improved machinery increases rather than reduces the demand for human hands. A mechanical seed-drill requires more labour to sow the same area than a seed-broadcaster or hand-sowing' (Goltz, *Die ländliche Arbeiterklasse*, p. 168).

Finally, a fourth proposal has been made for combatting the shortage of workers: a substantial increase in wages, better treatment, better housing, and better food. Of the four methods discussed here, this is certainly the most effective; but it still does not seem to be enough to retain the labour-power needed by agriculture. Higher wages are not the only reason why workers move to the towns. The easier prospect of finding work in the winter, the greater independence, the greater ease of establishing a family and the cultural superiority of the town in general are all factors which could only be offset by an enormous increase in wages.

Grossmann writes:

Much complaint is made over the shortage of female servants in the Elbe Marshes, mainly because they have moved off to the towns. This is particularly astonishing since those who take up service in the neighbouring small towns earn, at most, half the wages of those who
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stay on the land. Even in Hamburg, wages are, on average, no higher but expenses certainly are.

Better treatment might also not be enough to keep workers on the land over the long term. 'How many instances', says one correspondent,

do we know where employers barely regard or treat their servants as human; how often do servants have to tolerate a mediocre and often poorly prepared diet; how often do they lack even a modestly comfortable or heated room in which to spend their free hours; and how often do they have to clamber through all kinds of junk to find a room to sleep in in some remote corner of the house, a room frequently hardly even graced by a proper floor or somewhere to sit, let alone a table. In contrast, if servants are considered as members of the family in some respects, with whom matters affecting the farm can be discussed, who share the family's table – something customary in this area – who may spend their free time in the family's living room or have their own comfortable, suitable, well-heated parlour or bedroom, who are offered newspapers to read, then good servants will be happy with their lot. However, even then, servants still seem in general to yearn for employment as postmen, railway clerks, seamstresses or barmaids, or to get a job in one of the bigger cities: simply because life there is more agreeable than in the quiet, isolated simple village, which may not even have an inn. With the current high wages, good servants, assuming that they do not marry too early as often happens, can earn enough to buy a plot by the time they are thirty, especially where prices have fallen to present levels: and on this they can keep four cows with a few sheep. (Grossmann, Zustände der Landarbeiter, p. 419)

Neither higher wages, nor good treatment, nor the prospects of independent property can prevent the mass of agricultural workers from fleeing the land.

And how are agricultural workers supposed to obtain higher wages and better treatment? No class of entrepreneurs will ever voluntarily agree to an increase in wages: they must be forced into it. However, agricultural labourers are basically still too weak to be able to enforce this through the power of their organisations. Any increase in wages in the countryside will be the simple consequence of a growing shortage of workers. Higher wages and a plentiful supply of labour have been mutually exclusive on the land up until now.

Despite the good sense in recommending that a wage increase could
Difficulties of Commodity-Producing

bring the flight from the land to a halt, such a step cannot realistically be expected. The flight will continue unimpeded.

Anderson Graham's book *Rural Exodus* notes on this:

If they get low wages, as in Wiltshire, then they emigrate. And if they get high wages, as in Northumberland, they also leave. If farms are small, as in the Sleaford District of Lincolnshire, they take their leave; and in Norfolk, where the farms are larger as a rule, the flight from the land continues to grow. The rural dweller seems to be utterly possessed of the desperate thought that there is no longer a bright future for him on the land. He simply puts down his hoe and spade and is off.

Where self-help fails, state compulsion steps in to assist. Tightening up the Servants Ordinance, punishing breach of contract, making marriage more difficult are all meant to ensure that the farmers can keep their servants. The elimination or obstruction of free movement by banning migration, measures making it more difficult for migrants to settle in towns, increasing the price of rail travel, and similar moves, are meant to keep the migrants at home.

Of these, the first will merely make rural life even more unbearable for the servants and contract workers, and will inevitably increase the flight from the land. Suppressing free movement, assuming the industrial population were to tolerate it and it was feasible, might help some farmers but not agriculture in general. It would rob numerous small peasants of the only opportunity they have for supplementary employment and throw them into acute poverty. And it would also make it impossible to practise any farming which needed wage-labourers in industrial areas: as we saw, such farming cannot manage without workers from outside. This would postpone the bankruptcy of agriculture in economically backward areas only to accelerate it in the economically more advanced districts.

No remedy for the shortage of agricultural workers has been found in capitalist society. Capitalist farming has now reached the stage which feudal agriculture arrived at in the late eighteenth century - a dead end, from which it cannot emerge by virtue of its own forces on the given social foundation.

One might imagine that one was reading a description from the last century:

There is a shortage of labour which is especially noticeable on the large estates and peasant farms. The consequence is that large estates
and even peasant farms have to be leased off individually. The disadvantage of this practice is that it leads to a kind of depredation of the land since too few cattle are kept, and only latrine and other secondary fertilisers are used. This naturally impairs the long-term fertility of the soil. It has also been found that sandy fields, which were previously profitably cultivated, are now lying fallow, and have not been cultivated for years. These often belong to workers who earn more from wage labour at high wages than from tilling their own fields. (Grossmann, Zustände der Landarbeiter, II, p. 206)

Reports from Hesse and Bavaria note:

As the general reports state, the shortage of labour in some districts of Bavaria is not only reputed to have disrupted orderly farming, but also to have led to a general lowering in the intensity of farming. (Grossmann, Zustände der Landarbeiter, II, p. 110)

Compare this with the effects noted above of the use of imported labour. Despite every technical advance, an undoubted decline in agriculture has taken place in some areas. A continuing shortage of labour will mean this will become more generalised. 'A reduction in the labour-force must necessarily lead to a decline in the arable area cultivated each year, with an increase in pasturage' (Goltz, Die ländliche Arbeiterklasse, p. 176).

All farms employing wage-labourers will be hit by the debilitating effects of the labour-shortage, but the smaller will be worse affected than the larger. These have least access to the means if not to overcome the shortage, at least to mitigate it to some extent. They have no land to rent out to wage-labourers in return for fixed labour-obligations; their need for labour is too small for it to be worthwhile importing labour from further afield, and they have to make do with those they can find in the vicinity; they are too small to mechanise and lack the resources to make any substantial increases in wages.

For this reason the smaller farms using wage-labour are precisely those which employ the type of worker most likely to migrate: unmarried workers, servants and serving maids.

Of farms engaged in commodity-production, rather than production exclusively or almost exclusively for the household, those least affected by the flight from the land are those employing only a few workers, and able if necessary to manage with family labour, but nevertheless large enough to bind the owner to the land. In general, such farms range from 5
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to 20 hectares. They also benefit from the fact that the tendency towards parcellisation, from which they are most at risk, is reduced the more the flight from the land gets a grip on the agricultural population. The demand for land therefore falls, and the excessively high price for small farms comes down. Parcellisation ceases to be profitable, and the dismemberment of estates stops. It is, therefore, hardly surprising that such farms are the only ones in Germany to have noticeably gained in overall area. Between 1882 and 1895 the cultivated area in Germany increased by 648,969 hectares, of which 563,477 was accounted for by farms between 5 and 20 hectares; farms between 1 and 2 hectares lost 50,177 hectares, and those between 20 and 50 hectares 62,898. The overall distribution of land by farm size was as follows:

<table>
<thead>
<tr>
<th>Under 1-2 ha.</th>
<th>2-5 ha.</th>
<th>5-20 ha.</th>
<th>20-100 ha.</th>
<th>100-1,000 ha.</th>
<th>More than 1,000 ha.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1882</td>
<td>24</td>
<td>33</td>
<td>100</td>
<td>288</td>
<td>311</td>
</tr>
<tr>
<td>1895</td>
<td>25</td>
<td>31</td>
<td>101</td>
<td>299</td>
<td>303</td>
</tr>
<tr>
<td>+/-</td>
<td>+1</td>
<td>-2</td>
<td>+1</td>
<td>+11</td>
<td>-8</td>
</tr>
</tbody>
</table>

Such figures warm the hearts of all good citizens who see the peasantry as the sturdiest bulwark of the existing order. Look, they exclaim, there is no movement – in agriculture that is: Marx's dogma does not apply here. And the figures do indeed seem to obliterate both the decentralising as well as centralising tendencies noticeable throughout agriculture up until the 1880s. The peasantry appears to be blossoming anew – to the detriment of all those socialist tendencies produced by industry.

But this blossom has its roots in a swamp. It is not a product of the well-being of the peasantry, but of the distress of the whole of agriculture. It has the same causes as the fact that machines which have been tried and tested in agriculture are now having to be abandoned, that feudal forms of labour contract are re-emerging, that arable land is giving way to pasturage, that some fields are beginning to be left fallow. The day that agriculture solves its 'labour question' and begins a new phase of expansion, will be the day that the tendencies currently favouring the medium-sized farm will turn into their opposites. Prosperity for agriculture and the continued existence of a
peasant mode of farming are mutually exclusive within the developed capitalist mode of production. Proof of this cannot only be seen in Europe, but also in the Eastern states of the USA (see p. 137-8).

Nor should one expect a continuation of agriculture's current decline to lead to the displacement of the large enterprise and the dwarf-holding. The medium-sized peasants, described with such enthusiasm by Sismondi at the beginning of the century, will, therefore, neither come to dominate agriculture nor be able to proclaim to the whole of social development: Thus far, and no further!

Their reward for avoiding the worst effects of the shortage of labour out of all the agricultural commodity-producers is to suffer the most from the other burdens which afflict agriculture. The middle peasants are the main object of usurious and merchant exploitation; money taxes and military service hit them the hardest; and their land is most exposed to the threat of impoverishment and exhaustion. And since these farms are amongst the most irrational of those engaged in commodity-production, participation in the competitive struggle means superhuman effort and sub-human living. There is a peasant saying that as long as they avoid overwork, they will be relatively well off, and that 'misery starts with overwork'.

The size of their property still binds these peasants to the soil: but not their children. Like wage-labourers and dwarf-holders, the children of middle peasants are also beginning to be gripped by the flight from the land, and the nearer industry comes to them, the more they strive to escape. A report from Schleswig-Holstein, one of the provinces in which the peasantry has maintained itself in a healthy and vigorous state, observes:

Servants, like the sons of peasants, who worked on the family farm up until their entry into the army rarely return to the land after completion of their military service unless they are learning a craft-skill; they move to the towns, since life in the open country no longer has any attraction for them. (Auhagen, Die ländliche Arbeiterverhältnisse in der Rheinprovinz, p. 426)

But the more that the children of the middle peasant tire of being the worst kept and most oppressed wage-labourers, and the more they try to escape peasant barbarism, the greater will be the decline in the size of families. They will no longer be able to run the farm, even at a very low level of cultivation: the role of wage-labour will increase, and the labour question will also make its debut to add to the other problems weighing down on this class of farms.
The middle peasants are anything but true conservatives – that is, content with things as they stand. On the contrary, they are as eager to transform the prevailing order as the most radical Social Democrat, although, of course, in quite a different direction. Nevertheless, as obstreperously as they often might seem to behave, they will not act to overthrow the state. But they will stop being a pillar of the existing social order. The agrarian crisis extends to all commodity-producing classes in agriculture – and will not spare the middle peasant.
Chapter 9 showed that although the capitalist mode of production has shattered the fetters of feudalism and given agriculture sufficient impetus to progress more in a few decades than it had managed over the previous thousand years, it has also generated forces which constrain and depress agriculture, creating a growing antithesis between the current mode of production's forms of appropriation and ownership and the needs of rational cultivation.

Such tendencies are nothing new in themselves: but they were not a particular burden to the farmer and landowner as long as their effects could be shifted on to the consumer. And as long as this proved possible, the period following the breakdown of the feudal state proved to be a golden age for agriculture: this lasted until the 1870s.

Meitzen, writing in the 1860s, commented:

The memorandum on the state promotion of agriculture is quite correct in observing that 'hopes for the effects of the agrarian laws have not gone unfulfilled. In place of enervation, a welcome activation of the rural population has taken place. A coincidence and succession of fortunate circumstances has spread general prosperity amongst the owners of both peasant farms and Junker estates. The purchase price of estates of all types has risen, almost to excess, as a result of their free cultivability and unrestricted competition amongst buyers.' (Meitzen, Der Boden und die landwirtschaftlichen Verhältnisse des preußischen Staates, p. 440)

Compare this with the present-day utterances of a Prussian Minister for Agriculture!

Food prices rose steadily up until the latter half of the 1870s, in marked contrast to the prices of industrial products. In many instances they rose faster than wages, leaving workers not only worse off as producers, through increases in the rate of surplus value, but also often as consumers too. Agriculture's prosperity rested on the back of proletarian impoverishment.
According to Conrad, wheat prices moved as follows in England, France and Prussia.

<table>
<thead>
<tr>
<th></th>
<th>England</th>
<th>France</th>
<th>Prussia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1821-30</td>
<td>266.00</td>
<td>192.40</td>
<td>121.40</td>
</tr>
<tr>
<td>1831-40</td>
<td>254.00</td>
<td>199.20</td>
<td>138.40</td>
</tr>
<tr>
<td>1841-50</td>
<td>240.00</td>
<td>206.60</td>
<td>167.80</td>
</tr>
<tr>
<td>1851-60</td>
<td>250.00</td>
<td>231.40</td>
<td>211.40</td>
</tr>
<tr>
<td>1861-70</td>
<td>248.00</td>
<td>224.60</td>
<td>204.60</td>
</tr>
<tr>
<td>1871-75</td>
<td>246.40</td>
<td>248.80</td>
<td>235.20</td>
</tr>
</tbody>
</table>

A kilo of beef cost the following (in Pfennigs) in:

<table>
<thead>
<tr>
<th></th>
<th>Berlin</th>
<th>London</th>
</tr>
</thead>
<tbody>
<tr>
<td>1821-30</td>
<td>61</td>
<td>n.a.</td>
</tr>
<tr>
<td>1831-40</td>
<td>63</td>
<td>n.a.</td>
</tr>
<tr>
<td>1841-50</td>
<td>71</td>
<td>87</td>
</tr>
<tr>
<td>1851-60</td>
<td>85</td>
<td>101</td>
</tr>
<tr>
<td>1861-70</td>
<td>100</td>
<td>113</td>
</tr>
<tr>
<td>1871-80</td>
<td>125</td>
<td>131</td>
</tr>
</tbody>
</table>

This steady rise came to a halt in the 1870s.

<table>
<thead>
<tr>
<th></th>
<th>England</th>
<th>France</th>
<th>Prussia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1876-80</td>
<td>206.80</td>
<td>229.40</td>
<td>211.20</td>
</tr>
<tr>
<td>1881-85</td>
<td>180.40</td>
<td>205.60</td>
<td>189.00</td>
</tr>
<tr>
<td>1889</td>
<td>137.00</td>
<td>198.30</td>
<td>192.00</td>
</tr>
</tbody>
</table>
According to the latest report of the English Royal Commission on Agriculture, a quarter of wheat cost the following in England:

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1888-91</td>
<td>32 shillings 11 pence</td>
</tr>
<tr>
<td>1890-92</td>
<td>33 shillings 1 pence</td>
</tr>
<tr>
<td>1891-93</td>
<td>31 shillings 2 pence</td>
</tr>
<tr>
<td>1892-94</td>
<td>26 shillings 6 pence</td>
</tr>
<tr>
<td>1894-95</td>
<td>24 shillings 1 pence</td>
</tr>
</tbody>
</table>

In the period 1881–5, a kilo of beef cost 119 Pfennigs in Berlin; between 1886 and 1890, 115 Pfennigs. In London the price was 124 Pfennigs between 1881 and 1885, and 101 Pfennigs between 1886 and 1890.

Prices have therefore reversed direction since the 1870s.

As with any other major change in modern agriculture the cause lies in industry, on which agriculture is becoming more and more dependent.

The capitalist mode of production causes the constant revolutionising of production. This has two main sources: accumulation, the increasing piling-up of fresh capital, and technical transformation, the product of the uninterrupted advance of science, now the servant of capital. The mass of products produced by capitalist methods grows year by year in the capitalist nations: and it is growing much faster than the population.

Curiously, this steadily growing wealth becomes a source of increasing problems for capitalist producers on account of the fact that their mode of production is the production of surplus-value; and surplus-value accrues to the class of capitalists, not their workers. At the same time, capitalist production is also production on a mass scale, the production of articles of mass consumption, goods for the masses. This is fundamentally different to the modes of production of feudalism or antiquity. Feudal lords and slave owners also squeezed a surplus-product out of their workers; but they, or their hangers-on, consumed it themselves. In contrast, the surplus-value appropriated by the capitalist usually initially takes the form of production which has to be bought by the mass of the population before it can take on the form of products suitable for capitalist consumption. Like the feudal lord or slave-owner, the capitalist has to try and hold down the consumption of the masses to increase their own. But the capitalist is also burdened with the novel worry of maintaining and increasing mass consumption. This contradiction is both one of the most characteristic, and one of the most uncomfortable problems which the modern capitalist has to solve.
Naive Sozialpolitiker and even zealous socialists have long tried to prove to the capitalist that mass consumption will be greater, the higher the consumption of the working masses; and that, as a consequence, all that has to be done to maintain and increase production is simply to raise wages. At best, this might persuade an individual capitalist to welcome wage increases in other branches of industry, but never in his own. It may be in a brewer’s interest for mass consumption to rise through increases in the wages of other workers but never through increases in the wages of his own. Of course, higher wages mean that capitalists can sell more. But capitalists are not in business to sell; they produce to make a profit. Other things being equal, profits will be higher the higher the surplus-value. In turn, this will be higher, for a given expenditure of labour, the lower the wage.

Capitalists have long been aware that there are quite different methods available for raising the mass consumption of goods produced under capitalist conditions than raising the consumption of the mass of their workers. Their first hunt for markets is not amongst the proletariat, but the non-proletarian masses, and in particular, the rural population. We have already seen how this ruins rural domestic industry and creates a large market for the sale of articles of mass consumption.

However, the greater the productive forces within the capitalist mode of production, and the more predominant wage-labour – that is, more numerous that class which in the nature of things can only consume part of the product it creates – the less this market suffices. The extension of the market beyond the confines of the nation, production for the world market and the constant expansion of this market, become a condition for the continued existence of capitalist industry. This is what lies behind the current urgency and struggle to extend markets; this is why our age is marked by the favouring of Africans with hats and boots, and the Chinese with battleships, cannons and railways. The internal market itself is now almost totally dependent on the external market. This determines, in the main, whether businesses succeed, and how much proletarians and capitalists, and with them merchants, craftsmen and farmers, can consume.

Once the external market, the world market, ceases to be capable of rapid expansion, the capitalist mode of production will have reached the end of the road.

The Railway System

The constant push to expand markets goes hand in hand with a revolutionising of the transport system.
The capitalist mode of production has always been based on mass production: and this necessitates mass transportation. This is not only for the export of its products. Capitalist large-scale industry consumes far more raw materials than are available in its immediate vicinity, and concentrates larger numbers of people than this area can feed. Raw materials and foodstuffs usually have a low value to weight ratio, and can only be economically moved over long distances by particularly inexpensive means of transport.

Only water could offer such cheap transport during capitalism's infancy. And this confined development to coasts or areas with suitable waterways. However, the capitalist mode of production not only requires cheapness but also speed and certainty of mass transport. The quicker the turnover of capital, the less capital had to be advanced for any particular undertaking in order to continue at a given scale: and consequently, the higher the scale that was attainable with a given capital. If I ship commodities from Manchester to Hong Kong, it makes an enormous difference whether I receive payment in three months or in a year. If my capital turns over four times in a year, then, other things being equal, my profit will be four times greater than if it turned over only once.

Moreover, the quicker the transport, the further I can look for customers, and the more I can expand my market without slowing down the turnover of the capital advanced or having to enlarge it.

Raw material stocks can also be kept to a minimum whilst maintaining constant production: more can be accomplished with a given capital, or the same with a smaller capital, and the range of raw material suppliers can be broadened.

Greater certainty of transport has the same effect. It reduces the mass of reserves of money and raw materials which the entrepreneur has to hold to cope with any disruptions in selling or the supply of raw materials.

As far as speed and certainty are concerned, water transportation by sail, oar, or draft-horse leaves much to be desired. Canals and rivers freeze in winter, the sea is made uncertain by storms, and calms or contrary winds can be even worse for the waiting merchant.

It was the taming of steam power which enabled the development of a form of mass transport which allowed the capitalist mode of production to become independent of the waterways, set down firm roots in the interiors of the continents and transform the entire world into a market for its enormously expanding large-scale industries.

Although steam engines and railways were invented at the beginning of our century [nineteenth century], their application remained confined
to those areas dominated by large-scale industry. It was the great wars which put paid to the old Europe and America and cleared the path for the very rapid development of the railway system outside the regions of large-scale industry. Only then did the railway turn from being an upshot into a trailblazer of capitalist development. Strategic considerations were foremost in the widespread support for railway construction in Russia after the Crimea War, and Austria-Hungary since 1859, and even more since 1866. This also applies to the railways of Romania, Turkey and India. Commercial considerations also played a role, however. Governments needed money to compete with the capitalist powers. The only thing which their populations could bring to market were raw materials and foodstuffs. And these required means of mass transportation.

This was the essential reason for the railways built by the American capitalist class after the War of Secession which gave hegemony to the capital of the Union. The successes of these railways soon stimulated imitation, and one of the main activities of European finance currently consists in the establishment and financing of railways in regions outside Europe which are either economically backward or totally deserted. The construction of such railways not only offers welcome channels of investment for the flood of capital threatening to choke the European capitalist class, but also opens up and often creates new markets for Europe's rapidly growing industry, at the same time developing new sources of raw materials and food.

Giffen's recent figures show the expansion of rail mileage since 1850.

<table>
<thead>
<tr>
<th></th>
<th>1850</th>
<th>1860</th>
<th>1870</th>
<th>1880</th>
<th>1890</th>
<th>1895</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>14,551</td>
<td>33,354</td>
<td>64,667</td>
<td>105,429</td>
<td>141,552</td>
<td>155,284</td>
</tr>
<tr>
<td>America</td>
<td>9,604</td>
<td>33,547</td>
<td>58,848</td>
<td>109,521</td>
<td>212,724</td>
<td>229,722</td>
</tr>
<tr>
<td>Asia</td>
<td>844</td>
<td>5,118</td>
<td>9,948</td>
<td>22,023</td>
<td>26,890</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>350</td>
<td>1,042</td>
<td>4,889</td>
<td>13,332</td>
<td>13,888</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>278</td>
<td>956</td>
<td>2,904</td>
<td>6,522</td>
<td>8,169</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>24,155</td>
<td>67,393</td>
<td>130,631</td>
<td>232,691</td>
<td>305,143</td>
<td>433,953</td>
</tr>
</tbody>
</table>

In 1870 the European rail network accounted for half the world mileage; by 1895 only a third. Route mileage increased fivefold between these two dates; but in America it increased sevenfold, and in the rest of the world thirtyfold.
Steam has also transformed shipping, if not quite as spectacularly as in the case of rail. According to Jannasch, the total tonnage of all inward and outward bound vessels in the major shipping nations was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (in tons)</th>
<th>Steam tonnage (in tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1872</td>
<td>137,226,600</td>
<td>52,908,900</td>
</tr>
<tr>
<td>1876</td>
<td>189,785,300</td>
<td>100,754,700</td>
</tr>
<tr>
<td>1889</td>
<td>360,970,800</td>
<td>287,965,100</td>
</tr>
<tr>
<td>1892</td>
<td>382,480,600</td>
<td>313,393,100</td>
</tr>
</tbody>
</table>

The cost of both rail and sea transport is steadily falling. According to Sering average freight rates for the transport of wheat from Chicago to New York per bushel were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>By water</th>
<th>By rail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1868</td>
<td>24.54 cents</td>
<td>42.6 cents</td>
</tr>
<tr>
<td>1884</td>
<td>6.60 cents</td>
<td>13.0 cents</td>
</tr>
</tbody>
</table>

In 1868 the average cost of moving a bushel of wheat from New York to Liverpool by steamer was US$14.36; by 1884 it had fallen to $6.87.

Since then freight rates have fallen even further. According to the *Yearbook of the United States Department of Agriculture, 1896*, the cost of moving a bushel of wheat from New York to Liverpool changed as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>January</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td>1885</td>
<td>9.80 cents</td>
<td>5.00 cents</td>
</tr>
<tr>
<td>1890</td>
<td>11.13 cents</td>
<td>3.75 cents</td>
</tr>
<tr>
<td>1896</td>
<td>6.12 cents</td>
<td>4.00 cents</td>
</tr>
</tbody>
</table>

Transport of 100 lbs of wheat by rail from Chicago to New York cost 25 cents in 1893; by 1897 the cost was 20 cents.

This development has dramatically changed the position of European agriculture. Agricultural products – like potatoes, hay, milk, fruit and
even wheat and meat – are characterised by their low value to weight ratio. In addition, many – like meat, milk and many types of fruit and vegetables – cannot tolerate long journeys. Under primitive means of transport, moving these products raised their price a great deal, and made it impossible to supply from anywhere more than a very short distance away. Supplying foodstuffs to the market, the town, remained an overwhelmingly local affair. The immediate locality had a monopoly on exploiting urban consumers and made thorough use of it. The level of transport costs from the furthest farms, whose products had to be brought in to cover urban food requirements, boosted the differential ground-rents of estates lying nearby. The increasing difficulties of extending the supply of foodstuffs beyond a certain area allowed a massive increase in absolute ground-rents.

Railway construction did not have any great impact on this situation as long as it remained confined to countries with a highly developed industry. Although urban markets were opened up to fresh sources of food, this was generally produced under similar conditions to those nearer the towns. The railway primarily served to bring about a massive expansion in the urban market, and it was this which facilitated the rapid and enormous growth in cities which has been the hallmark of our age. They did not reduce ground-rents. Quite the opposite: from the period of the beginning of the railway age until the 1870s ground-rents rapidly increased in Europe. And the railways increased the number of landowners who participated in this increase. They massively increased the volume of ground-rents accruing to large landowners.

Railways laid down in economically backward countries had a different effect. Although similarly hardly responsible for an overproduction of food, by increasing its supply they extended the urban market for it, and enlarged the size of the industrial population which could not have grown as rapidly as it did without the import of foodstuffs into Europe from overseas.

It was not the volume of imported food which threatened European agriculture, but rather the conditions under which it was produced. Such produce did not have to bear the burdens imposed on agriculture by the capitalist mode of production. Its appearance on the market made it impossible for European agriculture to continue shifting the rising burdens imposed by private property in land and capitalist commodity-production on to the mass of the consumers. European agriculture had to bear them itself. And this is what is at the heart of the current agrarian crisis.
The Regions of Food Competition

The countries able to undercut European agriculture can be divided into two major groups: the regions of oriental despotism and the free (current or former) colonies, on the condition that one can still include countries such as Russia in the former. As far as the rural population is concerned this is by and large quite valid.

Under oriental despotism, the rural population is completely at the mercy of the state and the ruling classes. Capitalism has not yet created a national political life; the nation – at least in the countryside – is still simply an aggregation of village communities, each of which lives out its own isolated life and is powerless in relation to the centralised state authority. As long as matters remain at the stage of simple commodity-production, the position of the peasant in such a state is not usually too bad. The peasants barely come into personal contact with state authority; the democratically organised village commune both protects them and represents their interests before the state, and in turn state authority has few means with which it can impose excessive demands on the commune, and little occasion to do so, since it can make only limited use of the payment in kind in which taxes are levied. The cruelties and exactions of oriental despotism are more visible in the towns in relation to the courtiers, higher officials and rich merchants than in the open countryside.

Matters undergo a dramatic change once state authority comes into contact with European capitalism – in whichever way this occurs. European civilisation makes its appearance in the forms of militarism, bureaucracy and state borrowing: both the state's need for money as well as its power vis-à-vis the rural commune suddenly increase. Taxes become money taxes. Existing modest money taxes are stepped up to intolerable levels and ruthlessly collected. As the nation's main branch of production, agriculture has to bear the brunt of taxation – all the more so, the weaker the rural population. The peasants' comfortable life comes to an end. Meeting their obligations forces them to undermine the physical basis of their own labour-power and of the land. Leisure, artistic activity – such as the fine wood-cuttings and embroidery of South Russian peasantry – become a thing of the past, rapidly followed by the peasants' own well-being. Although more is harvested than ever before, no time is allowed for the soil to recover; everything not absolutely indispensable for the most meagre level of survival goes off to market. But where to find buyers in a country in which almost everyone is a farmer seeking to sell food, and where no one needs to buy? The export of foodstuffs now becomes a matter of life and death.
Governments have to build railways from the interiors to the ports or national borders if they want to be able to collect money taxes from the peasantry.

The prices of such foodstuffs are naturally hardly regulated by the costs of production. They are not produced under capitalist conditions, and are sold under the pressure of the state and the usurer who enters the scene with the introduction of money taxes. The higher the taxes, and usurer's interest, the greater the distress and debt-servitude of the peasants; the greater their distress, the greater the need to get rid of their produce at any price, and hence the greater the amount of labour which has to be performed, unremunerated, to pay off their creditors – a rich peasant, village innkeeper or landlord. And the greater the volume of products which the peasant brings to market, the lower their prices – and hence the cheaper the products which are produced on their creditors' estates. The growing burdens on the peasant imposed by taxes and usurer's interest do not increase but in fact reduce the price of the product. The small peasant's ground-rent and wages, inasmuch as one can speak of such, are forced down to the absolute minimum.

A system of agriculture producing on a capitalist basis, with a given standard of living amongst the rural population, and a given level of wages and ground-rents – fixed in land-prices and mortgages – and which does not exhaust, but maintains the equilibrium of soil fertility, and additionally has to cope with an insufficient supply of labour, cannot match such competition.

Competition from the American and Australian colonies is quite different to that posed by those areas of oriental despotism which come into contact with European capitalism – Russia, Turkey and India.

Such colonies contain a vigorous democracy of free farmers, off the path of world trade, and free of militarism and the burden of taxes. Immeasurable tracts of unowned fertile land abound as the land's original rulers – the small number of indigenous peoples – have been exterminated or forced into small reserves. There is at yet no monopoly of land by individuals, no ground-rent, the land does not have a price. Unlike in Europe, the farmer does not have to use the bulk of his capital to purchase the land, but can use the whole amount for equipping the farm. Given the same expenditure of capital, and the same area, the farmer can therefore attain a much higher level of cultivation than is possible in Europe. Success is all the more probable since the colonists – if they are from Europe – are obliged to adapt to a completely fresh situation, in which the traditions and prejudices of the preceding age, which so hampered the European peasant, quickly disappear.

A further factor encourages the development of cultivation. The soil is
not yet exhausted – it is still completely virgin. It does not require fertilising and crop-rotation, and will continue to produce a rich yield for years ahead with the same crop. The farmer does not need to buy or make fertiliser: he can stick to a single crop – such as wheat – and will be more inclined to do so, the more developed the transport system, and the more the farmer is exclusively involved in commodity production and no longer needs to produce for his own consumption. This one-sidedness of production allows large savings on labour-power and the means of labour, and at the same time means all the equipment can be fully adapted to the one end it is intended to serve. The wheat-farmer does not need stalls for cattle, apart from draught animals, and does not need barns for storing fodder. No labour is needed to tend the cattle; and there is no need to plant root-crops, thus saving on labour and implements. Like the absence of ground-rents, this one-sidedness enables the colonial farmer to attain a higher yield for a given amount of capital and labour on the same cultivated area, or with the same expenditure of capital and labour but over a much greater area, the same yield per hectare as in Europe.

The usual explanation for the highly developed technology of American farming is the shortage of labour and high wages, which made mechanisation a necessity. But without the other two factors noted above, this could not have been as influential as it in fact was.

For colonial agriculture there is no 'labour question' in the European sense. Nevertheless, the colonies are much more thinly populated than the European nations, and the number of workers for any given cultivated area is much less.

However, the number of workers available only determines the type of farming, and not its success. Farming is more extensive where there are few workers, and human labour is replaced by machines wherever possible. However, it is by no means irrelevant whether – with a given type of farming – the number of available workers falls or not, and whether their capacity to work diminishes or not. As far as the prosperity of agriculture is concerned, it is not the number or skill of its workers which is decisive, but the direction in which these factors change.

In this respect, the European colonies are far better off. The same flight from the land which is depopulating the European countryside not only leads to the towns, but also despatches new regiments of strong country folk to the colonies, the most intelligent and energetic of their type. And these will, and must, soon become even more intelligent and energetic in their new environment. Those who cannot adapt quickly will go under.
After a few years a completely uneducated immigrant will become a much more able individual since they can eat so much better. They are like a plant which one has transplanted from a poor to a better soil – this is still so today, and as long as labour is better remunerated here than in Europe will continue. (Meyer, Ursachen der amerikanischen Konkurrenz, p. 16)

There is no military service in the colonies to abduct labour from the land.

Sering (Die landwirtschaftliche Konkurrenz Nordamerikas, p. 179) states quite explicitly: 'One often hears complaints about the high wages in the farming districts, but rarely about the shortage of workers.' But even the high wages do not stay at their high levels.

Whereas the increasing difficulty in obtaining farm labourers in sufficient numbers is causing agricultural wages to rise in Europe, in the colonies – thanks to the constant influx of fresh labour – they show a tendency to fall. According to Sering (ibid.) monthly wages in the USA for farm labourers engaged for one year, in dollars, by region were:

<table>
<thead>
<tr>
<th>Region</th>
<th>1866</th>
<th>1869</th>
<th>1875</th>
<th>1879</th>
<th>1881</th>
<th>1885 (May)</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>35.75</td>
<td>46.38</td>
<td>44.50</td>
<td>41.00</td>
<td>38.25</td>
<td>38.75</td>
</tr>
<tr>
<td>Eastern States</td>
<td>33.30</td>
<td>32.08</td>
<td>28.96</td>
<td>20.21</td>
<td>26.61</td>
<td>25.55</td>
</tr>
<tr>
<td>Central States</td>
<td>30.07</td>
<td>28.02</td>
<td>26.02</td>
<td>19.69</td>
<td>22.24</td>
<td>23.50</td>
</tr>
<tr>
<td>Western States</td>
<td>28.91</td>
<td>27.01</td>
<td>23.60</td>
<td>20.38</td>
<td>23.63</td>
<td>22.25</td>
</tr>
<tr>
<td>Southern States</td>
<td>16.00</td>
<td>17.21</td>
<td>16.22</td>
<td>13.31</td>
<td>15.30</td>
<td>14.25</td>
</tr>
</tbody>
</table>

There is an unmistakable downward trend. In view of all these facts, it is easy to see how laughable the advice given to European farmers by liberal economists really is: you only have to become as intelligent as the Americans, and American competition will be a thing of the past.

Nonetheless, it is curious that in the course of development the Americans themselves, instead of becoming more intelligent, are getting less intelligent – that is, they are beginning to farm using European methods.

The picture of colonial agriculture which we have drawn can only be applied to the United States to a limited degree. Agriculture there is based on robbing the soil (cf. p. 150) which it sooner or later exhausts.
This makes it necessary for the farmer to exchange fresh land for his exhausted land from time to time – either by having such a large farm in the first place that it can include both a cultivated and a non-cultivated part, or – if his entire holding is exhausted – by moving on to as yet uncultivated areas and making a new plot of land cultivable. The nomadic character of colonial agriculture resembles that of the ancient Germans – although with the difference that it is practised with all the aids of modern technology, and is for sale, not self-sufficiency. But this will mean that modern nomadic agriculture will inevitably exhaust the soil even more swiftly than the agriculture of the Germans. Abandoned land is left waste until it has recovered, or is taken over by a farmer who begins to farm using European methods, with manuring and crop rotation. At any event, sooner or later this old land will become unusable for extensive depredatory cultivation. Soils on which wheat can be grown uninterruptedly for 40 years without fertiliser (Sering, ibid., p. 188) are extraordinarily rare.

The fluctuating character of American agriculture is revealed in the following figures:

<table>
<thead>
<tr>
<th></th>
<th>Western states</th>
<th>Central states</th>
<th>Eastern states</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>6,100,000</td>
<td>23,700,000</td>
<td>5,700,000</td>
</tr>
<tr>
<td>1890</td>
<td>11,400,000</td>
<td>17,600,000</td>
<td>4,600,000</td>
</tr>
<tr>
<td>+/-</td>
<td>+5,300,000</td>
<td>-6,100,000</td>
<td>-1,100,000</td>
</tr>
</tbody>
</table>

The cultivated area in the North Eastern states has been reduced even more markedly: from 46,385,632 acres to 42,338,024 acres, by more than 4 million acres.

With such a rapid exhaustion of the soil, the land hunger of the American colonists is inevitably greater even than that of the ancient Germans: and like Germany, the vagina gentium, the mother of peoples who over the centuries gradually pushed down as far as Africa, the East of America is becoming a new vagina gentium, a jumping-off point for settlers who have filled the whole continent across to the Pacific Coast within the space of a few decades.

This move westwards was encouraged by high immigration from Europe. The prospect of being able to farm without the burdens of the old capitalist civilisation – ground-rents, militarism, taxes – on fertile soils
was too alluring. Countless numbers of farmers were tempted to leave the patriarchal plot to which — according to the assurances of our poets and politicians — they were inseparably wedded, and look for a new life over the ocean.

All the fertile land in the United States is now private property. The increase in the number of farms is steadily slowing down. Between 1870 and 1880 they increased by 1,348,922: 51 per cent; 1880-90 by only 555,734: 14 per cent. The land is no longer free: it yields a ground-rent and has a price. And with this begins the encumbering of agriculture with the burden of private property under capitalism. The American farmers now have to buy their farms. Working capital is reduced by the amount of the purchase price. The farms have to be smaller than would previously have been necessary, or alternatively, the farmers have to go into debt. Otherwise they have to rent land. And on their death they can no longer tell their children to look for free land in the West. The farms have to be divided up, or one heir must sell to the others: this cannot happen without increasing indebtedness or reducing working capital. Reduction in size and farm indebtedness, together with a deterioration in the quality of equipment are the consequences.

At the same time, the demands on the farmer are increasing. The soil is exhausted, and new land cannot be had for nothing. Fertilisers, crop rotation, stock-keeping become necessary but all this requires additional labour and money. Since 1880 the costs of the amount of additional fertiliser used each year have been recorded in the Agricultural Census. In 1880 the cost was US$28,600,000; by 1890 this had risen to $38,500,000. This is yet another source of indebtedness and reduction in farm size.

Tenant farming and indebtedness begin to take root and expand. Renting accounted for 25.6 per cent of all farms in the United States in 1880; by 1890 the proportion had grown to 28.37 per cent. Farm indebtedness was first recorded for the Union as a whole in 1890. Of those farms not rented, 28.22 per cent were in debt in 1890, most of which were located in the states with the highest degree of capitalist development. Of the 886,957 indebted farms, 177,508 were in the North Atlantic States (34.22 per cent of farms in that region), and 618,429 in the North Central States (42.52 per cent). In contrast, only 31,751 farms were indebted in the Western States (23.09 per cent), 31,080 in the Southern Atlantic States (7.43 per cent) and 28,189 in the Southern Central States (4.59 per cent). The level of debt was put at $1,086 million, 35.55 per cent of the value of farms. For 88 per cent of the indebted farms, the cause of indebtedness was given as: purchase, improvements, acquisition of machinery, livestock and the like.
Such conditions are bound to dry up the flow of immigrants, whilst the transition from extensive to intensive farming is causing the demand for labour-power to grow. Immigration reached its high point in 1882, when 788,992 immigrants arrived. Since then it has steadily fallen, and in 1895 was only 279,948. Emigration from Germany which still ran at 220,902 in 1881 fell to 24,631 by 1897.

At the same time, industry and commerce are developing rapidly and absorbing a growing portion of the population. The number of persons employed in industry grew by 49.1 per cent between 1880 and 1890, with a 78.2 per cent increase in commerce over the same period. Growth in agriculture (including mining) was a mere 12.6 per cent over the same period.

American agriculture is also approaching the time when it will be faced with its own labour question. But the development of industry does not stop at directly poaching labour-power from agriculture – it also promotes militarism. Industry becomes industry for export, seeking to conquer the world market and clashing with rival powers. Militarism imposes great demands: state indebtedness grows, and taxes increase. Industry's rise is accompanied by crises which shake the whole country. Unemployment assumes threatening dimensions, class struggles intensify, and the ruling classes employ more and more drastic means to repress or prevent troublesome social movements – giving a further boost to militarism. In the process, the state itself increasingly becomes the prey of high finance, which plunders the population through its monopoly.

All this implies that agriculture in the United States will become increasingly burdened, and its competitiveness on the world market correspondingly reduced.

The competition from European Russia and India will also lose its edge with the passage of time. Depredatory agriculture will lead to the bankruptcy of the prevailing agricultural methods even sooner than in the United States, since reserves of land are smaller, the older cultivated areas already more exhausted, and the means of cultivation more exposed to deterioration with the increasing poverty of the peasants and the forced surrender of their livestock to the usurer and tax collector. The end result is chronic, and periodically worsening, famine.

Exports can therefore only grow as long as the rail system continues to expand into as yet unexploited and unexhausted areas. Such farming must eventually end – either in the complete desolation of the land, or in a transition to the capitalist farming of the large landowners and farmers, the first steps towards which are already evident in Russia.

The proletarianisation of the rural population, which casts
innumerable cheap workers and large alienable tracts of land on to the market, and the counterpart to this – the emergence of a class of rural usurers who pile up capital – supply all the preconditions for capitalist production. Conditions in Russia will converge towards those of Europe and ease the pressure on prices which its competition currently represents.

But it would be wrong to conclude from this that the agrarian crisis will soon be surmounted.

The process which it initiates continues without pause, opening up new regions, both colonies and areas of oriental despotism, to the capitalist mode of production. Unsettled land is still available in Australia, Canada and South America. Dr Rudolf Meyer, writing in 1894, noted:

The London Economist of 9 September 1893 contained an extract from the report of the English consular official in Argentina which states, amongst other things, that in the current year only 12.5 million acres are being cultivated, against a potential cultivable area of 240 million acres. In addition, large areas with similar conditions for cultivation exist in the other Plate States and Venezuela, and parts of Brazil. The cultivable area suitable for wheat growing could be as much as 200 million hectares. One can appreciate what this means when one considers that the area put under wheat, rye, oats and barley in the last few years has totalled approximately 56 million hectares in the USA, 13 million in Austria-Hungary, 4 million in Great Britain and Ireland, 14 million in Germany and 15 million in France – a total of 102 million hectares. (Meyer, Ursachen der amerikanischen Konkurrenz, p. 469)

The final report of the Royal Commission on Agriculture, 1897, comes to the same conclusion. Siberia, with its 100 million hectares of grain land, has been opened up by rail to the world market. Railways are encroaching on Central Africa from north, south, east and west; and the opening up of China by rail is expected imminently. However, as far as China is concerned, the coming of the railway will be more likely to increase imports rather than exports of food, although the economic structure of China shares too many common features with India to lead us to expect anything other than that it will share the same fate as the latter: the ruin of domestic industry, the rapid growth of peasant indebtedness, the slow emergence of capitalist industries, and alongside the increase in hunger and misery, a growth in the exports of agricultural products. India, in which famine constantly rages,
customarily exports wheat and rice — approximately 20 million cwts of wheat and 20-30 million cwts of rice.

The situation is not greatly different in Russia. According to the most recent calculations, the Russian peasantry annually produces approximately 1,387 million *puds* of grain (excluding seed-corn). Of this, 1,286 million *puds* of rye are needed for their own consumption, and 477 million for their cattle. This leaves a deficit of 376 million *puds* which peasants have to buy if they want to feed themselves and their stock properly. Instead — as is generally known — they continue to sell grain. The same factors will also compel the Chinese peasants to sell wheat and rice, regardless of how much they need for themselves.

Of course, not all countries are suitable for growing wheat. But then, wheat flour is not the only type of cereal flour. Attempts have been made to replace wheat and rye by other cereals, such as maize, rice and millet. Such experiments will not be successful, however, as long as wheat imports are increasing, and while there is no need to find a surrogate. But should the time ever come when all the wheat or rye lands are full, and grain prices inexorably begin to rise, the spirit of invention would immediately throw itself upon the problem of replacing customary cereals with surrogates made from tropical products. Those tropical countries which are not suited to wheat cultivation — Central America, Northern Brazil, large parts of Africa, India, South Eastern Asia — would then also join the ranks of the European grain farmers' competitors.

Eventually, this competition will have to lose its ruinous character. The surface of the earth is finite and the capitalist mode of production is expanding at a dizzy pace. As the product of the competition between the backward agricultural countries and the advanced industrial countries, the agrarian crisis must therefore eventually come to an end. But the end of this competition will also spell the end of the capitalist mode of production's possibilities of further expansion. Constant expansion is the life principle of capitalism: technical revolution and the accumulation of capital are unceasing; production becomes increasingly mass production, whilst the share of the masses in their own product steadily diminishes. The agrarian crisis can therefore only end with a general crisis of capitalist society as a whole. This point may arrive earlier or later; but as long as capitalist society continues, agrarian crisis will be its permanent accompaniment. And if the capitalist burdens which once depressed agriculture in Western Europe now begin to do the same to its competitors in the USA, Russia and so on, this is not proof that the crisis in Western European agriculture is coming to an end. It simply proves that the crisis is extending its grip.
Optimistic, and in particular, liberal economists have been prophesying the end of the agrarian crisis for 20 years; and for 20 years the crisis has been getting deeper and more widespread from year to year. It is not a passing phenomenon: it is permanent, embracing the whole of economic and political life.

We cannot consider the effects of the agrarian crisis on industry here, although its development has been extensively promoted by the crisis. The times are past when one could say 'Hat der Bauer Geld, hat's die ganze Welt' (All's well with the peasant, all's well with the world).

Our task here is simply to observe the changes in agriculture which food competition from outside Europe has generated and fostered.

The Decline in Grain Production

The most obvious and simple method for landowners and farmers was to call for state assistance, and show their outrage at 'bleak Manchesterism'. That is, having lost the economic power to shift the burden of capitalist conditions of production on to the mass of the population, European land ownership will seek to have this accomplished through political power, through the imposition of tariffs on grain, debasing the currency (bi-metallism), and subsidies.

There is no need to rehearse the theoretical justification for these measures yet again; they have been discussed so often that the positions involved can be assumed to be known to all. And there is scarcely anything new to add. Such a discussion is all the more superfluous in that the agrarians themselves have begun to see that they are not going to advance very far with such 'petty means'. Their attempts to increase the price of food artificially are running head on into very determined opposition from the working class, those mainly affected. Grain duties have proved little help to agriculture. But were circumstances to arise in which they could become effective, and grain prices were to rise, this would bring about such intolerable hardship for the bulk of the population that concessions would have to be made in the face of popular resistance. The poor harvests of 1891 prompted an immediate reduction in grain duties in France (between July 1891 and July 1892); and they also gave rise to a reduction – if not an immediate one – of duties in Germany, not only temporarily but permanently.

In England no serious politician dare advocate an artificial increase in the price of food: the working class is too powerful. Moreover, competition with the free-traders of England does not allow other industrialised countries to hoist their food prices too high. England's insistence on the free import of food forces both workers and capitalists
on the Continent to resist any increase in food tariffs which might negate the effects of external food competition. The fact that agrarian protective tariffs in Europe have not been put up to enormously high levels is primarily due to the power of English workers.

Our arguments in the previous chapter also suffice to show that were an energetic protectionist policy for agriculture possible, the sole beneficiaries would be the landowners, not agriculture. By holding up ground-rents such a policy would maintain the high price of land, and simply prolong the burden which this imposes on farming.

Attempts to protect European agriculture from external competition by duties and other 'petty means' cannot possibly succeed: their only achievement will be able to slow down the adaptation of agriculture to the new circumstances.

Yet despite this, adaptation is clearly going ahead.

One of the main advantages enjoyed by overseas competition is the abundance of available land; this allows it to select only the best soils, those most suited to crops, for cultivation.

The situation is different in Europe. As long as any rural economy is self-sufficient it has to produce everything which it needs, irrespective of whether the soil is suitable or not. Grain has to be cultivated on infertile, stony and steeply sloping ground as well as on rich soils. The replacement of self-sufficiency by commodity-production did not initially make a great deal of difference. In fact, the increase in the demand for grain as a result of rapid population growth forced a shift to increasingly infertile land, of which more and more was devoted to arable farming.

This changed once overseas competition entered the scene. It was no longer necessary to carry on producing grain on unsuitable soils, and where circumstances were favourable it was taken off the land and replaced by other types of agricultural production.

This tendency was also reinforced by the following factors. Overseas competition was firstly, and most acutely, felt in the grain market. The cultivation of grain is much simpler, and requires less preparation and human labour than intensive stock-rearing, the growing of root crops, or vegetables and fruit. Grain also has one of the highest value to weight ratios of agricultural produce, as the following table prepared by Settegast shows.

The table indicates the percentage of the value of the commodity per cwt/mile for transport by road and railway.
Overseas Food Competition

<table>
<thead>
<tr>
<th>Market</th>
<th>By road</th>
<th>By rail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>price per cwt Pf. @ 15 Pf</td>
<td>@ 2.5 Pf per cwt/mile</td>
</tr>
<tr>
<td>Green fodder</td>
<td>50</td>
<td>30.00</td>
</tr>
<tr>
<td>Sugar beet</td>
<td>100</td>
<td>15.00</td>
</tr>
<tr>
<td>Straw</td>
<td>100</td>
<td>15.00</td>
</tr>
<tr>
<td>Potatoes</td>
<td>150</td>
<td>10.00</td>
</tr>
<tr>
<td>Hay</td>
<td>200</td>
<td>7.50</td>
</tr>
<tr>
<td>Milk, fresh fruit</td>
<td>400</td>
<td>3.75</td>
</tr>
<tr>
<td>Wheat</td>
<td>1,000</td>
<td>1.50</td>
</tr>
<tr>
<td>Livestock</td>
<td>2,000</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Wheat is high up the scale. The transport costs of living animals have not fallen as a result of rail transportation, although the speed of their transport has naturally increased enormously. Their transport costs equal those of wheat. However, wheat can stand extremely long journeys, storage, transhipment and sea voyages without damage; living animals suffer greatly on long journeys, especially passage by sea. It is, of course, impossible to store them. Grain's insensitivity to the duration and rigours of transportation makes it far superior to most other mass products of agriculture - meat, milk, fruit, vegetables and eggs.

Given that foreign competition is most likely to emerge in the field of grain production, it would seem that any European farmers not committed to grain production should seek their salvation by switching to the other products cited above, but they cannot do so simply at will. A market has to exist. And in many instances economic development can be quite obliging in this respect. A number of historical and physiological factors mean that meat consumption is much greater in the towns than in the countryside. And since the urban population is growing much faster than the population as a whole, the demand for meat must also be growing at an equally rapid pace. Moreover, the production of milk, vegetables, fruit, eggs and similar products for the market was confined to a small number of districts neighbouring on the towns until well into this [nineteenth] century. And nearly every household in villages and small towns in rural areas - including non-farming households - produced food for their own requirements. This is impossible in the large town or city. As soon as a large proportion of the population begins to live in such towns, demand for these products will grow strongly. Their production for market will expand, to the advantage of the peasant's
purse if not their health. The peasant family used to consume the milk and eggs which the farm produced; now they go off to market, to be replaced by coffee-extract, brandy and potatoes. Even an increase in meat eating can be damaging if potato eating increases at the same time and the consumption of milk and cereals falls (Weber, *Die Verhältnisse der Landarbeiter*, p. 777). However, statisticians assure us that the increase in the consumption of these 'luxuries' means an increase in popular welfare.

The same developments in transport which make grain growing unprofitable can enable some areas to begin producing meat, milk, and so on for large-scale sale by providing access to markets from which they were previously excluded.

Such factors strengthen those tendencies favouring the small-scale farm and weaken those favouring the large-scale farm. As the latter is superior in the sphere of grain production, these are the most hard hit by overseas competition. And those fields in which farmers driven out of the grain market have sought refuge are – with the exception of the production of meat – exactly those in which small farmers are better able to defend themselves than the large.

Such factors should not be overestimated, however. They are not universal. There is not a market for milk, vegetables and meat everywhere. And increasing the stock of capital requires additional capital and labour-power which are not available to every farmer.

These factors were felt most strongly and earliest of all in England, where the climate is very favourable to pasturage and where the urban population has rapidly grown. By 1851 as many people lived in towns in England as did in the countryside; in contrast, in 1849 slightly over one quarter (28 per cent) of the population of Prussia lived in towns; only now is the urban population equal to the rural population in the German Reich.

Moreover, capitalist tenant farming also prevailed in England: the farmer had to pay rent punctually every year, and could not use indebtedness to perpetuate unprofitable farming methods. Such a system was most likely to force the farmer to adapt to new circumstances.

England's geographical location and intensive commerce placed it most prominently in the firing line when overseas competition emerged. Net imports of wheat and wheat flour into England were, on average: 1873–5, 12,191,000 quarters; 1883–5, 17,944,000; 1893–5, 22,896,000. This amounted to 50.50 per cent, 64.20 per cent, and 76.92 per cent of the total amount of these products available in England. Only a quarter of the wheat consumed in England comes from local sources.

English farmers had to recognise that the age of the Corn Laws was
over. England is much too democratic, its rural population too weak, and its industrial population too strong for anyone to dare to increase food prices artificially.

Agriculture was faced with an alternative: either imminent bankruptcy or a rapid transformation of its operating conditions. In most instances the latter occurred. Landlords had to reduce ground-rents - in Ireland under the pressure of legislation, and in England under pressure from a powerful class of tenant farmers. In recent years rents in the best areas have fallen by 20 to 30 per cent, and in the poorer areas by 50 per cent or more. At the same time, the outlays which the landlord has to make for improvements and buildings have increased. The English Royal Commission on Agriculture gives numerous examples, one of which we cite here by way of illustration - that of a farm in Norfolk. Income and outgoings were as follows (in pounds sterling):

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross income</th>
<th>Total outgoings</th>
<th>Percentage of income accounted for by outgoings</th>
<th>Net income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1875</td>
<td>4,139</td>
<td>1,122</td>
<td>27.1</td>
<td>3,017</td>
</tr>
<tr>
<td>1885</td>
<td>2,725</td>
<td>1,166</td>
<td>42.8</td>
<td>1,559</td>
</tr>
<tr>
<td>1894</td>
<td>1,796</td>
<td>1,216</td>
<td>67.7</td>
<td>580</td>
</tr>
</tbody>
</table>

(Royal Commission on Agriculture, 1895, p. 22)

The owner's net income thus fell from £3,017 to £580 over 19 years.

But this reduction in the burdening of agriculture from ground-rents is not enough. It is accompanied by the shift from grain growing to stock-rearing. Average wheat harvests in the United Kingdom (net of seedcorn) were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1852-59</td>
<td>13,169,000 quarters</td>
</tr>
<tr>
<td>1860-67</td>
<td>12,254,000 quarters</td>
</tr>
<tr>
<td>1868-75</td>
<td>11,632,000 quarters</td>
</tr>
<tr>
<td>1889-90</td>
<td>8,770,000 quarters</td>
</tr>
</tbody>
</table>
Since then production has slumped to an average of seven million quarters.

Area under wheat was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1866-70</td>
<td>3,801,000</td>
</tr>
<tr>
<td>1889</td>
<td>2,545,000</td>
</tr>
<tr>
<td>1894</td>
<td>1,985,000</td>
</tr>
<tr>
<td>1895</td>
<td>1,417,403</td>
</tr>
<tr>
<td>1896</td>
<td>1,692,957</td>
</tr>
</tbody>
</table>

In contrast, pastureland has increased. In 1875 it covered 13,312,000 acres, in 1885 15,342,000 acres, and in 1895 16,611,000 acres.

Matters have taken a different course in Germany. Its continental location, grain duties, and the conservative character of the peasantry serve to hold back development. At the same time we see an advance from primitive to intensive farming, the abandonment of fallow, and the transition from the three-field system to crop rotation – advances which are by no means completed everywhere. These latter also, of course, favour grain production. The decline in grain cultivation, its displacement by stock-rearing, vegetable and fruit growing has been confined to a few regions of Germany thus far, and is not a general phenomenon.

Within Germany the harvested area of cereal crops has changed as follows:

<table>
<thead>
<tr>
<th>Cereal Crop</th>
<th>1878</th>
<th>1883</th>
<th>1893</th>
<th>1896</th>
<th>Increase(+)/Decrease (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat and spelt</td>
<td>2,222,500</td>
<td>2,306,100</td>
<td>2,398,200</td>
<td>2,249,900</td>
<td>-56,200</td>
</tr>
<tr>
<td>Rye</td>
<td>5,950,200</td>
<td>5,817,100</td>
<td>6,016,900</td>
<td>5,982,100</td>
<td>+165,000</td>
</tr>
<tr>
<td>Barley</td>
<td>1,623,300</td>
<td>1,754,300</td>
<td>1,627,100</td>
<td>1,676,300</td>
<td>-78,000</td>
</tr>
<tr>
<td>Oats</td>
<td>3,753,100</td>
<td>3,773,800</td>
<td>3,905,800</td>
<td>3,979,600</td>
<td>+205,800</td>
</tr>
</tbody>
</table>

The area under these main cereal crops has hardly changed. In 1883
cereals and legumes were planted on 15,724,000 hectares; and in 1893 on 15,992,000 – an increase of 268,000 hectares. In the same period the area of pasturage and fallow was reduced by 576,483 hectares from 3,336,830 to 2,760,347 hectares.

Whilst the area under grain more or less remained constant, the animal stock increased markedly.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cattle</th>
<th>Pigs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1873</td>
<td>15,776,700</td>
<td>7,124,100</td>
</tr>
<tr>
<td>1883</td>
<td>15,786,800</td>
<td>9,206,200</td>
</tr>
<tr>
<td>1892</td>
<td>17,555,700</td>
<td>12,174,300</td>
</tr>
<tr>
<td>1897</td>
<td>18,490,800</td>
<td>14,274,600</td>
</tr>
</tbody>
</table>

Thus, whereas the number of cattle increased by a mere 10,000 between 1873 and 1883, in the following decade the increase was nearly two million, with almost a further million added over the subsequent five years. The increase in pig numbers is also much greater in the period since 1883 than in the preceding period.

Despite its high tariffs, France is in a worse position as far as grain growing is concerned. The areas under the principal crops changed as follows between 1840 and 1892 (in hectares):

<table>
<thead>
<tr>
<th>Year</th>
<th>Grain crops Planted</th>
<th>Grass</th>
<th>Natural pasture and meadows</th>
<th>Fallow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1840</td>
<td>14,552,000</td>
<td>1,577,000</td>
<td>4,198,000</td>
<td>6,763,000</td>
</tr>
<tr>
<td>1862</td>
<td>15,621,000</td>
<td>2,773,000</td>
<td>5,021,000</td>
<td>5,148,000</td>
</tr>
<tr>
<td>1882</td>
<td>15,096,000</td>
<td>3,538,000</td>
<td>5,537,000</td>
<td>3,644,000</td>
</tr>
<tr>
<td>1892</td>
<td>14,827,000</td>
<td>3,532,000</td>
<td>5,920,000</td>
<td>3,368,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Increase (+)/ Decrease (-) 1862-1892</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain crops Planted</td>
</tr>
<tr>
<td>Grass</td>
</tr>
<tr>
<td>Natural pasture and meadows</td>
</tr>
<tr>
<td>Fallow</td>
</tr>
</tbody>
</table>

The area of grain crops has been considerably reduced since 1862. One important part of this was the loss of territory in 1871 (1,415,000 hectares): but this was more than made up for by the reduction in fallow
and the decline in cereal growing continued from 1882 to 1892, whereas despite the loss of territory, the meadows and pastures continued to increase.

The number of cattle also increased, whilst horses fell in number.

<table>
<thead>
<tr>
<th></th>
<th>1862</th>
<th>1882</th>
<th>1892</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horses</td>
<td>2,914,412</td>
<td>2,837,952</td>
<td>2,794,529</td>
</tr>
<tr>
<td>Cattle</td>
<td>12,011,509</td>
<td>12,997,054</td>
<td>13,708,997</td>
</tr>
</tbody>
</table>

Optimistic economists who believe that European agriculture will be able to fend off overseas competition by switching from grain to the production of milk, meat and fruit are mistaken, however. The technical revolution and the accumulation of capital will not stop; transport will become cheaper and quicker, and preserving methods increasingly effective. Overseas competition will therefore progressively invade those areas in which hard-pressed European agriculture has sought refuge.

Twenty years ago almost all the livestock imported into England came from Europe. Today this has virtually completely stopped, and most comes from North America. Livestock will soon be able to be transported from South America.

The change in the source of English livestock imports has been as follows:

<table>
<thead>
<tr>
<th></th>
<th>Europe</th>
<th>USA</th>
<th>Canada</th>
<th>Argentina</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>1876</td>
<td>99</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td>43</td>
<td>36</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>1891</td>
<td>16</td>
<td>67</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>1895</td>
<td>67</td>
<td>23</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>
Head of cattle imported were as follows:

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>1895</th>
<th>1896</th>
<th>1897</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>95,993</td>
<td>101,591</td>
<td>126,495</td>
</tr>
<tr>
<td>USA</td>
<td>276,533</td>
<td>393,119</td>
<td>416,299</td>
</tr>
<tr>
<td>Argentina</td>
<td>93,494</td>
<td>65,699</td>
<td>73,867</td>
</tr>
<tr>
<td>Others</td>
<td>3,545</td>
<td>2,143</td>
<td>1,675</td>
</tr>
<tr>
<td>Total</td>
<td>415,565</td>
<td>562,552</td>
<td>618,338</td>
</tr>
</tbody>
</table>

The countries of origin of sheep imported into England were as follows:

<table>
<thead>
<tr>
<th>per cent</th>
<th>Belgium</th>
<th>Denmark</th>
<th>Germany</th>
<th>Ireland</th>
<th>Holland</th>
<th>USA</th>
<th>Canada</th>
<th>Argentina</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1876</td>
<td>24</td>
<td>5</td>
<td>30</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td>9</td>
<td>32</td>
<td>3</td>
<td>45</td>
<td>9</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1891</td>
<td>12</td>
<td>7</td>
<td>61</td>
<td>3</td>
<td>9</td>
<td>6</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1895</td>
<td>6</td>
<td>42</td>
<td>21</td>
<td>29</td>
<td>29</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As far as the supply of live sheep is concerned, the displacement of the European countries from the English market by overseas territories began later, but increased very quickly.

Twenty years ago meat could only be transported by sea in the form of conserves, tinned meat, salt-meat, and smoked meat. Since then methods for keeping fresh meat edible for weeks by refrigeration have developed to such an extent that the import of fresh foreign meat into England has constantly risen. In 1876, 34,640 cwts of fresh beef imported; by 1895 this was 2,191,037, and by 1897 3,010,387. The largest quantities came from the USA.

Fresh mutton was first recorded separately in the English statistics in 1882. Imports at that time were 190,000 cwts; by 1895 this figure has risen to 2,611,000, and by 1897 to 3,193,276. Of this latter figure, 1,671,000 came from Australia and 715,000 from Argentina.

As with wheat production, the USA has probably already gone past its peak exports of meat. The extensive pasturage needed for profitable livestock production for export requires enormous tracts of land which are steadily being encroached upon by a growing population. In the USA the development of population and livestock was as follows:
The technical preconditions for opening up egg, vegetable and milk production to overseas competition are therefore already present. And this competition will grow in strength in the older agricultural export countries, as well as in Europe, the more that grain-production is forced back by the rise of the newer exporting countries. Until now,
improvements in the transportation of these products of the secondary branches of agriculture have only damaged English agriculture. Farmers in the non-industrial parts of Europe have gained as England's suppliers. But eventually European agriculture will cease to export even within these fields, and overseas competition will spread, with the exception of those branches of production too insignificant to be seized on by the foreign farmer. And although competition has so far mainly affected spheres occupied by large farms, it will then get a grip on those in which the small farm is predominant.

No further argument is needed to appreciate the extent to which this will exacerbate the agrarian question. But European agriculture still has a few devices available for defending itself against its overseas enemies.

The Unification of Industry and Agriculture

Our main example so far in this chapter has been England. But when it comes to looking at the methods employed to defend agriculture and fight off overseas competition we can remain on the Continent as this aspect is little developed in England. In fact, conditions are much more favourable on our side of the Channel, and in particular in Germany.

Tenant farming initially permits the burdens of overseas competition to be shifted on to land-ownership. Where the landowner and farmer are one and the same person, the fixing of the price of land through mortgage indebtedness hinders this process. Such farmers are forced to look for a means of reducing their costs of production more quickly than tenants; and they are finding one which is more favoured by the system of proprietor farming than tenant farming, since the former renders the agricultural populations more stable, and exposes cooperation between farmers to less disruptive interruptions.

As we already know, agricultural produce generally has a low value to weight ratio, restricting the radius within which it can be profitably sold. With a given method of transportation, this radius can be extended enormously if the product concerned is exported in a processed rather than in a raw state.

Returning to Settegast's table, the percentage of the value accounted for by transport costs per cwt/mile is as follows:
The higher specific value of many products of the foodstuffs industry is joined by an additional advantage: they keep better than raw products. Examples are butter and cheese, and preserved meat, vegetables and fruit.

Some agricultural industries also offer a further, very important, advantage: the product contains little or none of the constituents needed to retain the fertility of the soil. Their export does not remove anything of significance from the soil. Conversely, industrial residues contain material which can serve as excellent fertiliser, either directly or indirectly, as animal feed, enriching the soil. The distillation of brandy and sugar-beet processing are good cases in point: their residues, exploitable as feed and fertiliser, have considerably increased grain production and stock-rearing, and become the indispensable foundation of intensive rational farming wherever they have become established.

Agricultural industry also provides winter employment for people and draught animals. And the steam engine used in the large industrial establishment also provides a handy source of motive power for the running of the farm (for threshing, grain-cleaning, malt-milling, pumping, sawing and the like): these will inevitably grow in importance once electrical power transmission establishes a firm footing on the land. The steam-engine in the factory will then power the plough, the thresher, the dung-cart on a field railway, and the reaper.

Where suitable conditions existed, such factors encouraged farmers to set up industrial establishments on their farms to process their raw products. The arrival of foreign competition gave a powerful boost to this by forcing down ground-rents and the prices of raw products. Farmers had a double reason to win back as industrialists what they were losing as farmers: the drop in ground-rents could be compensated for by a rising industrial profit, and an expensive product could be processed from
cheap raw materials.

As with any economic advance of our age, large enterprises were in the forefront, and derived the greatest benefit from this innovation.

Small firms do not usually possess sufficient capital or produce sufficient raw materials to be able to set up a plant for processing their own products. Small farmers are also slower to adapt, more conservative and less knowledgeable about technical progress and the needs of the world market than large-scale farmers and capitalists. It was the large landowners, in particular latifundium owners, who first introduced the large industrial establishment on to their estates, along with capitalists who set up agricultural industries and bought up the land needed to supply the raw materials. The link between industry and agriculture was forged from both sides. Distilleries and sugar-factories were joined on the large estates by starch factories and breweries, although the latter were not on a large scale as beer production was more profitable as an urban industry. Some of the raw materials for brewing have the same specific value as the end-product (barley), and some a higher (hops), and both are more easily transportable than beer. Brewing-barley and hops also only do well in certain areas. Apart from the agricultural industries already mentioned, dairies and factories for preserving vegetables, fruit and milk were also established.

One of the latifundium's greatest advantages over the smaller farm was that the farmer could establish a productive and broad connection between industry and agriculture. This advantage is at its greatest where the latifundium not only supplies the raw materials but also industry's motive power - water power, wood from nearby forests, coal. Consider the savings on transport and middlemen.

The successes of these agricultural industries inspired smaller farms to try and emulate them. The most appropriate form for this was found to be the cooperative - a form already prepared by some individual capitalist enterprises which were too large to obtain all their raw-material requirements from their own land, and which therefore had to conclude agreements for the supply of raw materials from farmers in the surrounding area. If such an enterprise was a joint stock company, the suppliers merely had to buy shares to complete the cooperative.

Such cooperatives have developed rapidly in recent years, especially in Germany. The growth of agricultural cooperatives (excluding lending, purchasing and marketing cooperatives) has been as follows:
The latter are mainly engaged in distilling, milling, baking, wine-producing and similar industries.

We are in no doubt that this cooperative movement, which is still in its infancy, will have a significant effect and bring about a major transformation in agriculture.

But whereas one individual might see this as a transitional stage on the way to socialism in agriculture – the other favoured transitional stage being the remnants of the feudal common pasture – and another as a means for preserving an independent vigorous peasantry, we see it as neither of these.

Modern socialism is characterised by the ownership of the means of production by the workforce – and in a socialist communal system this means everyone. For a producers' cooperative to serve as a transitional stage to such a state, it would have to be an organisation of producers who own the cooperative's means of production. One of the most important objections to the view that present-day producers' cooperatives of workers represent a transitional stage to socialism consists in the fact that in capitalist society, a flourishing cooperative of this type will eventually reach the point at which the cooperators will take on wage-labourers, proletarians, who do not have a share in the ownership of the means of production and who are exploited by the members of the cooperative: that is, any producers' cooperative in modern society – if it is thriving – will tend to become a capitalist enterprise.

Whereas this is a mere tendency in producer cooperatives established by wage-labourers, it marks those set up by farmers from the very beginning: and these are the subject of our discussion here. Workers in a cooperative sugar-factory, distillery, dairy, conserving factory, mill, etc., are not members of the cooperative but wage-labourers hired and exploited by the members. Amongst the benefits which the farmer derives from the cooperative – alongside saving on transport and handling expenses – is the pocketing of a profit on capital. Such agricultural production cooperatives of this type – and there are not yet any other types – are not a transitional stage to socialism, but to capitalism.
But what about the role of the cooperative in rescuing the small peasant? The first observation to be made here is that they are not available to the dwarf-holder, to the proletarian peasant, who is most in need of help: an industrial establishment takes money and this is precisely what the small peasant is lacking. Most small peasants are also unable to produce raw material of the appropriate quality for processing. It is the 'middle strata' of peasants who stand to gain the most from producers' cooperatives.

But here too, the large farm will always enjoy considerable advantages over the small farm. There is nothing to stop the large landowner with the necessary cash from setting up a lucrative industrial enterprise: compare this with the difficulties involved in setting up a cooperative! The large landowner will quite naturally adapt their agriculture to the requirements of the factory: but think how difficult it is to get large numbers of small farmers to coordinate and standardise their supplies.

The large farm is the ideal partner for large-scale agricultural industry. In fact, the latter often creates a large farm where none existed before. Sugar-making, the classic example of large-scale agricultural industry, has greatly encouraged the development of large-scale farming. And Paasche has observed that one of the reasons holding back the spread of agricultural industry in Southern Germany and some parts of France and Northern Italy is the local fragmentation of landownership.

Dr Ihne's article on German sugar factories in America, published in Zukunft (V, p. 382), refers to the 'cheap and rational manufacture of sugar in some parts of East Prussia, where the owners of large estates have built sugar-factories and supply them with their own beet, produced by their own workers on their own land, independently of the fickle and often bloody-minded beet-growing peasants and cottagers. In this they resemble the big plantation owners of Louisiana with their cane sugar factories.'

Some agricultural industries also offer the large farm a number of benefits.

If a distillery is attached to an estate, all the residues of the process can be used on the farm, progressively improving the land. The opposite occurs where potatoes are supplied to the distillery from a number of farms. 'The high water content of the residuum makes it difficult to transport: it is only worthwhile using as feed on the distillery's own farm. The enrichment of this farm will be at the expense of the other farms, since the soil nutrients supplied via the potatoes are unlikely to retrace their steps' (Krafft, Lehrbuch der Landwirtschaft, p. 101).
According to Settegast's now familiar table, the transport of distillery residuum costs 30 per cent of its value per cwt/mile, compared to only 10 per cent for potatoes. With cooperative distilleries, those farms nearest to the distillery will increase their soil's wealth, whilst those more distant will be drained of it.

The same applies with sugar-factories.

In addition to the large farmer, it is large-scale capital which gains the most and is most likely to avail itself of the closer connection between agriculture and industry in a number of industries.

At the most recent congress of German agricultural cooperatives in Dresden, farmers were warmly recommended to establish cooperative bakeries and mills. Large-scale cooperatives, offering not only their members but also the public considerable benefits, were to replace the former, often very inadequate, small enterprises.

The idea of elevating the position of the agricultural small-scale enterprise by feeding it with the profits of large-scale baking and milling is, of course, a fine one - at least for the small farmer. Less so for the small miller and baker. But this is no embarrassment to the farmers - as they readily admit. And if uniting milling, baking and agriculture in one hand really does yield such great advantages, as is claimed, and we have no reason to doubt it, isn't it more likely that the large, well-capitalised power-mills rather than the slow-moving undercapitalised small-farmer cooperatives will be first to grasp the advantages? The large mills will take control of the small farmers and bakers before the small farmers take control of the large mills.

How matters stand between the peasant and the large power-mills is revealed in the following letter from the grain region of Upper Bavaria, which appeared in the press in the summer of 1897.

Two power-mills dominate the entire area for a day's journey around. The peasants are completely dependent on them. Saturday is cornmarket day in the small provincial town: but only oats are sold there now as the peasants don't dare to bring wheat and corn to market. The two millers are the only buyers, and anyone who goes to market instead of selling to them is punished by being offered 10 Pfennigs less per cwt. The free sale of grain has completely stopped: peasants simply have to turn up with their wares and wait quietly to see what they get. If they refuse to play along, all they get is the answer: Go back home then - I've just bought in 1,000 cwts of Hungarian wheat.

Although the large farm may have a number of advantages over the
small farm in the industrialisation of agriculture – as in other fields – this does not of course prove that the small farm will not derive some considerable benefits from the only form of agricultural large-scale industry available to it – the agricultural producers' cooperative. Where such a cooperative can be established, it allows the farmer to become a capitalist, enrich his agriculture with the fruits of capitalist exploitation, organise it more rationally and generally raise its level.

But how long can a conjuring trick which overnight converts a peasant heading towards the proletariat into a capitalist last?

The establishment of a cooperative does not alter the relationship between the peasants and any outside factory which they supply: they have to adapt their farming to its requirements. The sugar-factory instructs the farmers as to which seeds to use and how to fertilise: the dairy tells them which feed to use, when to milk and even the type of cattle to buy.

Farmers used to shy off heavy nitrogen manuring since this was held to reduce the sugar content of the beet. The factories therefore mostly prescribed a 1:2 ratio of nitrogen to phosphoric acid, and completely forbade a top dressing of Chile saltpetre and the planting of beet in fresh dung. Of these instructions only the ban on top dressing and the planting of beet in fresh dung, which was put out on the fields after Christmas, has been retained. The proportion of nitrogen to phosphoric acid has gradually shifted to the advantage of the former, so that some factories now demand a proportion of 2:3 or 3:4, and many even 1:1. (Karger, *Die Sachsengängerei*, p. 14)

Such instructions cease to be necessary once agriculture has fully adapted itself to the sugar industry.

Stöckel's work on the establishment, organisation and operation of dairy cooperatives (*Errichtung, Organisation und Betrieb der Molkereigenossenschaften*) provides a model management plan for such an institution.

Paragraph Four reads, for example:

This paragraph contains all the instructions necessary for feeding. Certain binding instructions on feeding are an absolute necessity for the sale of fresh milk, and, in particular, the sale of so-called mother's milk. It can also become necessary to establish feeding rules for processing cooperatives, in particular the restricting of feeds which affect the taste and life of the butter.
Paragraph Five. Milking times should be arranged so that milk is delivered directly from the stall to the cooperative.

Paragraph Six. The greatest cleanliness is to be observed during milking.

Paragraph Seven. The members of the Board of Supervision (and the Board of Management) have the right to inspect the stalls and milk storage rooms of members at any time without notice, to be in attendance during milking and to take samples of the milk being obtained. These agents are entitled to demand fully accurate and detailed information from members as to the feeding of the cattle, their treatment, and similar matters. (Stöckel, ibid., pp. 102–4)

In Denmark the creamery societies make regulations for the feeding and management of cattle in order to ensure uniformity of quality and the absence of unpleasant flavourings from particular kinds of food, together with a steady supply of milk in winter. (Royal Commission on Agriculture, 1897, p. 126)

The farmer is therefore denied the final say in how his own farm is run. The farm becomes an appendage of the factory, and has to adapt to its requirements. And the farmer becomes a specialised worker of the factory.

Technical dependence can grow to such an extent that the factory supplies the farmer with feed and fertilisers.

And technical dependence is soon followed by economic dependence. The cooperative not only supplies the means for improving the farm and covering any deficits which may arise, but also – the more the farmer adapts his farming to its requirements – becomes the sole buyer of the farmer's output. Agriculture then ceases to be possible without industry: industry becomes agriculture's backbone. Industry's collapse would be agriculture's ruin.

And such a collapse can happen all too easily.

The greater the profits obtained from agricultural industry, the greater the number of capitalists who apply themselves to it. Large profits can only usually nowadays be made by enterprises with a far-above-average capitalisation, enabling them to defeat any competition both technically and commercially. And they can only be earned either in fields conducive to monopoly by their very nature or open to artificial monopoly, or in fields newly created by technical or economic revolutions and freshly opened up to capitalist exploitation, such as electrical engineering. This type of profit does not persist: the new field is quickly filled up, and chronic overproduction sets in. The
first arrivals get the cream, and the latecomers are left with skimmed milk – and often not even that.

In agricultural industry, the large landowner – in particular when also a capitalist – therefore has an advantage over smallholders and their cooperatives. The larger landowner is more flexible, enterprising, far-seeing and less ponderous than the smaller; and where the necessary preconditions are there, can more quickly set up an agricultural industry, as long as it is profitable.

All agricultural industries – like all other industries – eventually reach the stage where they are overcrowded. Wherever competition rages, prices will be put under pressure, and the weakest and less competent eliminated. Finally, the branch is convulsed by periodic crises, some of which are more generalised, coinciding with the general alternation of economic prosperity and crash, and some of which are specific, the result of particular technical, economic and legislative changes.

The more the state steps in to help these industries, the more agriculture profits at the expense of the population as a whole, the sooner this moment will arrive. The European alcohol and sugar industries are clear illustrations of this fact. Both have been widely stimulated in Germany, Austria, Russia, France by all manner of concessions and privileges, in particular export premiums, which take the form of a rebate on taxes.

Between 1872 and 1881, the number of distilleries processing molasses or farinaceous materials in the Reich tax area increased from 7,011 to 7,280: but the number of distilleries paying over 15,000 Marks in spirits tax increased from 789 to 1,492 – almost double.

Between 1880/81 and 1885/86 the quantity of potatoes used for spirits increased from 1,982,000 to 3,087,000 tonnes.

The upshot of this amazing increase was a crisis, which began in 1884. The first response was for Bismarck’s government to take the ailing industries under its wing. The government finally succeeded in pushing through the 1887 Tax Act which ensured the distilleries their annual 'gift' of 40 million Marks, and was a vigorous counter to overproduction. In 1895 this was supplemented by a new law even more restrictive to the overproduction of alcohol, which raised the domestic price of spirits: the ensuing tax revenue was used to pay an export premium of 6 Marks per hectolitre. But despite this, the ghost of the spirits crash refuses to be laid.

Sugar has also been the happy beneficiary of the state’s goodwill – like alcohol it is produced by the high and mighty. The consequence has been an enormous growth in sugar production. The figures for the German
Factories processed volume supplied tonnage of raw sugar produced

<table>
<thead>
<tr>
<th>Year</th>
<th>Factories processing sugar</th>
<th>Processed tonnage</th>
<th>Volume supplied by factories</th>
<th>Tonnage of raw sugar produced</th>
</tr>
</thead>
<tbody>
<tr>
<td>1871/72</td>
<td>311</td>
<td>2,251,000</td>
<td>1,504,000</td>
<td>186,000</td>
</tr>
<tr>
<td>1881/82</td>
<td>343</td>
<td>6,272,000</td>
<td>3,432,000</td>
<td>600,000</td>
</tr>
<tr>
<td>1891/92</td>
<td>403</td>
<td>9,488,000</td>
<td>4,644,144</td>
<td>1,144,000</td>
</tr>
<tr>
<td>1896/97</td>
<td>399</td>
<td>13,722,000</td>
<td>5,782,051</td>
<td>1,739,000</td>
</tr>
</tbody>
</table>

Compare these figures with those for the export and internal consumption of sugar in the German Reich.

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumption of Sugar</th>
<th>Export of Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>tonnes</td>
<td>tonnes</td>
</tr>
<tr>
<td>1871/72</td>
<td>221,799</td>
<td>14,276</td>
</tr>
<tr>
<td>1881/82</td>
<td>291,045</td>
<td>314,410</td>
</tr>
<tr>
<td>1891/92</td>
<td>476,265</td>
<td>607,611</td>
</tr>
<tr>
<td>1896/97</td>
<td>505,078</td>
<td>1,141,097</td>
</tr>
</tbody>
</table>

Although sugar consumption, and in particular sugar exports have grown enormously, they have recently slipped far behind production. In 1896/97 sugar consumption and exports totalled 1,640,000 tonnes against total output of 1,740,000 - an overproduction of 100,000 tonnes. It should also be borne in mind that the sugar industry greatly benefited from the Cuban War which completely blocked Cuban sugar exports. In 1894/95 overproduction had reached 300,000 tonnes.

Conditions for the sugar industry cannot be expected to improve; they are more likely to get worse. The pressure of overseas competition which necessitates the development of agricultural industries, and the encouragement of such industries by the ever-growing volume of subsidies, is also felt in other countries. In round figures, beet production, expressed in tonnes of raw sugar, was as follows in the early 1890s (figures taken from Schippel, 'Zuckerkrise, Ausfuhrprämien und
Zuckerring', Neue Zeit, XV, 1, p. 622).

<table>
<thead>
<tr>
<th>Year</th>
<th>Germany</th>
<th>Austria</th>
<th>France</th>
<th>Russia</th>
<th>Holland</th>
<th>Belgium and Other European countries</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1891/92</td>
<td>1,200,000</td>
<td>780,000</td>
<td>640,000</td>
<td>550,000</td>
<td>230,000</td>
<td>90,000</td>
<td>3,490,000</td>
</tr>
<tr>
<td>1893/94</td>
<td>1,370,000</td>
<td>840,000</td>
<td>570,000</td>
<td>650,000</td>
<td>310,000</td>
<td>110,000</td>
<td>3,850,000</td>
</tr>
<tr>
<td>1894/95</td>
<td>1,830,000</td>
<td>1,060,000</td>
<td>780,000</td>
<td>620,000</td>
<td>370,000</td>
<td>150,000</td>
<td>4,810,000</td>
</tr>
</tbody>
</table>

An increase of almost one million tonnes in the supply of raw sugar, against an annual increase in world demand of a quarter, at best a third, of this figure.

The best customer for German sugar after England is the United States of America. Exports of raw sugar, and sugar products from the German Reich were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>To Great Britain</th>
<th>To the USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1891</td>
<td>784,000</td>
<td>454,000</td>
<td>140,000</td>
</tr>
<tr>
<td>1896</td>
<td>974,000</td>
<td>513,000</td>
<td>316,008</td>
</tr>
<tr>
<td>1897</td>
<td>1,120,000</td>
<td>564,000</td>
<td>376,000</td>
</tr>
</tbody>
</table>

In the meantime the Americans have been devoting no small amount of effort to establishing their own sugar industry. F.W. Ihne, President of the Polytechnic Society of Chicago, recently invited German engineering companies to take the opportunity to set up sugar-beet factories in America. How patriotic! The Americans’ efforts will increase in proportion to the drop in wheat profits. However, as the above figures show, the sugar industry is capable of extremely rapid growth, and the Americans are just the people to push it sky high.

In the sugar-producing countries of Europe, export premiums are being increased rather than reduced: they were doubled in Germany in 1896 (from 1.25 Marks to 2.5 Marks). The premiums are following the same course already trod by protective tariffs and militarism: once underway, they can't be stopped – even if the wish to do so is there. It is widely acknowledged that the premiums are pushing overproduction towards a fearful crisis – but each individual country thinks that it will suffer the worst should it be the only one to abandon these premiums: and each
hopes that it can hold out longer than their rivals. The population is bled more and more, at the same time as beet cultivation continues to expand, and wider and wider circles of agriculture become chained to the fate of the sugar industry.

The number of hectares planted with sugar-beet increased as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Germany</th>
<th>Austria</th>
<th>France</th>
<th>Russia</th>
<th>Belgium/Holland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1891</td>
<td>336,000</td>
<td>328,000</td>
<td>223,000</td>
<td>310,000</td>
<td>75,000</td>
</tr>
<tr>
<td>1892</td>
<td>441,400</td>
<td>369,000</td>
<td>272,000</td>
<td>331,000</td>
<td>103,000</td>
</tr>
</tbody>
</table>

But the bankruptcy of the sugar industry is becoming increasingly unavoidable: and the devastation which this eventual breakdown must inevitably cause is becoming ever greater.

Dairying in Germany is promoted somewhat less energetically than sugar-processing. Nevertheless, it has grown rapidly under the pressure of foreign competition as grain cultivation becomes less lucrative, as the figures from the dairy cooperatives noted above show. Unfortunately, no detailed statistics of dairying in Germany are yet available. Evidently, only part of the rapid growth in dairying is associated with higher milk production. The number of cows is increasing much more slowly than the production of butter and cheese. The rapid expansion of dairying is more attributable to another factor. Because of difficulties in transportation, milk produced at some distance from the towns could not formerly be brought to market and become a commodity. It was consumed on the producer's farm – by the family and wage-labourers, if any were employed. Going over to dairying allowed the producer to make butter and cheese which could stand more extended transport, and not only make an appearance as a commodity on the domestic market but also on the world market. Nevertheless this deprives farmers of the milk which they and their household once consumed. The expansion of dairying in the country and rural milk consumption took divergent paths.

Apart from being able to work in the fresh air, the superior strength and stamina of the rural population compared with the urban – despite overwork and poor living conditions and the lack of meat in their diet – was principally due to their high consumption of milk. Working in the fresh air ceased once domestic industries became established, and milk consumption came to a stop once dairies began to take the milk from the
rural population. These preferred means for saving the small peasant economically turn out to be highly effective methods for ruining them physically.

Matters are at their worst where the dairies produce cheese. But it seems rather optimistic to hope that if the dairies confined themselves to producing butter as mostly happens in Württemberg, and gave the skimmed milk back to the farmers, the disadvantages of the dairying system for the rural diet would be eliminated: this has been suggested by Landauer-Gerabronn, for example, at the Forty-Second Congress of Württemberg Farmers, held at Hohenheim in 1897. He noted,

Such a type of milk use might cause our doctors to be better disposed towards the dairies than was the case when all milk was delivered to the cheese-makers, without the farmer taking any of the sweet skimmed milk home. Quite correctly, this gave rise to some concern on health grounds amongst doctors and also occasioned one military doctor to make public his disastrous experiences in mustering recruits in some areas.

Skimmed milk can never replace full-cream milk since it lacks the latter's fat content. Full-cream milk contains 2.8–4.5 per cent fat, skimmed milk only 0.2–0.5 per cent. This writer can also recall coming across reports which were no less unhappy about the use of skimmed milk, and found it very pernicious that it was given to babies in dairying regions. Of course, the return of skimmed milk would be least beneficial to the rural population if farmers abstained from drinking it themselves and made commercial use of it by feeding it to pigs, which then thrive quite magnificently and fetch a good price. The more the products of the small peasant become commodities, the more they are transformed into money, the poorer the peasant’s diet.

If the dairying system inflicts indisputable physical damage on the dairy farmer, the economic boost which it is claimed to provide is far from indisputable, aside from the most immediate considerations.

Whilst German butter production is growing rapidly, butter exports are falling and imports rising. The movement of imports and exports was as follows between 1886 and 1897:
Cheese imports and exports were as follows over the same period:

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports (kilogrammes)</th>
<th>Imports (kilogrammes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1886</td>
<td>12,309,000</td>
<td>5,119,000</td>
</tr>
<tr>
<td>1891</td>
<td>7,649,000</td>
<td>7,950,000</td>
</tr>
<tr>
<td>1895</td>
<td>6,857,000</td>
<td>6,890,000</td>
</tr>
<tr>
<td>1896</td>
<td>7,101,000</td>
<td>7,857,000</td>
</tr>
<tr>
<td>1897</td>
<td>3,716,000</td>
<td>10,326,000</td>
</tr>
</tbody>
</table>

Here the picture is also one of falling exports and rising imports. Competition in dairy products on the world market is also rapidly increasing. The supplanting of grain is stimulating dairying in virtually every European country. Denmark in particular has expanded its butter production enormously. The excess of exports over imports increased from 18 million kilos in 1881 to 119 million kilos by 1896. The ratio of cows to the human population has not substantially changed.

<table>
<thead>
<tr>
<th>Cows per 1,000 population</th>
<th>Absolute number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1871</td>
<td>448</td>
</tr>
<tr>
<td>1881</td>
<td>452</td>
</tr>
<tr>
<td>1893</td>
<td>449</td>
</tr>
</tbody>
</table>

The dairying system has also been growing swiftly outside Europe. Canada for cheese, and Australia for butter are particularly relevant.
Canadian cheese exports grew from 106,200,000 lbs in 1891 to 146,000,000 by 1895.

Apart from falling wheat prices, dairy production has also been encouraged by export premiums (2 pence per lb of butter and 1 penny per lb of cheese) in Victoria (until 1893), South Australia (until 1895), and Queensland (until 1898). The 1897 Royal Commission on Agriculture reported on the situation in Australia in the following terms.

One feature of the progress of dairying in Victoria has been the extension of the factory system. According to the latest official information there were 155 butter and cheese factories in operation in the colony, as compared with 74 in 1892, and out of an estimated total production of 35,580,000 lbs of butter in the former year, nearly 27,000,000 lbs were manufactured in the dairy factories. The increase in the exports of butter from Victoria since 1889 has been as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Export (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1889/90</td>
<td>829,000 lbs</td>
</tr>
<tr>
<td>1890/91</td>
<td>1,700,000 lbs</td>
</tr>
<tr>
<td>1891/92</td>
<td>4,794,000 lbs</td>
</tr>
<tr>
<td>1892/93</td>
<td>8,094,000 lbs</td>
</tr>
<tr>
<td>1893/94</td>
<td>17,141,000 lbs</td>
</tr>
<tr>
<td>1894/95</td>
<td>25,948,000 lbs</td>
</tr>
<tr>
<td>1895/96</td>
<td>21,024,000 lbs</td>
</tr>
</tbody>
</table>

(Royal Commission on Agriculture, 1897, p. 80)

There are similar reports of rapid growth in dairy production from Queensland and New South Wales; in the latter colony, butter production rose from 15,500,000 lbs in 1889 to 27,359,000 lbs in 1895.

The following extract from the report on New South Wales is of particular interest:

It seems that dairying is not now, as formerly, wholly confined to farmers, since many graziers in a large way of business, especially near the coast, have lately turned their attention to the industry. When the factory system was first introduced, the factories were mostly cooperative and the process of cream separation and butter-making were carried on together. This arrangement is gradually dying out, and central butter factories, fed by numerous separating establishments called 'creameries' are taking the place of the others. The advantages gained from this change are said to be considerable; a butter of more uniform quality is made in each centre,
and there is a reduction in the cost of manufacture owing to the greater quantity made and the use of improved appliances, such as refrigerators, which the larger establishments can profitably provide. (Royal Commission on Agriculture, 1897, pp. 80-1)

As with exported German sugar, England is the largest consumer of German exports of butter. Of the 7,101,000 kilos of German exports in 1896, 5,570,000 went to England; and of the 3,716,000 kilos in 1897, 2,766,000. But these figures also show that German butter is rapidly losing its place in the English market. Butter imports into England in percent were broken down as follows in the period between 1887 and 1895:

<table>
<thead>
<tr>
<th></th>
<th>Denmark</th>
<th>Norway and Sweden</th>
<th>France</th>
<th>Holland</th>
<th>Germany</th>
<th>Australia</th>
<th>Other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1887</td>
<td>32.3</td>
<td>11.3</td>
<td>27.5</td>
<td>10.7</td>
<td>10.3</td>
<td>0.4</td>
<td>7.5</td>
</tr>
<tr>
<td>1890</td>
<td>40.7</td>
<td>11.3</td>
<td>25.9</td>
<td>7.7</td>
<td>5.1</td>
<td>2.0</td>
<td>7.3</td>
</tr>
<tr>
<td>1893</td>
<td>40.2</td>
<td>12.4</td>
<td>20.1</td>
<td>6.1</td>
<td>7.1</td>
<td>7.3</td>
<td>6.8</td>
</tr>
<tr>
<td>1894</td>
<td>42.8</td>
<td>11.0</td>
<td>16.5</td>
<td>6.4</td>
<td>5.4</td>
<td>11.3</td>
<td>6.6</td>
</tr>
<tr>
<td>1895</td>
<td>41.1</td>
<td>11.5</td>
<td>16.1</td>
<td>6.8</td>
<td>4.0</td>
<td>11.1</td>
<td>9.4</td>
</tr>
</tbody>
</table>

Australia's rapid rise is especially noticeable. The Danish dairies are being hard-pressed by Australian competition, which forces down prices and threatens their markets.

Nevertheless, German cooperative members are busy, eagerly trying to increase the number of dairies. They are proud of the rapid growth seen over the last few years, as if the lucrativeness of a business was to be judged by the number of competitors. Of course, as saviours of the peasantry they are forced to strike such an attitude. Irrespective of how many dairy cooperatives there might be, it will never be enough when set against the number of peasants who await their salvation by this brilliant method. But butter and cheese production will have fallen victim to overproduction and crisis long before any major portion of the peasantry will have been rescued by dairying cooperatives.

In Denmark, the promised land of dairy cooperatives, many are already in dire straits. The gloomiest reports were given on the position of the butter producers during the committee stage of the German Margarine Act. But this did not inhibit the conference of agricultural cooperatives at Dresden from triumphantly announcing that 175 new
dairies had been established in 1896, and a further 177 in 1896. And the fever seems likely to continue to rage ever more strongly. The more perceptive cooperatives are already beginning to raise warning voices. Landauer-Gerabronn noted:

An extraordinarily powerful movement for the founding of new dairies had made itself felt over the last year. If this continues it cannot be ruled out that the number of dairies could double within two or three years, and might even triple. In the Gerabronn district no new dairies had been established in the 16 years since the first, but no less than ten new dairies have appeared in the last six months and more are expected in the immediate future. Plans are on such a grand scale that even enthusiastic admirers of cooperative activity are beginning to shake their heads and wonder if the setting up of so many dairies might not be indirectly exposing agriculture to very serious dangers.

Along with an alcohol and a sugar crisis, a dairying crisis is also now inevitable. In fact, this goes without saying for any large-scale industrial enterprise.

Sering also complained about the bitter competition between the dairy cooperatives. At a lecture to the Royal Prussian State Agricultural Board in February 1897 he offered the consolation that there are now hopes that these problems can be surmounted by a further extension of the cooperative idea, or more likely by the same method now uniquely reshaping our large industries, the cartel system. Individual dairies are being urged to join the large retail butter cooperatives in larger numbers than before, and to commit themselves to the exclusive sale of a portion of their output through these retail cooperatives. The enlarged and strengthened retail butter associates will then seek to divide the market amongst themselves, and hence overcome the ruinous and unpredictable competition which formerly prevailed; surpluses should be disposed of abroad [to England] even if this means sacrifices.

Interestingly, Professor Sering's recommendation of this splendid approach occurs in the same speech in which he shortly beforehand indignantly declared: 'Retail cooperatives are most indispensable in a period in which industrial cartels are growing: there is no other protection against the misuse of the economic power which association confers on manufacturers than an association of consumers' (Sering, in Thiels landwirtschaftliches Jahrbuch, 1897 Supplement, pp. 223, 225).
So, whilst the agrarian cartel is 'an extension of the cooperative idea', the industrial cartel is a 'misuse of economic power' which can only be combatted by extending the cooperative idea. The cooperative is praised as the means of dealing with the cartel, and the cartel is praised as the means of avoiding the otherwise inevitable bankruptcy of the cooperative. The Professor's logic is at about the same level as his moral indignation.

But this is not the most interesting thing about his arguments. What is noteworthy is that they confirm the difficulties experienced by the dairies and preach the cartel as the only way out – a strategy made impossible by the constant increase in the number of dairies. And this has to be admitted by a luminary of agrarian science in a hymn of praise to the miraculous workings of the cooperative system!

The same applies to the other agricultural large-scale industries which have not been of such significance for the cooperative system.

Of course, the coming crisis does not have to ruin the industry which it afflicts. In fact, this is a rare occurrence. The usual outcome is a transformation of the prevailing property relations into a more capitalist shape – carrying out exactly what the cooperative is supposed to prevent.

The small, inadequately-equipped and under-capitalised enterprises will go under in a crisis. But the ruin of a factory in an agricultural industry is not confined to that enterprise alone: it drags down, or at least undermines, very many dependent agricultural existences with it. And the greater the prop offered by the industry, the more farmers relied on it, the more devastation its bankruptcy will unleash.

The larger, better-equipped, enterprises can survive, although they will be forced to pass through a difficult period in which profits will dry up and production will only be sustainable through increasing amounts of subsidy. Cooperative members who cannot afford to make such advances lose their rights in the cooperative. If the insolvency of the cooperative members becomes generalised, nothing remains but to sell the undertaking to a capitalist; if it is not generalised, the crisis will lead to the undertaking becoming the private property of a few rich cooperators who will run it on purely capitalist lines.

This process does not mean the inevitable proletarianisation of the former cooperative members: if they are lucky they can hang on to their peasant holdings. But even then, their economic dependency on the former cooperative undertaking will remain intact – being transformed from dependency on an association whose members, as farmers, shared equal rights and interests, into dependency on one (or several) dominant capitalists with antagonistic interests. The specialised workers of the cooperative factory become wage-labourers of a capitalist factory. And
matters are not improved by the fact that, as in domestic industry, this form of wage-labour is a hidden one. This is the inevitable end to agricultural producer cooperatives.

As everywhere else in capitalist society, industry finally wins out over agriculture, and capital over individual producer cooperatives.

Because such cooperatives hold out the prospect of immediate benefits to farmers, they in fact prove to be a powerful means for furthering the industrialisation of agriculture and hence for clearing the path for domination by capital – a path on which capital might otherwise have encountered difficulties.

We do not mean to underestimate the significance of these cooperatives. They are important for the revolutionising of agriculture: but they are not a means for saving the peasant.

However, the cooperative system has its limits.

The laws that apply to every other industry also apply to the agricultural industries. Concentration and centralisation of enterprises, which encounters so many strong counter-tendencies in agriculture, is making rapid progress: as with other industries, the tendency towards the large undertaking dominates the agricultural industries.

This is most evident in the, admittedly state-fostered, field of sugar-processing. The number and size of enterprises grew as follows in the German Reich between 1871/72 and 1896/97.

<table>
<thead>
<tr>
<th></th>
<th>Sugar factories</th>
<th>Processed tonnage of beet</th>
<th>Average tonnage per factory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1871/72</td>
<td>311</td>
<td>2,250,918</td>
<td>7,237</td>
</tr>
<tr>
<td>1881/82</td>
<td>343</td>
<td>6,271,948</td>
<td>18,286</td>
</tr>
<tr>
<td>1891/92</td>
<td>403</td>
<td>9,488,002</td>
<td>23,543</td>
</tr>
<tr>
<td>1896/97</td>
<td>399</td>
<td>13,721,601</td>
<td>34,389</td>
</tr>
</tbody>
</table>

This represents virtually a five-fold increase in the average tonnage of beet processed by the individual factory within a space of 25 years.

The same trend can also be seen in the field of potato distilling, albeit on a less dramatic scale, up until the passing of tax laws designed to curtail the growth of production. The Reich Statistical Yearbook shows that the number of distilleries processing potatoes, grain or molasses increased from 7,011 in 1872 to 7,280 by 1881/82. However, the number of those paying a spirits tax of less than 15,000 Marks annually fell from 6,222 to 5,788, whilst those over this level increased from 789 to 1,492.
Moreover, the scale of production changed as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Potato distilleries</th>
<th>Processed tonnage of potatoes</th>
<th>Average tonnage per distillery</th>
</tr>
</thead>
<tbody>
<tr>
<td>1882/83</td>
<td>4,180</td>
<td>2,392,000</td>
<td>572</td>
</tr>
<tr>
<td>1886/87</td>
<td>4,069</td>
<td>2,719,000</td>
<td>668</td>
</tr>
</tbody>
</table>

After 1887/88 the output per distillery within the Reich tax area has remained at the same average level, although it should be noted that the smallest distilleries have shown a marked decline in numbers.

<table>
<thead>
<tr>
<th>Size Interval</th>
<th>1890/91</th>
<th>1894/95</th>
<th>Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 50 litres</td>
<td>1,300</td>
<td>513</td>
<td>-787</td>
</tr>
<tr>
<td>50-500 litres</td>
<td>731</td>
<td>720</td>
<td>-11</td>
</tr>
<tr>
<td>500-5,000 litres</td>
<td>632</td>
<td>657</td>
<td>+25</td>
</tr>
<tr>
<td>5,000-50,000 litres</td>
<td>1,931</td>
<td>1,983</td>
<td>+52</td>
</tr>
<tr>
<td>Over 50,000 litres</td>
<td>1,793</td>
<td>1,758</td>
<td>-35</td>
</tr>
</tbody>
</table>

The dairies are also naturally subject to the laws of development of modern large-scale industry. Technical progress will not stand still just for them. Hand-operation is being replaced by steam-power, machines increase in number and size, and with this their productivity; processing and storage areas grow, markets expand, and with them the need to employ commercially trained staff, who can only be properly utilised by a large enterprise.

We saw above how the dairies in New South Wales are steadily increasing in size. The same is also reported from Belgium. A report from Colard Bovy to the 1885 International Agricultural Congress confirmed that inadequate and poorly managed small cooperatives were steadily retreating before the larger cooperatives, 'which can process large quantities of milk at the lowest prices and under better conditions, and can supply produce of constant uniformity. These advantages are maximised if the establishment is in the charge of a diligent official' (cited in Vandervelde, 'Agrarsozialismus in Belgien', Neue Zeit, XV, 1, p. 755).

The development of the foodstuffs industry in the German Empire is
shown in the following figures, based on data from the 1882 and 1895 occupational statistics.

**Number of wage-labourers and clerks per 100 managers (owners and employed managers)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Grain mills</th>
<th>Sugar processing</th>
<th>Production of other vegetable food products</th>
<th>Production of animal products (except meats)</th>
<th>Malting and brewing</th>
<th>Brandy distilling, liqueurs</th>
<th>Sparkling wine, cider, perry, wine-conditioning</th>
<th>Vinegar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1882</td>
<td>101</td>
<td>2,831</td>
<td>688</td>
<td>141</td>
<td>364</td>
<td>299</td>
<td>256</td>
<td>162</td>
</tr>
<tr>
<td>1895</td>
<td>237</td>
<td>5,764</td>
<td>1,231</td>
<td>315</td>
<td>759</td>
<td>413</td>
<td>315</td>
<td>237</td>
</tr>
<tr>
<td>Increase</td>
<td>76</td>
<td>2,933</td>
<td>543</td>
<td>174</td>
<td>395</td>
<td>114</td>
<td>59</td>
<td>75</td>
</tr>
</tbody>
</table>

1 Conserves, vegetable compresses, coffee substitutes, cocoa, starch, noodles.

2 Salt-fish, conserved milk, butter and cheese processing.

The growth in the size of establishments is visible everywhere: the number of wage-labourers is increasing much more quickly than that of owners and managers in all the agricultural industries. The increase is over 100 per cent in beet-sugar processing, dairying and brewing, and 400 per cent in the production of vegetable conserves.

The Nestlé company provides a good example of such expansion. The company owns two large factories in Switzerland for the production of condensed milk and one factory for producing cereal foods for infants. The latter, in Vevey, has a daily throughput of 100,000 litres of milk, the produce of 12,000 cows from 180 villages – 180 villages which have lost their economic independence and become subjects of the House of Nestlé. Although their inhabitants are still the nominal owners of their land, they are no longer free peasants.

As this development proceeds and the capital sum needed to set up a competitive undertaking increases, the number of farmers able to take the step of setting up a producers' cooperative declines: the likelihood increases that any new undertaking will be capitalist from the outset, as can already be seen with sugar-beet processing and potato distilleries. Those cooperatives which are established in these branches of industry are almost entirely composed of big peasants and Junkers.

If every rural producers' cooperative is inevitably threatened with falling into the clutches of a capitalist every time a crisis occurs, sooner
or later the time will come when the small peasant will no longer have access to such institutions, and the industries will become the monopoly of capitalists and large landowners. This development also generally leads to small-scale agriculture being supplanted by large. Again the sugar industry provides us with the best demonstration of this. The advantages of agricultural mechanisation are most evident where the motive power for the machine does not have to be specially obtained but can be supplied by a factory located on the estate itself.

When this does not lead to the decline of the small farm, the industrialisation of agriculture sets the seal on the small farmers' dependence on the factory, the sole buyer of their products. They become fully subordinated to industrial capital, and their farming is directed solely to meeting its requirements.

This is the salvation which agricultural industry offers to the peasant.

The Displacement of Agriculture by Industry

Although the development of agricultural industry may offer farmers some new, if temporary, support, the advance of technology sets in train developments which put them under great pressure and ruin individual branches of farming. One element in this is greater economy in the use of raw materials: with constant consumption of the end-product, the demand for raw materials will fall, and with increasing demand for the end-product demand will not rise as fast. Industrial progress also tends to replace high-value raw materials by low-value ones, especially via the use of waste and the production of surrogates. Finally, industry may even advance so far that it can begin to produce materials previously supplied by agriculture, or can make such effective substitutes that the agricultural product is no longer required.

A few examples will serve to illustrate this point. The major loss of nutrients caused by imperfect grinding of corn is well-known. Advances in milling are constantly reducing these losses.

In the seventeenth century, Vauban estimated the annual consumption of a man at nearly 712 lbs of wheat, a quantity which now suffices nearly for two men; and by the improvements in mills there are now gained to the population immense masses of nutritious matter, of the annual value of many millions, which were formerly used for animals alone; whereas for the feeding of animals the bran may be far more easily replaced by other food, not in the least adapted for the use of man ... Wheat does not contain above 2 per cent of woody indigestible
fibre, and a perfect mill, in the most extended sense, should not yield more than that proportion of bran; but practically the best mills always yield, even now, from 12 to 20 per cent (10 per cent coarse bran, 7 fine bran, 3 per cent bran flour); and the ordinary mills produce as much as 25 per cent of bran, containing 60 or 70 per cent of the most nutritious constituents of the flour. (Liebig, *Familiar Letters of Chemistry*, pp. 464-5)

In 1877, a Herr Till, the owner of a power-mill, claimed to have invented a milling process which yielded 92.6 per cent flour and only 7.4 per cent bran and waste (Till, *Die Lösung der Brotfrage*). We have not come across any greater reduction in bran. Trials are also currently underway to make the nutrients in the bran, in particular the protein, digestible through chemical means.

Clearly, if flour consumption remains constant, any advance in milling must result in a reduction in the demand for grain. The same result as an actual fall in demand will occur even with rising demand if the mass of grain coming on to the market is increasing as fast, or even faster, than the consumption of flour. The displacement of primitive mills by power-mills is bound to exacerbate the effects of the crisis on the grain market.

Attempts to transform the nutrients in bran into a form digestible by humans is one example of the use of waste and the production of surrogates.

The increasing use of waste is one of the most fundamental and unique features of the modern mode of production. It is the natural outcome of large-scale production, which accumulates waste in enormous amounts at particular points. The need to dispose of it stimulates experiments in finding industrial applications – transforming a source of problems and unproductive expenditure into a source of profit.

These wastes have become very important for agriculture. The waste products churned out by large-scale industry – such as distilling, sugar-making, brewing, oil-mills, together with 'Thomas powder' and wood ash – supply agriculture with animal feeds and fertilisers and function as a powerful force binding agriculture to industry. Conversely, industry also appropriates the wastes from agricultural products and uses them to compete against agriculture.

The production of oil from cotton-seed is a good example: this was previously thrown away, or at most used as a fertiliser in the cotton plantations. Having discovered how to extract oil from the seed, this industry is rapidly stepping up its competitive challenge to the European oil-producing plants. In Germany oil imports have advanced as follows:
Cotton-seed oil is used in particular in the adulteration of olive-oil and the production of synthetic butter, margarine, which is manufactured from ox-tallow, milk and cheap oils - especially cotton-seed oil - and is scarcely distinguishable from butter in terms of taste and physiological effect. The first synthetic butter factory was established in Germany in 1872, and there are now approximately 60.

Such a development will obviously not do much to improve the already crisis-stricken butter market. The escalating complaints of the agrarian lobby, which won them new limitations on the margarine industry in 1896, are certainly exaggerated: but the counter-claim that farmers have not been damaged by synthetic butter is also equally overstated. It is little consolation to the farmers to point out that the manufacture of synthetic butter is itself in difficulties. This fact is not so much expressed in losses for individual factories - the same phenomenon can be found in the poorly managed, unfortunately located or inadequately equipped plants even in prospering branches - as in the statistics of that country in which competition between margarine and butter is least restricted: Great Britain. Imports into Great Britain developed as follows between 1886 and 1895:

<table>
<thead>
<tr>
<th>Year</th>
<th>Butter cwts</th>
<th>(of which Australian)</th>
<th>Margarine cwts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1886</td>
<td>1,452,000</td>
<td></td>
<td>870,000</td>
</tr>
<tr>
<td>1892</td>
<td>2,107,000</td>
<td>4</td>
<td>1,293,000</td>
</tr>
<tr>
<td>1895</td>
<td>2,750,000</td>
<td>11</td>
<td>922,000</td>
</tr>
</tbody>
</table>
Cheap Australian butter is not only putting pressure on the producers of natural butter, but also those of synthetic butter. This will not, of course, lead to the demise of synthetic butter production but rather to improvements in production methods, something from which the producers of natural butter have nothing to gain.

Even if we did not dispute the fact that dairies are being damaged by margarine production, this would not imply that we ought to approve of attempts to hinder the production of the latter to the advantage of the former. Evidently, it is a matter for regret when the bankruptcy of a cooperative dairy propels large numbers of hard-working peasants into the proletariat: but it is no less cause for sadness when equally hard-working proletarians lose their livelihoods because of a new machine. This is how technical progress takes place in present-day society. Anyone wishing to do away with this method of progress must also be prepared to do away with this social order in its entirety. It is sheer nonsense to use all means available to maintain this order on one hand, yet seek to suppress its consequences on the other. And such nonsense actually becomes a disgrace if, in seeking to put it into practice, passing or sectional interests dictate that a small number of producers are accorded the privilege of being sheltered from any technical progress which might impinge on their profits at the expense of society in general.

In a modern state the mass of the population will not tolerate such a privilege indefinitely: and it is therefore utopian to protect agriculture from the onward march of industry by these means. The agrarians' desperate efforts to do so merely expose the extent to which they are threatened by capitalist large-scale industry in the food sector, and the importance of industry relative to agriculture.

Of all the surrogates produced by large-scale industry, synthetic butter along with synthetic cheese have had the greatest impact on agriculture so far. But they are not the only ones working in this direction.

Beer brewing has gone through an enormous upswing in almost every country in Europe in the last few decades.

<table>
<thead>
<tr>
<th>Germany Year</th>
<th>Hectolitres</th>
<th>Great Britain Year</th>
<th>Hectolitres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1872</td>
<td>32,945,000</td>
<td>1873</td>
<td>35,700,000</td>
</tr>
<tr>
<td>1882/83</td>
<td>39,250,000</td>
<td>1881</td>
<td>44,774,000</td>
</tr>
<tr>
<td>1890/91</td>
<td>52,730,000</td>
<td>1891</td>
<td>52,675,000</td>
</tr>
<tr>
<td>1895/96</td>
<td>60,563,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Agrarian Question

<table>
<thead>
<tr>
<th>Year</th>
<th>Austria Hectolitres</th>
<th>Belgium Year</th>
<th>Hectolitres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>9,303,400</td>
<td>1870</td>
<td>7,794,000</td>
</tr>
<tr>
<td>1880</td>
<td>10,530,000</td>
<td>1880</td>
<td>9,238,500</td>
</tr>
<tr>
<td>1890</td>
<td>13,570,000</td>
<td>1890</td>
<td>10,770,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>France Hectolitres</th>
<th>Russia Year</th>
<th>Hectolitres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1872</td>
<td>7,131,000</td>
<td>1866</td>
<td>2,200,000</td>
</tr>
<tr>
<td>1885</td>
<td>8,010,000</td>
<td>1884</td>
<td>4,212,000</td>
</tr>
<tr>
<td>1890</td>
<td>8,490,000</td>
<td>1890</td>
<td>8,490,000</td>
</tr>
</tbody>
</table>

In Denmark beer production grew from 1,200,000 hectolitres in 1876 to 2,185,000 by 1891. In Sweden production increased from 419,815 to 1,240,811 between 1880 and 1890; beer production in Switzerland increased from 280,000 in 1867 to 650,000 by 1876, 1,004,000 by 1886 and 1,249,000 in 1891.

One might think that hop production would have increased at the same rate. Nothing could be further from the truth. It has only increased very slightly. In 1867 the European hop harvest was put at 50,000 tonnes. The figure was still the same in 1890 (of which 24,705 was produced in Germany and 15,000 in England). In 1892 the harvest amounted to 57,550 tonnes (of which 24,150 was produced in Germany and 19,000 in England).

In England annual beer production rose from 35 million hectolitres in 1873 to 52 million by 1891, an increase of almost 50 per cent. In contrast the area under hops fell from 24,000 in 1871 to 23,000 in 1892. And according to the Royal Commission the import of hops, 'has remained practically stationary throughout the last 20 years. Taking the period 1876-78, the average annual importation of hops from all sources was 195,000 cwts, and in 1893-95, it amounted to 203,000 cwts' (Royal Commission on Agriculture, 1897, p. 83).

Developments in Germany are illustrated in the following table:
<table>
<thead>
<tr>
<th></th>
<th>1884</th>
<th>1896</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hop harvest</td>
<td>28,870 tonnes</td>
<td>25,325 tonnes</td>
</tr>
<tr>
<td>Hop imports</td>
<td>1,340 tonnes</td>
<td>3,041 tonnes</td>
</tr>
<tr>
<td>Total</td>
<td>30,210 tonnes</td>
<td>28,366 tonnes</td>
</tr>
<tr>
<td>From which hop exports</td>
<td>11,514 tonnes</td>
<td>9,868 tonnes</td>
</tr>
<tr>
<td>Remaining quantity</td>
<td>18,696 tonnes</td>
<td>18,498 tonnes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1884/85</th>
<th>1896/97</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer production</td>
<td>42,287,000 hectolitres</td>
<td>61,486,000 hectolitres</td>
</tr>
<tr>
<td>Hectolitres of beer per tonne hops</td>
<td>2,260</td>
<td>3,324</td>
</tr>
</tbody>
</table>

Rising beer production has therefore done absolutely nothing to help hop producers. It has simply encouraged the production of hop surrogates.

The development of chemistry has afflicted vine-growers even more seriously than hop growers in showing how to manufacture grape-sugar, the best known method for improving low-quality wines from potato-starch, rag or wood fibres. And chemistry has also shown how wine can be manufactured from draff or raisins using sugar and other products of agricultural industry.

Even so-called 'natural wines' are now increasingly obliged to pass through a number of processes requiring scientific knowledge and expensive equipment, making natural wine more and more a product of capitalist large-scale industry, to which the vine-grower merely supplies the raw material.

In other words the wine-cellar is becoming a wine-factory.

In his speech 'The Position of Legislation on Wine Preparation', given to the Royal Prussian State Agricultural Board in February 1897, Professor Märcker noted:

Wine is not a fully natural product; it does not grow ready for the bottle on the vine, but has to pass through a lengthy process in its treatment once in the cellar until a noble wine has been obtained from the sweet must. The preparation of wine has occasioned many scientific studies in recent years. Much progress has been achieved in that we are gradually learning how to produce natural wine from low-quality grapes. Of prime importance is the rise of selective yeast breeding.
Many types of yeast fungus cling to the peel of the grapes and cause fermentation.

It is known that there are various strains of yeast, and that the yeast which grows on the Johannisberg in Geisenheim produces a wine of a quite specific character: attempts have been made to breed a pure yeast strain in order to obtain a specific type of wine. Those of a sanguine disposition thought that once positive results had been obtained, grape growing could be eliminated together. All that would be required would be to add yeast to sugar solution, and produce the finest Johannisberger or Steinberger.

Clearly, one ought to be enthusiastic about such a prospect: not only sugar-plums for the masses but now Johannisberger too. Wouldn't this be the beginning of heaven on earth?

This is how a socialist might think – but not an agrarian. Good fortune for the population at large – a plentiful supply of foodstuffs and luxuries – would be a disaster for ground-rents. If anyone can make their own Johannisberger out of sugar-solution, think of the catastrophic effects this would have on those vineyards currently producing such wines. Professor Märcker continues, somewhat relieved:

Thank God, this has not yet happened. But we have succeeded in producing a much better wine with the pure yeast than without it, and we can get much better prices for our products. And this only a few years after pure yeast was first used.

The yeast fungi have respectfully refrained from encroaching on ground-rents. But might not these microscopic young blades one day abandon their loyal posture and turn rebellious? Producing Johannisberger from scrapings is just the beginning: why not go on and make wine out of sugar-solution?

The improvement of wine cannot be prohibited – this much is admitted by Professor Märcker himself in his speech. Statistics tell us that only one vintage in ten is really excellent, three good, three average, and three poor. Such sour wines cannot be drunk by educated palates. To put a ban on the improvement of wine would cause serious damage to the growers themselves.

In addition to draff and improved wines, we also have raisin-wines.

Raisins, stirred in water, chopped and left to ferment can produce quite excellent wines when used in conjunction with pure yeast strains.
It is a very good and drinkable wine, having all the character of a wine and representing serious competition to our German wines. It is immune to analysis and enormously cheap: 100 litres can be produced for 12 marks. This is therefore competition which has to be combated by legislation.

Imagine the calamities which would befall the German people were raisin-wine to displace potato hooch!

Pure yeast strains can also be used to produce wine-like drinks from malt. A large factory is currently producing such malt-wine in Hamburg. We note here one observation made during the discussion of this speech by Privy Councillor Thiel who, amongst other things, said that the small vintners are not in a position to undertake the necessary improvements themselves and that only the large vineyard owners and wine-traders could do it. Meitzen wrote in similar vein in the 1860s:

Only the larger owners and prosperous growers can actually press, treat the wine in the cellar and then wait to sell it at a favourable moment. The number of poorer growers who do not possess the means to do this is currently 12-13,000 (in pre-1866 Prussia). They sell the grapes immediately after picking to obtain ready money quickly, and have often sold off the profits from the grapes against advances. The mass of grapes ceded to the dealers and wine-producing manufacturers by this class of grower in the autumn of 1864 was put at 69,405 cwts by the tax authorities. (Meitzen, Der Boden und die landwirtschaftlichen Verhältnisse des preußischen Staates, II, p. 275ff.)

The dependence of small growers on the dealers is bolstered by the uncertainty of grape yields. Not only, as Märcker noted, are there fluctuations in quality, so that only one crop in ten will produce an excellent and three in ten a poor vintage, but quantities vary equally as much.

Meitzen cites wine yields (in pails) for the period 1821 to 1864 in his above work (p. 277). Extracting some of the salient figures gives the following picture:
Under such conditions wine growing is a game of pure chance, in which the ultimate winner is the one with the largest — and annually replenishable — purse. A poor year will bankrupt a small under-capitalised grower, or drag him into hopeless debt-servitude.

The cooperative system is also supposed to be the saviour here. Cooperative cellars are intended to enable the small grower to pocket the profits both from improved wines and from trading in wine. But like the agricultural producers' cooperatives, these are inaccessible to the very small grower lacking in capital, and, like any other producers' cooperative, sooner or later degenerate into a capitalist form or become capitalist property. As such they merely accelerate the development by which the grower becomes increasingly dependent on the factory, on the cellar, and is transformed into a specialised worker within the wine industry.

But the same technical development which makes the grower ever more dependent on the manufacturer also makes the latter increasingly independent of the indigenous grower. Rapidly rising quantities of cheap foreign wine can be imported and improved: and increasing amounts of cheap raw material of other sorts from which wine can be made can also be obtained.

The revolutionising of wine production can be followed most clearly in France. Phylloxera and other blights caused the grape yield of the country to fall precipitously. Annual production was as follows:

<table>
<thead>
<tr>
<th>Ten year average</th>
<th>Area of grape cultivation</th>
<th>Yield per hectare</th>
<th>Total consumption</th>
<th>Surplus or Deficit</th>
<th>Export of Wine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>hectares</td>
<td>hectolitres</td>
<td>hectolitres</td>
<td>hectolitres</td>
<td>hectolitres</td>
</tr>
<tr>
<td>1870-1879</td>
<td>2,364,175</td>
<td>22.4</td>
<td>52,935,956</td>
<td>38,100,000</td>
<td>+14,800,00</td>
</tr>
<tr>
<td>1880-1889</td>
<td>2,052,897</td>
<td>16.3</td>
<td>33,499,782</td>
<td>36,400,000*</td>
<td>-3,000,000*</td>
</tr>
<tr>
<td>1887</td>
<td>1,919,878</td>
<td>13.6</td>
<td>25,365,441</td>
<td>34,000,000</td>
<td>-9,000,000</td>
</tr>
<tr>
<td>1891</td>
<td>1,763,374</td>
<td>17.0</td>
<td>30,139,000</td>
<td>not known</td>
<td>not known</td>
</tr>
</tbody>
</table>

* 1880-1884
Although wine consumption has far exceeded production since the beginning of the 1880s, exports have barely fallen at all. This is partly explicable by the accumulated surpluses of previous years, and partly through the import of lower-quality wines which are improved and then either consumed in France itself or exported as fine French wines.

Wine imports (in thousands of hectolitres) were as follows:

<table>
<thead>
<tr>
<th>From</th>
<th>1878</th>
<th>1889</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>1,347</td>
<td>7,052</td>
</tr>
<tr>
<td>Algeria</td>
<td>1</td>
<td>1,581</td>
</tr>
<tr>
<td>Portugal</td>
<td>16</td>
<td>875</td>
</tr>
<tr>
<td>Austria-Hungary</td>
<td>9</td>
<td>422</td>
</tr>
<tr>
<td>Turkey</td>
<td>8</td>
<td>194</td>
</tr>
<tr>
<td>Greece</td>
<td>0</td>
<td>146</td>
</tr>
</tbody>
</table>

The manufacture of synthetic wine has increased over the same period. According to official figures the total production of synthetic wine was as follows:

<table>
<thead>
<tr>
<th>Dried grapes</th>
<th>Draff</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>hectolitres</td>
<td>hectolitres</td>
<td>hectolitres</td>
</tr>
<tr>
<td>1880</td>
<td>2,320,000</td>
<td>2,130,000</td>
</tr>
<tr>
<td>1890</td>
<td>4,293,000</td>
<td>1,947,000</td>
</tr>
</tbody>
</table>

The true figures may be considerably higher. Only part of this industry is conducted above board.

The import of raisins into Germany increased from 12,994,000 kilos in 1886 to 32,846,000 in 1895. The lion's share of this increase is accounted for by wine manufacture. In addition, the import of fresh grapes rose from 3,381,000 in 1886 to 19,371,000 by 1895.

Moreover, foreign competition was also readiness itself in this field, notably in Africa (Algiers, Tunisia, the Cape), in the USA (in particular California), and in Chile, Uruguay, Argentina, and Australia. In Algiers 17,600 hectares were planted with vines in 1878, 96,624 in 1889, and 116,000 in 1893 with a total yield of 3,800,000 hectolitres. In the USA 1,500,000 were produced in 1889, the same in Argentina, and
The surrogates and waste products dealt with so far are still raw materials if of low value—produced by agriculture. However, industrial development has advanced so far in some areas that it can now fully produce materials which once had to be obtained from agriculture.

The best-known of these are the successes registered by chemistry in the processing of tar. This is not only used to obtain an uncommonly large and daily increasing number of completely new materials, which are especially important in medicine, but can also very cheaply produce materials previously furnished by agriculture.

Madder, for example, was an important commercial crop until the 1870s in some parts of Europe, especially Holland, Southern France and South Germany. The extraction of alizarin from coal-tar by Graebe and Liebermann in 1868, a substance increasingly used in aniline factories since 1870, spelt doom for madder cultivation.

Saccharin, another product of coal-tar, discovered in 1879 and produced en masse since 1886 was also initially expected to have a similar impact on sugar-beet cultivation. This has not come about, however. Although saccharin is 500 times sweeter than cane-sugar, it can only replace sugar as a sweetener, not as a nutrient. Nevertheless, it has pushed sugar out of a number of former uses, and thus acts to put a brake on the expansion of its consumption.

Alcohol can also be obtained from tar, although not yet in a form suitable for industrial exploitation.

The advances of electrical engineering appear to be of greater—and more disagreeable—significance for agriculture. It seems to have managed what steam-power never did—the almost complete expulsion of the horse from economic life.

Steam-power is best fitted to move large loads with little interruption to the operation. It has displaced the horse from the movement of loads over long distances. But the growth of large towns, stimulated and in fact caused by the railway system, required increasing short haulage which until recently could only be met by the horse. And despite its value in carrying out many tasks on the farm, steam-power has not been able to push the horse out of agriculture.

Electricity, whose power is easily divisible and transmissible over long distances, which can be switched on and off at will, whose motors are compact and easy to operate, is able to take over the functions of the horse as motive power both in transport and agriculture, and has already done so in many instances. Other technical advances are also working towards the displacement of the horse from transportation.
Electric trams, electric cars and buses are being joined by another type of motor vehicle: and the spread of human-propelled bicycles is making advances whose speed is not only an inexhaustible source of material for jokes and moral outrage, but also of fat profits for cycle manufacturers and dealers.

The effect of all this is clear: the demand for horses must fall, the production of horses must become unprofitable. In the USA, where the electric tram has already displaced the horse-drawn coach to a greater extent that in Europe, this has already happened. An English farmer, who knows the situation in America at first hand, writes:

One has recently been hearing numerous complaints about the horse business. The production of horses seemed particularly unprofitable in America: horse producers told me that they often could not sell their own raised stock at all because of lack of buyers: the supply was bigger than the real need. This did not surprise me, since every small town in America now has an electric or cable railway instead of a horse-drawn way. The practical American has long since discovered that electricity is cheaper than the expensive keeping of horses. I was often astonished at the spread of electricity to even the smallest villages. (König, Die Lage der englischen Landwirtschaft, p. 408)

As a consequence, the number of horses is falling in America – despite agricultural expansion, population increase and urban growth. The price of horses has fallen even more swiftly than their number.

Horses and their value have changed as follows in the Union:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Value (US dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1892</td>
<td>15,498,140</td>
<td>1,007,593,636</td>
</tr>
<tr>
<td>1893</td>
<td>16,206,802</td>
<td>992,225,185</td>
</tr>
<tr>
<td>1894</td>
<td>16,081,139</td>
<td>769,224,799</td>
</tr>
<tr>
<td>1895</td>
<td>15,893,318</td>
<td>576,730,580</td>
</tr>
<tr>
<td>1896</td>
<td>15,124,057</td>
<td>500,140,186</td>
</tr>
<tr>
<td>1897</td>
<td>14,364,667</td>
<td>452,649,396</td>
</tr>
</tbody>
</table>

The present value of the stock of horses in the Union is now less than half its 1892 value.

Growth in exports has accompanied the fall in domestic demand.
These figures are taken from the Yearbook of the United States Department of Agriculture (pp. 574, 580). According to the German Statistical Yearbook import figures of horses from the United States were as follows: 1890, 19; 1896, 4,285; 1897, 5,918. Imports from America have easily overtaken those from England, which themselves grew from 1,070 in 1890 to 2,719 in 1897.

At the same time technical progress in transport in Europe will also inevitably first limit the increase in the keeping of horses, and then bring about a reduction.

First affected are the horse-breeders, mostly large farmers; but breeding also remains an important source of income for middle and large peasants in some areas. In contrast, small farmers are barely threatened by the overproduction of horses. In this instance too, the smaller have the advantage over the larger — though not on grounds of technical superiority.

However, they are indirectly affected by the cut in the keeping of horses since this naturally implies a cut in the demand for feed. Bicycles, electric trams, motor vehicles and electric ploughs eat neither hay nor oats. And of the main grain crops, oats have so far been the least hit by overseas competition. In Great Britain the area under the main cereals has changed as follows (in acres):

<table>
<thead>
<tr>
<th>Cereal</th>
<th>1867-72</th>
<th>1878-82</th>
<th>1895</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>3,563,000</td>
<td>2,965,000</td>
<td>1,417,000</td>
</tr>
<tr>
<td>Barley</td>
<td>2,289,000</td>
<td>2,460,000</td>
<td>2,166,000</td>
</tr>
<tr>
<td>Oats</td>
<td>2,746,000</td>
<td>2,777,000</td>
<td>3,296,000</td>
</tr>
</tbody>
</table>

A slight drop in acreage was recorded in 1896, when the total area under oats fell to 3,095,000 acres. Whether this decline will be temporary, or already represents the beginnings of a progressive decline in the cultivation of oats is not yet decided. In any eventuality, such a
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development must occur sooner or later.

What is spared from overseas competition is threatened by industrial development at home.

The transformation of agricultural production into industrial production is still in its infancy. Bold prophets, namely those chemists gifted with an imagination, are already dreaming of the day when bread will be made from stones, and when all the requirements of a human diet will be assembled in chemical factories. Of course, such fantasising is not strictly relevant to our concern here.

But one thing is certain. Agricultural production has already been transformed into industrial production in a large number of fields, and a large number of others can be expected to undergo this transformation in the immediate future. No field of agriculture is completely safe. Every advance in this direction must inevitably multiply the pressures on farmers, increase their dependence on industry and undermine their security.

This does not mean that the time has arrived when one can reasonably speak of the imminent demise of agriculture. But wherever the modern mode of production has taken root, agriculture has lost its conservative character forever. Keeping to the old ways threatens farmers with certain ruin: they have to follow the development of technology, and adapt their farming to the new circumstances. There is no time to pause for breath. Farmers may think they have defeated one foe, but another will quickly rear its head. Economic life even in the open countryside, once trapped in such eternally rigid routines, is now caught up in the constant revolution which is the hallmark of the capitalist mode of production.

All those lacking either in extraordinary luck, extraordinary ruthlessness, extraordinary business acumen or extraordinary amounts of money will be sucked into the whirlpool.

The revolutionising of agriculture is setting in train a remorseless chase. Its participants are whipped on and on until they collapse exhausted – aside from a small number of especially aggressive and thrusting types who manage to clamber over the bodies of the fallen and join the ranks of the chief whippers, the big capitalists.
Prospects for the Future

The Mainsprings of Development

When bourgeois economics looks at agricultural development, it tends to focus on the ratio between large and small farms, as defined by area. And since this proportion has only minimally changed, it concludes that, unlike industry, agriculture is essentially conservative in character.

In contrast, the prevalent socialist position perceives the revolutionising element in agriculture in usury, in the indebtedness which divorces the peasant from his land and drives him from home and hearth.

We hope that we have succeeded in showing how inaccurate the first view is; but it would also be wrong to accept the second without qualification.

Peasant indebtedness is not unique to the capitalist mode of production. It is as old as commodity production, and was of importance as early as the era of Greece and Rome, when history ceased being legend and became verifiable in written records. Usurers' capital, on its own, can only make the peasantry discontented and rebellious; it does not represent a driving force towards a higher mode of production. Capitalism, the development of the competitive struggle between large and small farms and the advantages of large-scale production conferred by the ownership of more money, are required before usury can become credit, significantly raise the efficacy of capital and accelerate economic development. Nevertheless, this still applies more to industry than to agriculture. In agriculture, the credit system generally retained its pre-capitalist character. Most indebtedness on the part of land-ownership is still, by and large, not the product of the desire to extend or improve the farm; for the most part it is the consequence of distress and changes in ownership either by sale or inheritance. As such it not only fails to promote economic development but, by subtracting from the means available for making progress, actually obstructs it. Peasant indebtedness is not only not revolutionary, it is conservative. It is not a means for raising the peasant to a higher mode of production, but serves to trap the peasant mode of production in its previously
Debt is not only more of a conservative than a revolutionary force as regards the mode of production in the countryside: it also has this effect on property relations. Naturally, the appearance of a new mode of production which disrupts peasant property can mean that indebtedness becomes a means for hastening its expropriation. This happened in Ancient Rome, when the surplus of slaves taken as prisoners of war favoured the development of a plantation economy. It was the case in England at the time of the Reformation when the rise in the wool trade led to the extension of sheep-grazing. However, the fact that indebtedness is merely a lever of expropriation, and not its driving force, can be seen from the fact that at the time of the Reformation in South Germany, the outcry over peasant indebtedness was even louder than in England. Nevertheless, this did not lead to any marked expropriation of the peasantry. The individuals owning peasant farms changed, but the farms themselves remained. Usury was more an instrument for sucking wealth out of the peasantry than reducing its numbers.

The transformation of rural relations of production which followed the French revolution and its offshoots also gave usurer's capital numerous opportunities to overturn property relations. It gave support to the tendency both towards the large farm, and towards the fragmentation of holdings. Peasant indebtedness helped large landowners to consolidate their estates and extend woodland. On the other hand, the growing rural population's increasing demand for living space and land led to the carving up of estates and the parcelisation of indebted farms - a process systematically pursued by many usurers. Both processes are still under way - although they have slowed down since the onset of overseas competition hit agricultural profitability, and the increase in the rural population lost momentum or stopped completely. Ground-rents and estate prices are no longer rising; and apart from a few favoured locations, such as near towns or factories, they have started to fall, and are threatened by even further falls. The advantage to be gained by expropriating indebted peasants diminishes. Forced sales not only threaten to lose usurer-capitalists their interest, but even part of their capital. Instead of hastening this moment, they try to postpone it by granting more time to pay interest, and often by advancing fresh loans - just as in England, where the agrarian crisis forced even the greediest and most callous landlords to allow time for the payment of rent arrears, to reduce future payments, and to assume direct responsibility for improvements.

The Verein für Socialpolitik's enquiry into peasant conditions included the following report by a Westphalian estate owner, a Herr Winkelmann:
Given the tenacity with which local peasants cling onto their birthright, many usurers find it more worthwhile to employ rural dwellers directly and divest them of everything above bare subsistence rather than go in for the dubious benefits of carving up the estate. In many of our poorer mountain districts, there are already simply no buyers. (Verein für Socialpolitik, Bäuerliche Zustände in Deutschland, II, p. 11)

Peasant indebtedness, in the main an obstacle to the revolutionising of rural relations of production, does not always imply the revolutionising of property relations. In fact the agrarian crisis is tending to push any revolutionary aspects into the background. But every major new change in the relations of production will find that the indebtedness of land-ownership will act as a lever to adapt property relations to the conditions of production.

But where should we look for the motive force necessitating such a change in the mode of production?

Our whole argument so far points to only one answer: industry. Industry is not only the motive force of its own development, but also of the development of agriculture. It was urban industry which destroyed the unity of industry and agriculture in the countryside, turning country dwellers into mere farmers, commodity-producers dependent on the vicissitudes of the market, and creating the possibility of their proletarianisation.

We also found that feudal agriculture had run into a blind alley from which it could not escape by its own efforts. It was urban industry which created the revolutionary forces capable of tearing down – in fact, forced to tear down – the feudal regime, opening new paths not only to industry but also agriculture.

It was industry which produced the scientific and technical conditions for the new, rational agriculture, revolutionised it through machinery and synthetic fertilisers, through the microscope and chemical laboratory, and in doing so established the technical superiority of the large capitalist farm over the small peasant farm.

This same economic development added a further distinction to the qualitative difference between the large and small farm: the distinction between farms simply providing for the subsistence of their attached household, and those producing mainly or substantially for the market. Although both became subordinated to industry, the process took different paths in each case. For the former, the need to acquire money developed through the sale of labour-power, either as wage-labour or in domestic industry: the small farmer became more and more dependent on
Prospects for the Future

industry and found himself more and more in the position of an industrial proletarian.

Commodity-producing farms were also increasingly forced to seek out a supplementary industrial occupation. Although the tendency towards reducing the costs of production is inherent in technical progress, this is more than offset by counter-tendencies in capitalist agriculture, tendencies which impose an increasing burden on it: the growth of ground-rents and lease prices, mortgage indebtedness, and its increase, or the fragmentation of holdings via the law of inheritance, the increasing exploitation of the country by the town as a result of militarism, taxation, absentee landlordism and so on, soil exhaustion, the growing susceptibility of cultivated plants and refined animal breeds to disease, and finally the increasing absorption of the rural labour-force into industry. Despite technical progress, these factors combine to raise production costs in agriculture. This initially leads to a general and steady increase in the price of food, but also to a sharpening of the antagonism between town and country, between land-ownership and the mass of consumers.

The same industrial development which creates these agricultural conditions effects a further transformation by expanding world trade and creating overseas food competition. Wherever land-ownership lacks sufficient power it receives the full force of such competition, as happened in England. But this also mitigates the antagonism between land-ownership and the mass of consumers.

Where land-ownership can recruit state power to its side, it will seek to restore production costs to their former levels by artificially increasing the price of food. Given the present level of world trade and international competition, this can never fully succeed and merely sharpens the already high degree of antagonism between land-ownership and the mass of consumers, especially the proletariat.

Agriculture also suffers alongside the landowner, especially where farmer and landowner are one and the same person. A great variety of methods are resorted to in an attempt to adapt production to the new circumstances – in one situation extensive pasturage, and in others intensive horticulture. But eventually, they come to see that the most rational means is the unification of industry and agriculture.

The modern mode of production – admittedly in two forms, industrial wage labour by small peasants and agricultural industry by the large farmer – therefore completes its dialectical process by returning to its starting point: the transcendence of the division between industry and agriculture. But whereas agriculture provided the central and leading force in primitive peasant farming, the roles are now reversed.
Capitalist large-scale industry now has the upper hand, and agriculture has to be the obedient and accommodating partner. What agriculture does is determined by the direction of industrial development. Should industry turn towards socialism, then agriculture must follow suit.

The number, the abilities, the intellect and the welfare of the population all decline in those areas which remain purely agricultural and closed to the incursions of industry, either because of inadequacies on the part of the localities themselves or of their inhabitants. And this is followed by the impoverishment of the soil and the degeneration of agricultural activity. In capitalist society, agriculture pure and simple ceases to constitute a prospering element in the community. And this extinguishes any hope that the peasantry could ever again recover its golden age.

And as with the agricultural population of the feudal period, these elements have also reached an impasse from which they cannot escape through their own efforts, and within which they cling together in ever greater anxiety and desperation. As at the end of the eighteenth century, their deliverance, and their path to further development, will be brought by the revolutionary population of the towns.

Whilst the capitalist mode of production hampers the formation of a revolutionary class in the countryside, it fosters one in the towns: it concentrates workers in one place and creates favourable conditions for their organisation, intellectual development and class struggle. It depopulates the open countryside, disperses rural workers over wide areas, isolates them, and robs them of the means for intellectual development and resistance to exploitation. In the towns, its concentration of capitals in fewer and fewer hands forges the conditions for the expropriation of the expropriators. In agriculture the concentration of enterprises is only one aspect: the capitalist mode of production also produces fragmentation. The advance of the capitalist mode of production sooner or later converts all industry into export industry in every country in which the domestic market is insufficient: industry produces for the entire world market. By the same token, it reduces pure agriculture to a trade which cannot even maintain the home market, and whose importance dwindles in relation to world production.

The more that capitalist forms of property and appropriation and capitalist interests come into contradiction with the needs of agriculture, the more they burden it, crush it down and the more desperate becomes agriculture's need to destroy capitalist forms and overthrow capitalist interests, the less agriculture is able to develop the forces and organisation needed to do this - the more it needs the impetus of the revolutionary forces of industry.
And such an impetus will not be lacking. The industrial proletariat cannot liberate itself without, at the same time, liberating the agricultural population.

Human society is an organism, not animal or vegetable in character but of its own specific type, although no less an organism. It is not merely an aggregation of individuals. And as an organism, it must be organised in a uniform manner. It would be absurd to imagine that one part of society can develop in one direction, and another part, of equal importance, in the opposite direction. Development can only go in one direction. However, each part of the organism does not have to generate the necessary force for its own development. It is enough that one portion of the organism produces the forces necessary to sustain the whole.

If the development of large-scale industry is proceeding towards socialism, and if it is the dominant power in present-day society, it will win over for socialism those areas unable to produce the preconditions for this transformation themselves and adapt them to its requirements.

Industry must do this, both in its own interests and in the interests of the uniformity and harmony of society.

No one could offer a worse prognosis for modern society than those bourgeois economists who triumphally proclaim that although the path of industry may lead to socialism, the path of agriculture leads to 'individualism'. Were this to prove correct, and agriculture were to become strong enough to defend itself from socialism and industry lack the strength to sweep this 'individualism' aside, this would signify not the salvation but rather the destruction of society: it would mean a state of permanent civil war.

Fortunately for human society, this sheet anchor of capitalist exploitation has no foundation on which to fasten itself.

The Elements of Socialist Agriculture

We begin from the axiom that the development of modern industry necessarily leads to socialism. It would require an entire book to provide the proof of this: and such proof has already been furnished in the great basic works of scientific socialism, and in particular in Marx's *Capital*. Our intention here is simply to indicate a little more concretely how the conquest of political power by the proletariat, and the consequent socialisation of industry, must affect agriculture.

Our choice of the term socialisation rather than nationalisation of industry is quite deliberate. We disregard the question here as to whether a socialist society can be a state. Initially, it certainly will be a state: in fact, state power should function as the most powerful lever
of social transformation. However, to be exact, this transformation does not imply the *nationalisation* but rather merely the *socialisation* of production as a whole together with the means of production. They will cease to be private property and become social property; but which type of social association they will be employed in depends on their social significance. Means of production serving local needs, such as bakeries, power stations, trams, are more suitable for municipal rather than state ownership. Some means of production (including, of course, the means of transport) have an international significance and can become international property – the Suez and Panama Canals for example. The decisive means of production will naturally pass into state ownership, since only the modern state can create the framework for a socialist society, and produce the conditions within which municipal or cooperative establishments can become the limbs of socialist production.

If socialisation only initially embraces large-scale capitalist industry, then those farmers unable to live solely from agriculture and forced to take up a supplementary occupation will evidently be transformed into workers for society, without the slightest encroachment on their property. For example, the socialisation of mines and brickworks will transform hundreds of thousands of dwarf-holders, forced to work in these industries to cover their agricultural losses, from capitalist wage-labourers into workers for society. On the other hand, the simple socialisation of sugar-factories will transform beet growers from being the specialised workers of a capitalist into the specialised workers of a social establishment without any direct expropriation. The same applies to the relationship between dairy producers and the butter and cheese factories which are currently having to assume an increasingly capitalist character. However, by concentrating large industrial establishments in a single hand, socialisation must also transform farmers who presently, under free competition, come independently to market into social specialised workers. The unification of beer breweries into one hand will place the hop and malt producers in the same relationship to the breweries as beet growers will be to sugar-factories. The same will happen to the relationship between the grain producers and socialised mills, and between wine-growers and socialised wine cellars.

The dependence of rural producers on large-scale establishments of this type is already considerable; their transformation from capitalist into social property must, therefore, represent as much a deliverance for the farmer, especially the small farmer, as the socialisation of mines will for the dwarf-holder who performs wage-labour.

The growing industrialisation of agriculture is accompanied by the
increasing independence of ground-rents vis-à-vis capital-profit, and of landed property in relation to agriculture, on one hand in the form of the tenant system and on the other in the form of mortgage debt. A proletarian regime must, of necessity, socialise landed property in both these forms. The greater the development of large-scale land-ownership (in countries with tenant farming) and the more that mortgage debt becomes concentrated in a few hands, the more this process will be welcomed as a deliverance by farmers – just as is the case with the socialisation of the agricultural industries.

Finally, a proletarian regime must also socialise large-scale agricultural establishments based on the exploitation of wage-labour. Although the large establishment is not as dominant in agriculture as it is in industry, it would be utterly misplaced to expect the peasant farm to supplant the large farm. In capitalist agriculture, large and small farms provide the conditions for each other’s existence.

The independent peasant farm has become untenable: it can only continue by being associated with a large establishment. If a nearby large industrial enterprise employs peasants as wage-labourers, or specialised workers, they will become its slaves. Where no such establishment exists, the peasant needs a large agricultural enterprise to avoid sinking into extreme poverty. Although the large farm suffers more from the flight from the land than the small farm, the same process is beginning to break up the peasant family, which lacks the means to compensate for the loss of labour by mechanisation. And although the agrarian crisis tends to expropriate the undercapitalised large landowner before the peasant, the constantly accelerating advance of the accumulation of capital will supply sufficient capitalists able to make a profit by combining agricultural and industrial exploitation – something only possible within the context of a large, not a peasant, farm.

So, although we should not expect small farms to be rapidly swallowed up by large, there are fewer reasons to expect the opposite process to take place. In fact, statistics show only a minimal shift in the proportions of individual farms by size, shifts often explicable by changes in the mode of farming – greater intensity for example – rather than economic decline. While the proportion of establishments with more than 50 hectares of agriculturally used land fell from 33.00 per cent to 32.56 per cent in Germany between 1882 and 1895, that is not quite half a per cent, in France the proportion of establishments with more than 40 hectares of cultivated area increased from 44.96 per cent to 45.56 per cent between 1882 and 1892, that is by over half a per cent.

These are insignificant differences. But in both France and Germany
the large farm occupied a very substantial share of the land – almost a third in Germany, and almost a half in France. However, only 142,000 farmers (out of 5,672,000, 2.51 per cent) had an interest in such establishments in France in 1892; by 1892 the figure had fallen to 139,000 (out of 5,703,000, 2.42 per cent). In Germany the figure for 1882 was 66,614 (out of 5,267,000 farmers, 1.20 per cent) and for 1893 67,185 (out of 5,558,317, 1.21 per cent). There is no doubt at all that such establishments would pass into social ownership when the continuation of the wages system becomes impossible. This alone would put over a third to a half of agricultural land at the disposal of society.

The large area occupied by large farms, whose capitalist character is steadily becoming more and more developed, the growth of the tenant and mortgage system, and the industrialisation of agriculture, are the elements preparing the ground for the socialisation of agricultural production which is just as certain a product of the rule of the proletariat as the socialisation of industrial production with which it is progressively merging into a higher unity.

The unfolding of the technical aspects of socialist agriculture is proceeding in step with the social. We have seen how modern science and modern technology have taken hold of agriculture and are transforming it; and how the modern large farm has reached its apogee in the capitalist latifundium which we considered in detail in Chapter 7. But just as the perfected techniques of English agriculture in the last century could only flourish on those few estates not subject to the destructive force of feudal property, so modern techniques can also develop only on a small number of isolated estates. Their generalisation requires another social revolution to sweep away those obstacles to development which so stunt agriculture after any short upswing. The victory of the proletariat will mean the suppression of militarism and centralisation in large cities. The socialisation of large farms will release them from the burdens of the law of inheritance and absentee landlordism. The replacement of wage slavery by the labour of free cooperators will also provide the large agricultural establishment with that crucial element of prosperity whose current absence is the greatest obstacle to their development: sufficient, intelligent, willing and careful workers.

The flight from the land will cease once workers find sufficient work on the land able to match the level of cultural conditions and welfare found with work in the towns. And its cessation will be all the more likely, the stronger the link between industry and agriculture, and the more that the commodity-production and commerce which gravitate towards centralisation in the cities are replaced by production by and for
society, creating a more even spread of the means of production and allowing an end to be put to the murderous concentrations of population in the cities. The unity of industry and agriculture, which finds its first miserable renaissance in the industrial labour of small peasants and cottagers, which appears more fully developed in the supplementary industrial occupation of the farmer who processes their own raw materials, and which reaches its present high point in the modern latifundium, will become the general law for social production as a whole.

The independent small agricultural establishment is now losing its last foothold. We have seen the three forms under which it has persisted: supplementary industrial work, wage-labour on a large farm, and where neither of these is available and the small peasant remains a mere farmer, with the large farm existing not as an opportunity for work but as a competitor, through overwork and underconsumption - as Marx puts it, through barbarism. The passage of capitalist enterprises into social property will mean the dependence of the small farm of both the first and second types on social production. They will either be absorbed by it or become appendages to it.

Independent, purely agricultural establishments will then lose any attraction for their owners. The position of the urban proletariat is already so superior to that of small peasant barbarism that the younger generation of peasants is just as susceptible to the flight from the land as rural wage-labourers. Once socialist latifundia start emerging all around them, cultivated not by poverty-stricken wage slaves but by prospering cooperatives of free and happy individuals, the flight from the parcel-holding into the town will be replaced by an even more rapid flight from the parcel into the large cooperative establishment. Barbarism will have been driven from its last bastions, where it still rules in splendid isolation in the midst of civilisation.

The large socialist establishment will not bring about the expropriation of small peasants but rather their deliverance from the hell in which private property now chains them.

Social development is currently proceeding in the same direction in agriculture as it is in industry. Social needs and social conditions are pushing in both areas towards the large social establishment, whose highest form unifies agriculture and industry in one cohesive unit.
Part II
Social Democratic
Agrarian Policy
Does Social Democracy Need an Agrarian Programme?

Off to the Land!

If there is any clear conclusion to be drawn from the developments presented in Part I, it is that industry will become the determining force in society as a whole: that agriculture will lose in significance relative to industry, will increasingly have to concede territory to industry and will become more dependent on industry in those spheres left to it. Social Democracy is not only entitled to draw its hopes for victory from the growing power of the proletariat, but also from the growing power of industry in society.

But to conclude from this that Social Democracy, or if one prefers, the proletariat struggling for its emancipation, can afford to ignore agriculture would be to go too far. The proletariat is the heir to present-day society and has every interest in ensuring that its inheritance is as rich as possible. Irrespective of the relationship between industry and agriculture, the land will always remain the basis of human existence; its productivity will always be a decisive factor in determining how much labour a society has to expend in order to maintain itself; and its character will always be crucial in determining the physical and intellectual character of the population.

The well-being of the society of the future is not the only reason why the proletariat should direct its attention to agriculture, however. The demands of the present are even more pressing. The proletariat cannot be indifferent to rises or falls in the price of food as wages do not follow these fluctuations quite as precisely as the iron law of wages might lead one to suppose. And the tempo of the proletarian class struggle is by no means unaffected by whether the rural population has a poor standard of living or represents an ignorant and obtuse mass.

Even if Social Democracy wanted to confine itself to industrial matters alone, the growing importance of agrarian issues for the whole of public life in all modern nations would make this impossible. It is a curious phenomenon that agriculture's political significance is in inverse proportion to its economic significance relative to industry, not only in areas dominated by Junkerdom, but also in peasant areas; not only in East
Elbia, but also in Bavaria, both where absolutism and where democracy reign, not only in Russia, Austria and Germany but also in France and Switzerland. This apparent contradiction between economic and political significance is explained once we recall that private property in land enters into an irresolvable contradiction with the existing mode of production much earlier than private property in the other means of production, generating unsustainable and unbearable conditions long before the latter. The classes affected by this process are precisely those who were once the former most solid pillars of the prevailing political and social order; some of these are members of the ruling class directly, whilst others are preserved by the ruling classes in their own interests. Hardly surprising, therefore, that agrarian issues number amongst the most taxing questions occupying the politically most influential sections of the civilised nations. Such elements are not concerned with saving agriculture so much as with saving those 'loyal classes' whose conditions of existence can no longer be reconciled with modern conditions of production. Their salvation of course implies reconciling the irreconcilable, and does not gain in rationality by the fact that the intellectual and economic conditions for a higher mode of production are notably less developed in agriculture than in industry.

In view of this, it is hardly surprising that the more the agrarian movement grows, the more it tends to spawn fanciful quack remedies which are taken more and more seriously by the ruling classes. Anyone who wants to give practical help to the rural population needs great clarity and strength of conviction to remain firm when confronted with this agrarian witches' dance. Social Democracy, for this reason alone, needs to possess an unequivocal view on agrarian questions: indifference would mean abandoning the proletarian masses in the countryside to the agrarian tricksters and conjurors.

It is this concern which explains the increasing attention paid to agrarian issues by Social Democratic parties in all the civilised nations over the last few years. But the unique lack of ripeness of the situation in agriculture has also made itself felt here too. Social Democracy did not initially take up agrarian issues for reasons of fundamental principle, but for reasons of political practice - considerations of electoral agitation. It needed to offer the rural population something, needed to make practical demands which might enlist the interest of the country-dweller in the socialist movement. Attempts were made to propose Social Democratic agrarian programmes before coming to terms with fundamental principles of any Social Democratic agrarian politics. And the search for a programme in the absence of clearly understood principles will always be a tentative, groping affair, producing
short-lived and unreliable results, regardless of the skill and perception of its instigators.

The need for Social Democracy to adopt a clear position on its agrarian policy has been generally acknowledged in its ranks. By contrast, there is no unanimity as to the necessity for an agrarian programme.

A specific agrarian programme is usually regarded as a programme of measures in the interests of the peasantry. No particular programme is needed to advance the interests of the agricultural wage-labourer: all previous Social Democratic programmes already encompass this. But making the specific interests of the peasantry into an issue for Social Democracy requires a specific agrarian programme.

This issue is widely known to have caused deep divisions of opinion within Social Democracy.

The protection of the peasantry [Bauernschutz] has been advocated as a necessary complement to the protection of the worker [Arbeiterschutz]. The proletarian in the countryside is the peasant: and Social Democracy is the party of the proletarian class struggle against capital. The roots of its strength are not in its ultimate objectives but its immediate demands. Just as Social Democracy defends the urban proletariat against its capitalist exploiter, the entrepreneur, it also has the task of protecting the rural proletarian from its exploiter, the usurer. It must oppose the impoverishment of the peasant no less vigorously and with just as much purposive engagement as it does the impoverishment of the town labourer.

We now consider this argument.

Peasant and Proletarian

The peasants' standard of living is often undeniably proletarian, and sometimes sub-proletarian. But this is far from implying that their class interests have become proletarian.

The modern proletarian is not characterised by poverty. Although the poor have not always been with us, they have been with us for many thousands of years. In contrast, the Social Democratic proletarian movement is a specific product of the last century, the product of a proletariat never before seen in world history, at least as a mass phenomenon.

One hallmark of the modern proletariat is its important role in the production process. The proletarian is the foundation of what is now the decisive mode of production, the capitalist mode. This distinguishes the proletarian from the lumpenproletarian of both ancient and modern times.
Modern proletarians are also by no means as utterly lacking in means as lumpenproletarians. The latter are lacking in everything, but this is most acutely felt in the shortage of food and other means of consumption. They are not overbothered by the lack of means of production. Lumpenproletarians are excluded from the sphere of production anyway, and often exhibit little enthusiasm to be admitted to it. But although they don't want to work, they do want to live – and can only do so if those owning the means of production will share with them. What social aspirations lumpenproletarians have tend towards an ideal of communism of the means of consumption, not of means of production, a communism of division, not combination – an aim which, in reality, leads to plunder where social circumstances facilitate acts of violence, and to beggary where this is impossible.

In contrast, the lack of means which marks out the modern wage-proletariat is simply that of the means of production. This can, but does not have to, be associated with a lack of means of consumption. Modern wage-labourers remain proletarian so long as they are not in possession of their means of production, regardless of how satisfactory their status might be as a consumer, and what they – as a consumer – might own, be it jewellery, furniture or even a small house. In fact, far from making them unfit for proletarian class struggle, improving their position as a consumer enables them to struggle all the more vigorously. Proletarian class struggle is not the outcome of poverty, but of the antithesis between the proletarian and the owner of the means of production. The establishment of social peace will not be brought about by the overcoming of poverty – even if this were to prove possible – but by overcoming this antithesis. And this can only occur when the working population regains possession of its means of production.

This brings us to an additional characteristic of modern wage-proletarians. They work not on individual but on social means of production, means of production of a scale which can only be utilised by a society of workers. Two types of ownership of such means of production are possible. Ownership by individuals who necessarily exploit the workers they employ: this is capitalist ownership. Or cooperative ownership. But under the rule of private property in the means of production, the cooperative form can never become general. Assuming that they succeed, all such attempts sooner or later take a capitalist direction. Cooperative ownership of the means of production can only become general in the form of social, that is socialist, property in the means of production. Other factors also push towards the socialisation of the means of production. However, we confine ourselves here to those arising out of the class interests of the proletariat and which cause
proletarian class struggle to take a socialist direction by its very nature.

Finally, we should also mention a fourth characteristic of the modern wage-proletarian, already referred to elsewhere in this work: separation from the employer's household. Wage-labourers of earlier epochs usually constituted an appendage to their employer's household, and belonged to their family, not merely as workers but as human beings. They were dependent on the employer in all their activities, even outside work. In contrast, the modern wage-proletarian belongs to no one once outside work. And the more that the capitalist mode of production develops and sweeps away such feudal remnants, the more proletarians are able to confront capitalists as free and equal individuals outside work.

It is these factors which have made the modern proletariat into the powerful driving force of the socialist movement.

These characteristic features are by no means all present when we turn to the peasantry. Reference is sometimes made to the mortgage creditor who is the real owner of the peasant's farm: but the relationship between peasant and mortgage creditor is not that of capitalist to wage-labourer, but of landowner to entrepreneur. Mortgages no more make peasants into proletarians than renting a factory, rather than buying it, makes the manufacturer into a proletarian. The peasant remains the owner of their means of production, their tools and implements, and stock — in short, their inventory. This can of course be pledged against a debt: nevertheless, the peasant still has to exercise the functions of an entrepreneur, and as such consequently remains in an antithesis to the proletariat, in the same way that any manufacturer producing with borrowed capital, and not owning any of their means of production, still functions as an industrial capitalist in a relationship of conflict to the proletariat.

This antagonism is most marked amongst peasants reliant on the exploitation of wage-labour, the big peasants.

In fact, as long as workers' movements confine themselves to the towns and direct their efforts against urban capitalists, large farmers are inclined to be sympathetic to them. English and later Prussian large landowners took a benevolent attitude towards the socialist movement in its earlier days and preached an alliance of wage-labour and ground-rent against profit on capital. This changed once the socialist movement threatened to gain a foothold amongst agricultural workers, in fact once the increase in industrial wages began to draw rural workers into the towns, leaving those left behind more demanding. Today the Prussian Junkers are more implacable opponents of Social Democracy than even the 'Manchester Men'. They no longer follow the colours of
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Wagener, but of Stumm. And the big peasants are not far behind.

And even if we were to find districts in Germany in which the larger peasants still took a benign attitude to the workers' movement, and believed that each had some interests in common, this would not prove that these strata could be won for Social Democracy if only the right approach were used. It would merely show that the workers' movement is still too weak to have any positive effect on the position of rural workers in such districts. It would be a proof of backwardness, not of the first signs of progress.

The contradiction between proletarians and middle peasants who do not employ wage-labourers, or at least not in any great numbers, and who essentially maintain their farms with family labour, but still produce food for market, is less acute than that between the larger peasants and proletarians. Although there is no contradiction between exploiter and exploited another contradiction nevertheless remains: that between the waged proletariat and all those who produce for the market – the contradiction between buyer and seller.

Despite this, one area of harmonious interest has been unearthed inasmuch as the worker is said to be the best customer for rural produce. And the higher their wages, the more they can consume. Peasants therefore have an interest in high wages, and share identical interests with the proletariat.

Such arguments are not new: they are repeatedly employed to discover harmonies of interest. Elements friendly to workers' interests advise manufacturers to raise wages as the best method of extending their internal market and avoiding problems in selling their output. At the same time elements friendly to manufacturers advise workers on the idiocy of wanting to force manufacturers into paying higher wages. This would either raise food prices, so that workers will lose with one hand what they gained with the other, or it will reduce profits. And the higher profits are, the more capital will be accumulated, and the more that is accumulated, the faster the growth in the demand for labour – the most powerful means for raising wages. Workers therefore have good reason to avoid anything which might lead to a diminution of profit, such as strikes and so on. Both workers and manufacturers share an identical interest in higher profits.

Both these arguments are right, inasmuch as capitalist society, like any other society, is a unitary organism in which damage to one part inevitably produces some disagreeable effects in the other parts. But this fact does not abolish class contradictions: it does not absolve any class of the necessity to assert its own interests and attack the interests of its opponents in the struggle against the opposing classes. The
contradiction between the harmony of interests of the various classes, undeniable to some extent in the final analysis, and the much more crucial and decisive antagonistic clash of class interests simply shows that capitalist society is an extremely imperfect organism which requires the squandering of much effort for it to fulfil its task.

The relationship between the individual classes and the moving force in capitalist society is not a product of the highly mediated harmony of their interests, or is so only a very limited extent, but is rather, and primarily, determined by their direct class antagonisms.

This also applies to the relationship between the sellers and the buyers of food. Their antagonism is too immediate to be softened by the much more remote interests of the seller in the purchasing power of the buyer.

Country-dwellers want to sell their products as dearly as possible, and workers want to buy them as cheaply as possible. What does it profit the former, if the latter use their high wages to buy margarine, American bacon, Australian meat and conserves of every description! Meanwhile farmers try to suppress any competition which might be welcomed by the worker, and artificially push up the prices of their products.

No amount of preaching of, albeit, an intelligently devised but nonetheless intangible harmony of interests can bridge this conflict of interests.

What decides whether a farmer is ready to join the ranks of the proletariat in struggle is not whether he is starving or indebted, but whether he comes to market as a seller of labour-power or as a seller of food. Hunger and indebtedness by themselves do not create a community of interests with the proletariat as a whole; in fact they can sharpen the contradiction between peasant and proletarian once this hunger has been stilled and debts repaid, should food prices rise and make it impossible for workers to enjoy cheap food.

Nevertheless, the peasantry and the proletariat do have some interests in common, alongside those antagonistic interests, as we shall discover later. And occasionally their common interests can outweigh their antagonisms and lead to political cooperation between peasants and proletarians. But irrespective of how often they might fight together, as a rule they must march separately: and the allies of today can become tomorrow's enemies.

But isn't it the case that the antagonism between the sellers of food and the sellers of labour-power inevitably spells disaster for the latter? Won't the events of 1848 be repeated and the hobnailed boots of the peasants and sons of peasants turn against the proletariat and trample it
Let us consider this hobnailed spectre a little more closely. Perhaps, like many other phantoms, it will lose its nightmarish character once we tackle it head on.

The memory of 1848 may be conjured up. But 50 years of capitalist rule have passed by since then. Have they had no effect?

In 1848 the agricultural population accounted for around three-quarters of the total population of Germany: it now amounts to just over one third, to be more precise 35.7 per cent, 18.5 million out of a population of 51,800,000. As late as 1882 it was still 700,000 more, amounting to over two fifths, 42.51 per cent of the population, 19,225,000 out of 45,222,000.

In the Kingdom of Saxony, it does not even amount to 14 per cent (in 1882 it was 19 per cent): and in the country of Zwickau it is only 10 per cent of the population as against 14 per cent in 1882. It is most strongly represented in North Germany in Posen (58 per cent as against 64 per cent in 1882), and in Southern Germany in Lower Bavaria; the German Vendée, the only major district of the German Empire in which it has not fallen, or only barely perceptibly since 1882. In 1882 it amounted to 61.5 per cent of the total population, and in 1895 61 per cent.

The agricultural population is larger in France, but there too it fell from 51.4 per cent to 45.5 per cent of the population between 1876 and 1891.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population</th>
<th>Percentage of Agricultural Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1876</td>
<td>36,906,000</td>
<td>51.4</td>
</tr>
<tr>
<td>1881</td>
<td>37,672,000</td>
<td>48.4</td>
</tr>
<tr>
<td>1886</td>
<td>38,219,000</td>
<td>46.6</td>
</tr>
</tbody>
</table>

We are rapidly approaching the situation in England where the number of those employed on the land in 1890 only amounted to 10 per cent of all economically active persons.

A relative, if not absolute, reduction in the number of those employed in agriculture has also taken place in the United States, although unfortunately agriculture is counted together with the fishing and mining industries. Were it to be recorded separately, its decline would
certainly be more marked. In 1880, it accounted for 50.25 per cent of all economically active persons (7,405,000), and in 1890, 44.28 per cent (8,334,000). In the North Atlantic states, only 22.6 per cent of all economically active persons was engaged in agriculture in 1890, although the proportion remained at over 60 per cent in the Southern states.

Not all those employed in agriculture are sellers of food. A good number also sell labour-power. In 1895 the situation in agriculture was as follows in the German Reich.

<table>
<thead>
<tr>
<th>Economically active</th>
<th>Dependants and servants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-employed farmers</td>
<td>2,576,725</td>
<td>6,900,096</td>
</tr>
<tr>
<td>Wage-labourers (hands, maids, day-labourers, clerks etc.)</td>
<td>5,715,967</td>
<td>3,308,519</td>
</tr>
<tr>
<td>Total</td>
<td>8,292,692</td>
<td>10,208,615</td>
</tr>
</tbody>
</table>

The population living from wage-labour in agriculture equals that of self-employed farmers and their dependants.

And not all the independent producers live solely from the sale of produce. Of the 2,530,539 independent producers in agriculture proper (excluding horticulture, forestry etc.) 504,465 had a supplementary occupation.

The position of the independent farmer looks no better when we turn from occupational to farm statistics. Out of 5,558,317 owners of agricultural establishments, only 2,499,130 are independent farmers: 717,037 are non-independent farmers, and the rest belong with other occupations, including no less than 1,495,240 in industry.

Two and a half million independent farmers are therefore set against 6 million agricultural wage labourers on one hand; and 3 million owners of agricultural establishments, whose main interest is in an area other than agriculture.

The peasants therefore no longer constitute the majority in the countryside: they are counterbalanced by a large stratum of agricultural workers, whose interests on all essential points are identical with those of wage-labourers.

Of course, the independent peasantry is still much stronger in some
areas than these average figures indicate. For example, of the 20 German Administrative Districts with the highest middle peasant holdings (5 to 20 hectares), 13 are in Bavaria alone. Whereas only 30 hectares per 100 hectares of agricultural land are accounted for by holdings of middle peasants in the German Reich as a whole, such holdings account for 60 to 70 per cent in these localities. The peasants' hobnailed boots can unquestionably still sometimes tread very hard on the toes of the proletariat in such areas. But they are a long way from trampling it down completely or even getting near to seriously endangering it once it begins to march in full strength, unified under one banner. The proletariat not only has all the advantages of high intellect conferred by town life, better organisation and training of its forces and the economic preponderance of industry over agriculture. It now also has numerical superiority.

The proletariat is now the most numerous class in the German Reich. Disregarding the army, public officials and so forth, and the unemployed, in 1895 there were 20,674,239 economically active persons and servants. Of these the following can be counted as being in the proletariat.

<table>
<thead>
<tr>
<th>Service</th>
<th>1,339,318</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage-labourers in agriculture, industry and commerce</td>
<td>10,746,711</td>
</tr>
<tr>
<td>Domestic servants</td>
<td>432,491</td>
</tr>
</tbody>
</table>

Of the remaining 8,155,719 economically active persons, many still fell within the scope of the proletariat; the 2 million employed family members, the 600,000 white-collar workers and the 5.5 million self-employed, who are often only nominally independent and in reality serve as wage-labourers for capital, as in domestic industry for example.

In the face of such figures, still rapidly moving to the advantage of the proletariat, it is simply anachronistic to conjure up the memory of 1848. Once Social Democracy has 'landed' the entire mass of the proletariat, together with those apparently independent farmers and industrialists who are, in fact, wage-labourers for capital, no power will be able to withstand it. The main task of Social Democracy is, and remains: to win over this mass, to organise it politically and economically, to elevate its intellectual and moral level and bring it to the point where it can assume its inheritance – the capitalist mode of production.

This 'landing' is no easy task, however, especially in the countryside.
The development of the proletariat, the growth in its political and economic power, its intellectual and moral elevation, will not take place, and cannot take place, as swiftly in the open countryside as they can in the centres of industry.

The *Communist Manifesto* already spelt out the factors working in this direction, and we do not need to dwell on them here. Pre-capitalist commodity-production begins by herding together large masses of propertyless wage-labourers in a few towns. Their power and intellectual development grow along with the power and intellectual development of the towns. But the journeymen were still half unfree; they belonged to their master's household, and their work and the boundaries of the household isolated them from each other. Only the conviviality of holidays and feast days brought them together. In contrast, the capitalist mode of production unifies wage-labourers in large masses, not only in individual towns, whose size far exceeds those of the feudal period, but also in enormous places of work within these towns: the capitalist mode of production itself organises and disciplines its wage-labourers. But they no longer belong to their employer's household. Outside of work they are economically completely independent free individuals with their own household.

Capitalist development has a different effect in the countryside. Instead of bringing people together, it disperses them. At a certain stage of its development, it not only leads to a relative but also to an absolute depopulation of the countryside. And those who are abducted are precisely the land's most assiduous, capable, energetic and intelligent elements. The weakest and most helpless remain behind. Depopulation is accompanied by intellectual desolation.

Improvements in education, very problematic in the countryside, and advances in the means of communication which bring books and newspapers to the country dweller, can only offset this process to a limited extent. Although the rural population now reads more than they used to, especially in winter, the newspapers which they get hold of are usually of the most reactionary type, judging modern society against long-outmoded models, and able to do more violence to those facts which do not fit in with these models, the more naive and ignorant their readership. Apart from the Bible, the product of long-gone millennia, their reading matter consists of the worst kind of penny-dreadful, distorting reality in the crudest way imaginable.

Such literature is not only utterly unfitted for clarifying anyone's perception of reality or for unlocking the essence of modern society: it can actually produce total confusion, reinforcing rather than reducing the effects of isolation.
This alone makes it difficult to organise the rural proletariat and teach it an understanding of and interest in the aspirations of the urban proletariat. But these more superficial hindrances are joined by much more massive, and deeper rooted, obstructions.

Although the rural proletariat may share the same interests as the industrial proletariat on all essential matters, it by no means exhibits all the characteristics of the modern proletariat. This applies, in particular, to house-servants (Gesinde), and to the Instleute, Heuerleute and Einlieger.

All these types of rural wage-labourers still live under feudal conditions, as members or appendages of another's household. They are subject to the discipline of their master outside of work: their pleasures, their reading and even their associations are subject to his control. They have no right of combination, even where this is not actually denied them in law; they are not allowed to read a newspaper which their master finds disagreeable, and are often instructed what to choose. Not even the possibility of eventual independence once they have saved enough serves to distinguish them from the serfs and slaves of preceding periods, since these too could also buy their freedom.

Excessively bad treatment may lead such a class to outbreaks of desperation and rebellion but its situation does not favour the waging of an organised, resolute and tenacious class struggle.

Agricultural labourers with property are better off in this respect. Possession of their own farm does not put them above the proletariat, since it is only an appendage of the household. And we already observed that the hallmark of the modern proletarian is not lack of the means of consumption, but of means of production for the market for commodities. A miner remains a proletarian, even though he may have a small house, a little potato plot and cow, as does the dwarf-holder as long as his farm merely serves his own household.

Although possession of a farm does not prevent dwarf-holders from being proletarians, it certainly makes it much more difficult for them to feel like proletarians. Their past, their present and their future conspire to bombard them with reasons why they should stand on the side of the independent farmers. Tradition alone, which has much greater force in the country than in the town, will incline a small cottager and cow owner towards an ancestral peasant class consciousness rather than the novelty of proletarian class consciousness. But peasant consciousness also draws strength from the present.

In theory the small farmer produces for his own consumption; his need for money is met through the sale of labour power, not agricultural produce. But although this is by and large correct in theory, life itself
does not deal in the sharp distinctions we require for science. Any theoretician attempting to investigate the fundamental laws underlying these phenomena may, in fact has to, neglect a number of gradations: needless to say, the application of such laws to practical life demands that such gradations be taken into account. Small farmers whose farm is sufficient to supply the household with necessary food, and even farmers whose farm is not completely able to do so, will usually sell part of their produce; pigs or geese are fattened, eggs, milk, vegetables sold if there is a nearby market such as a town or factory. Such farmers are by no means indifferent to the price of food and have a strong interest in high prices for the produce they sell.

Where workers are paid in kind, agricultural workers also have an interest in high food prices even as wage-earners. If they receive part of their wages in rye, which they sell, they have an interest in high rye prices and hence high rye duties too. They appear on the market not only as sellers of labour-power, but also as sellers of food.

But alongside all these past traditions and current interests, the interests of the future are perhaps the most powerful force for instilling peasant feelings and thoughts into the dwarf-holder. Although individuals live in the present, they work for the future, and Social Democracy, the party of the future, is only too well aware of how massively this can influence their thoughts and actions.

The industrial wage-labourer who still believes that handicrafts have a future, or the journeyman who fancies himself as a future master, is different to one who has abandoned any hope of ever becoming independent within the present-day mode of production. Similarly, the dwarf-holder who has given up hope of prospering and becoming independent on his own farm is different to the one who harbours hopes of one day ceasing to be a dwarf-holder, of saving enough out of his wages to buy sufficient land to become a fully independent peasant. Although he might still be a cottager who has to buy food, he regards himself as a prospective peasant who will sell it.

Bourgeois economists therefore regard the nourishing and sustaining of this hope as an important task: it is the most powerful bond tying the most numerous of the working classes on the land to land-ownership and separating them from the proletariat. Such economists therefore plead with even the large landowners not to buy up all available plots in their blind greed for land but to leave sufficient, if not to allow all agricultural workers to become peasants - where would one get wage-labourers from otherwise? - but to nurture the hope that each might one day become an independent peasant. It is just this hope which makes them all the more eager, willing and subservient.
One of the most eager advocates of large landowners giving workers opportunities to buy land is von der Goltz. However, he notes,

My view is by no means that one should seek to make all agricultural workers into landowners: or at least this is an aim which does not need to be seriously considered for the present in the Eastern Provinces. The prospect of one day becoming a landowner makes the Institute industrious, thrifty, economical, holds them back from excesses, and also benefits the employer. (Goltz, Die ländliche Arbeiterklasse und der preußische Staat, p. 215)

Roscher echoes this view.

The existence of small farms is particularly useful in that it offers an unbroken ladder filling the gaps between day-labourers and large peasants. The prospect of advance which such a ladder offers if one is industrious, skilled and thrifty both appeases and stimulates. (Roscher, Nationalökonomie des Ackerbaus, p. 176)

Two souls inhabit the breast of the dwarf-holder: a peasant and a proletarian. The conservative parties all have cause to strengthen the peasant soul: the interest of the proletariat runs in the opposite direction – along with the interests of social development and the dwarf-holders themselves. Consider the numerous examples of peasant underconsumption and overwork in Part I: the fact that the agricultural wage-labourer is better off than the independent small farmer, that misery begins when the peasant shackles himself to the land, should leave no doubt that we should not seek to elevate dwarf-holders as persons, to raise them from barbarism to civilisation, by lifting them out of wage-labour and into the peasantry. In fact, nothing could be more dangerous and cruel than to awaken illusions amongst them as to the future of the small peasant farm.

But an agrarian programme which promises effective protection for the peasantry does just this. Such a programme inevitably strikes a death blow at the proletarian soul in the dwarf-holders, and leaves the field free for the peasant in their heart. It severs the bond linking them to the industrial proletariat, and gives new life to all those factors which separate them from the wider mass of the proletariat. This type of rural proletarian agitation will inevitably achieve the exact opposite of what it was intended to. The basis of real proletarian class struggle in the countryside – as opposed to mere electoral agitation – is undermined for the sake of a few transient moments of success.
Class Struggle and Social Development

Social Democracy is the party of the proletariat in class struggle. But it is not just this. It is also a party of social development: it seeks the development of the whole of the body of society to a higher form beyond that of its present capitalist stage.

Social Democracy is characterised by the fact that it has joined together these two aspects into a cohesive unity. The establishment of this unity constitutes the immortal historical service rendered by Marx and Engels. The workers' movement and utopianism originally developed independently of each other, and not infrequently antagonistically. Their unification had, in part, been achieved prior to the work of Marx and Engels as in the socialist wing of the Chartists, the egalitarian French Communists, and Weitling's sects. Theory has never yet raced ahead of practice in any new major social development. Its accomplishment was merely to discover the main outlines of the new formation amongst the scattered and hesitant experiments, which had not as yet intellectually detached themselves from their inherited foundation, and discern their general necessity. And this was what in fact Marx and Engels achieved in the unification of the workers' movement and socialism. They replaced empirical trial-and-error and sentimental yearnings with the clear perception that the highest form of the workers' movement is the socialist movement, and that socialism can only be realised through the workers' movement; that the workers' movement must, of necessity, strive to advance beyond capitalist society, and that the only class which has the power to struggle for a higher social stage beyond that of capitalism is the class of wage-labourers.

Their work firmly established the inseparable link between socialism and the proletarian class struggle. Resurrecting the issue of whether the final aim or the movement is the more important, whether theory is more important than practice – questions which are no more than vague variations on themes already resolved 50 years ago in the Communist Manifesto – is a sign of theoretical regression, not advance.

The aim and the movement belong together in Social Democracy: they are inseparable. But should they ever come into conflict, it will be the movement which will have to give way. In other words: social development takes precedence over the interests of the proletariat. Social Democracy cannot protect proletarian interests which stand in the way of social development.

This is not, of course, generally the case. The theoretical basis of
Social Democracy consists in the recognition that the interests of social development and those of the proletariat coincide, and that the proletariat is therefore destined to act as the mainspring of social development.

However, an excessively close observation of the maxim 'charity begins at home', or a tendency to 'put the immediate before the longer term' can mean that quite significant special interests of specific sections of the proletariat can emerge which do indeed stand in the way of the development of society.

The proletariat consists of many diverse strata. Unless these are united within the overall mass of the proletariat in the struggle for its major objectives, the proletarian elite can all too easily come to feel that its interests are opposed to those of the broad masses. At the same time, these individual labour aristocracies are seriously threatened by the revolutionising of the prevailing conditions through technical and economic developments: these introduce mechanisation, replace men by women, skilled workers by unskilled, they render whole categories of workers superfluous, draw backward workers from the countryside or abroad into the towns and so on. The Social Democratic method for fighting this involves activating the solidarity of the proletariat as a whole, organising women, unskilled workers, foreign workers, introducing a legally regulated normal working day, and so forth. The guild method, which apes bourgeois conceptions, consists in the exclusion of other workers from work, and in arresting economic development. The labour aristocrats imagine themselves to have an acquired right for employment in those areas in which they wish to remain, and proceed to fight off the introduction of new machinery, women's labour and so on - in vain, as experience shows. Economic development is more powerful than they are; they are obliged to give way, step by step, but not without first suffering serious losses.

The first method is that of Social Democracy: the second, that of those worker movements which are not led by a higher aim, by a 'theory' - which are purely pragmatic movements. Can there be any doubt as to which movement is preferable?

Social Democracy is only too well aware that every economic advance in the capitalist mode of production is initially a source of degradation and decline for those layers of the population affected; but it also recognises that obstructing progress will result in even more disagreeable consequences. Progress does not simply degrade the working population: it also lays the basis for their subsequent elevation and emancipation. The advance of the machine system was accompanied by untold miseries inflicted on the working population. Their general position fell below
that of the heyday of handicrafts. But if those branches of industry in which the machine ultimately prevailed are compared with those in which production is still carried out using handicraft methods, on average the former will be seen to have shorter working hours, higher wages and more hygienic conditions.

The above discussion has been restricted to proletarians, since they provide the clearest illustration of the relationship between class struggle and social development. Applying these arguments to the question of the protection of the peasantry requires no special effort. Social Democracy clearly cannot offer peasants what it denies to proletarians the protection of their occupational position. The protection of workers demanded by Social Democracy is not aimed at preserving the occupations of individual workers, but rather their capacity for work, and for life: it protects their humanity, not their particular job. The proletariat does not demand this protection as a privilege for itself; it is to be shared by anyone who needs it, and should the peasantry ever demand the extension of worker protection to their own workplaces and their own selves, they will find no more eager helper than Social Democracy. But, as is well known, this is not what they want: in fact they resist it quite desperately. What they demand is the protection of their specific type of cultivation against the advance of economic development – and this Social Democracy cannot provide.

But aren't conditions in agriculture different to those in industry; doesn't economic development in agriculture merely lead to the ruin and pauperisation of the peasantry, rather than the supersession of the small enterprise by a higher mode of production? Protecting the peasantry would not therefore retard economic advance, but would simply put a brake on the physical degeneration of the agricultural population. Although the methods may differ, in essence this is no different in aim to steps made to protect workers.

The reply to this is as follows. Protection of the peasantry does not primarily mean protection of the individual peasant, but rather of peasant property. And this is, in fact, the main cause of the peasant's poverty. We have already noted that agricultural wage-labourers are often better off than small peasant proprietors, and that the propertyless wage-labourers are much more likely to escape their native misery than the peasants, whose property binds them to the soil. Peasant protection does not, therefore, protect the peasant from impoverishment: it protects the fetters which chain the peasants to their poverty. Protection of the peasantry also implies the protection and encouragement of the sale of peasant produce. The commodities
which the peasants sell are food. The more they sell, the less they consume themselves. Promoting the sale of milk, eggs and meat in the towns means reducing their consumption on the land, and their replacement by potatoes, schnapps and coffee essence. Improvement of their position as peasants is bought at the cost of ruin as human beings.

Attempts to combat peasant impoverishment by shifting the burden on to industry and the proletariat are naturally ruled out from the start – in fact, they should be vigorously opposed.

Such methods of protecting the peasantry mean food tariffs on the one hand, and the law of entail, the binding of workers to the land, the strengthening of the Servants Ordinance, the payment of peasant debt interest and insurance premiums by the state, and the like, on the other. Attempts to ward off the impoverishment of the peasantry by any of these methods will either fail utterly or pauperise industry and the proletariat long before their goal is attained. But industry is the crucial mode of production in a capitalist polity: whether the population thrives, or not, depends much more on its fortunes than on the state of agriculture. As the case of England shows, a capitalist polity can sacrifice agriculture to industry without damaging its well-being. The reverse procedure leads to the ruin of both industry and agriculture. Nowhere is the rural population more poverty-stricken than in those modern agrarian states lacking in developed industry: one only has to look at Galicia, Italy, Spain and the Balkan countries to discover what undeveloped industry means for the peasantry.

On the other hand, it is the proletariat, not the peasantry, which is the bearer of modern social development: elevating the peasantry at the expense of the proletariat means arresting social progress.

Moreover, it is not quite correct to say that agriculture does not exhibit any progress. Although this may be true of pure agriculture, which eventually runs into a dead end, the relations of production on the land are revolutionised in a variety of ways once industry breaks out of the towns and spreads into the countryside. Any agricultural activity linked with and dependent on industry passes into a phase of uninterrupted transformation, constantly creating and recreating new forms – just like industry itself. This process of the revolutionising of agriculture is still in its infancy, but it is advancing rapidly. Protection of the peasantry, the attempt to maintain the old independent peasant agriculture, can only impede this development. It will not prevent the transformation of agriculture, and will prove just as impotent as measures to protect the handicrafts within industry. In fact, it will inevitably increase the suffering and sacrifice incurred in development, and its ultimate bankruptcy will inflict a serious wound on the moral reputation of those
parties which advocate it.

Nationalisation of the Land

A Social Democratic agrarian programme conceived as protection of the peasantry would not only be futile: worse still, it would prove deeply damaging to Social Democracy, since it would stand in contradiction to its character as both a proletarian and evolutionary, or if one wishes, revolutionary party. The price it would have to pay for these very questionable, short-lived successes would be the disruption of its internal character, a reduction in its capacity to go on the offensive and the loss of its reputation as the party with the farthest horizons.

However, Social Democracy could adopt a different type of agrarian programme. Agriculture is claimed to display much slower development than industry: it will act as a brake on our advance. We therefore need measures to accelerate this development. This would be the right type of agrarian programme.

This is quite correct. Human society is a unitary organism, but – and this is what particularly distinguishes it from animal organisms – it is not an organism whose parts all develop at the same speed. Some remain backward, are overtaken by others and must, in the interests of uniformity, be driven onwards artificially by external forces in order to adapt to the whole. This applies as much for individual tracts of land as for individual classes. Nothing could be more mistaken than to suppose that recognition of the principle of social development rules out any leaps forward, anything artificial – that is, conscious intervention in social processes. It only rules out arbitrary intervention – intervention which contradicts the tendencies of social development, intervention inspired not by social insight, but merely by our whims and wants.

The civilised countries of Europe became ripe for capitalism long before feudalism had become obsolete in every branch of production and in every locality – we still find many vestiges of it today. And modern society will also be ripe for socialism long before the last handicraft worker and peasant will have vanished, before the entire proletariat is politically mature and economically organised. These are prerequisites which will never be fully met in capitalist society. In fact, one of the main tasks of the victorious proletariat will be to raise up the backward layers of the population and provide them with the means for a higher mode of production and a higher culture. Measures to elevate the peasantry by suggesting, and facilitating as much as is possible, the transition to socialist production will certainly play a major role in this. Social Democracy will certainly need this type of agrarian programme.
The question is simply whether the time for such a programme has arrived: whether a Social Democratic agrarian programme which promotes the development of agriculture in a socialist sense is possible on the foundations of present-day society.

The main driving force of economic development in capitalist society is the interests of the capitalists, profit. The encouragement of economic development initially implies the encouragement of profit.

However, there are specific capitalist means which correspond to this specific capitalist goal. What position should Social Democracy take towards economic development under these circumstances?

We cannot, and ought not, to impede capitalist development; but this does not mean that a proletarian socialist party has any reason to support it.

We cannot prevent the introduction of labour-saving machinery, or the replacement of men by women as wage-labourers. But it is not our place to egg the capitalists on, or to support them at the state's expense. The same applies to the expropriation of peasants and handicraft workers.

Social Democracy is sometimes accused of rejoicing in the proletarianisation of these classes. Nothing could be further from the truth. It does indeed regret that this happens: and if it took over the helm, it would immediately put an end to such methods of economic progress. Its position is simply that it is hopeless to try and hinder this process within the context of present-day society. Social Democracy's own historic role is not the expropriation of independent producers but the expropriation of the expropriators.

The same situation, if not quite as clear, is evident in economic development via the extension of the world market and colonialism. This method is also fundamentally a method of expropriation: it rests on the expropriation of the original inhabitants and owners of the colonial territory, and the ruin of their indigenous industries. If Chinese coolies ever come to Europe and compete with European workers, the latter ought not to forget that the former had previously been expropriated by European capital.

This process also cannot be stopped; it is also a precondition of socialist society, although Social Democracy ought not, on these grounds, to lend a helping hand. As with the case of maintaining the handicrafts and the peasantry, it is a reactionary utopia to call upon Social Democracy to support the resistance of the indigenous peoples of the colonised countries against their expropriation. But it would be flying in the face of the interests of the proletariat if one wanted to call upon it to support capitalists by granting them the assistance of the power of the state. Such work is too dirty for the proletariat to become
an accessory. The whole rotten business is one of the historic tasks of the bourgeoisie; and the proletariat should be glad not to have to soil its hands with it. There need be no worries that the bourgeoisie will neglect its duty and allow economic development to come to a standstill. As long as it continues to have social and political power, it will not shirk this historical task, since it is, by its nature, a task which commands the bourgeoisie to increase profit.

The interventions of the proletariat in this process of capitalist development ought not to consist in its promotion, in the lending of voluntary support – either directly or, through the state, indirectly. But it ought not to impede it. Its task is to mitigate the ruinous and degrading consequences for those sections of the population affected – as much as it can – without impairing the development itself. Not a ban on machines and female labour, therefore, but protective legislation. Not the prevention of exports, but the refusal of various types of state support for them (protective tariffs, premiums, colonial acquisitions and so on). And where this remains in practice ineffective, at least the maximum protection of those affected by this policy, such as the indigenous peoples of the colonies.

We shall come later to how this principle should be applied to some of the methods used to expropriate the peasantry.

The task of a socialist agrarian programme is clearly not to promote the capitalist economic development of agriculture. And no one is proposing this. What are being considered are methods which can begin to prepare the ground for socialist production in agriculture, and which accelerate agriculture’s transition to such a form of production as painlessly as possible.

Such an approach is only rendered possible by the contradiction between landed property and the agricultural enterprise. The agricultural enterprise is far more backward than the industrial, and much further removed from socialism. It seems to be an absurdity to pass over to a socialist organisation of agriculture as long as capitalism still rules in industry, and hence in society.

But what applies to production does not apply to property. Private property in land has entered into a contradiction with the conditions of production in agriculture much more rapidly and much more acutely than in industry, and has become much more of a fetter on it. Property in land has already become completely detached from the practice of farming. Whereas the tendency towards centralisation is scarcely perceptible for farms – in fact there is often a visible tendency towards fragmentation – landed property displays a marked tendency towards centralisation, particularly evident in mortgaged land, which is now overwhelmingly
The nationalisation of landed property is therefore already possible within capitalist society: it can be accomplished whilst retaining commodity production. Bourgeois parties, and often farmers themselves, already call for it in one form or another – often quite urgently. At the same time, socialist agrarian programmes of the type under discussion do not amount to any more than one method or another for the nationalisation of land.

Our attitude to land nationalisation in present-day society will also reveal our attitude to Social Democratic agrarian programmes of the progressive variety.

Alongside true land nationalisation, which has become very popular, in particular in countries with a tenant system of farming, we also have to consider the nationalisation of mortgages and the nationalisation of the grain trade.

Whoever holds the mortgage is the true lord of the land: the mortgage debtor stands in a similar relation to the mortgage holder as the tenant does to the landlord.

But the monopoly of the grain trade makes those farmers who grow grain for sale – or the vast majority – completely dependent on the holder of this monopoly. If not de jure, then de facto, this monopolist controls the entire land area planted with grain.

The socialists were the first to raise these demands. The eight demands made by the Communist Party in Germany, set out by the Committee of the Communist League in March 1848 (including Marx and Engels) read: 'Mortgages on peasant lands shall be declared the property of the state. Interest on such mortgages should be paid by the peasants to the state.'

And the preceding demand called for the conversion of large estates into state property.

Thirty years later, the workers' associations of the canton of Zurich began a movement for the introduction of state trade in grain.

Today, Social Democratic parties often look on these same demands with suspicion when they are raised by farmers, if not rejecting them outright. What has changed since then?

Both the general judgement and the social situation.

'When the February revolution broke out', wrote Engels in his memorable introduction to Marx's Class Struggles in France 1848-1850,
could be no doubt for us, under the circumstances then obtaining, that the great decisive combat had commenced, that it would have to be fought out in a single, long and vicissitudinous period of revolution, but that it could only end in the final victory of the proletariat. (Engels, ibid., p. 644)

However, the Swiss workers' movement of the 1870s was still under the sway of the democratic superstition which disregards class antagonisms and believes that the required democratic forms and enlightenment are all that is needed to clear the path towards socialism.

The current view is very different: and the present situation is very different too. Now it is propertied farmers, not proletarians, who are clamouring the most for the nationalisation of the grain trade and mortgages – a demand intended to foist the disadvantages, not confer the advantages, of private landed property on society in general, at the same time allowing the advantages of private landed property to persist untouched, in fact securing and enlarging them. It is not proletarians, but landowners and capitalists who control the state, and would implement a policy of nationalisation. And the position of both farmers and proletarians in 1898 is very different to that of 1848, or 1878.

Up until 1878 grain prices were steadily rising; farmers prospered but consumers suffered. State intervention would have meant coming to the aid of the consumer, and combatting price rises.

Today grain prices are falling. It is not consumers, but producers who are moaning about the price of corn. No one remotely imagines that the state would bring about a further fall in prices – state intervention in the fixing of grain prices only takes place to raise them. Hardly surprising that the state grain trade now shows a very different sort of face.

The same applies to the nationalisation of mortgages. Ground-rents were steadily rising between 1848 and 1878. As long as this continued, the nationalisation of mortgages would have held no benefits for land-ownership. Its sole purpose would have been to serve as a transitional measure of the revolutionary proletariat towards a socialist society, a means of making land-ownership dependent on the state and removing a sphere of exploitation from the capitalists.

Matters have changed since 1878, when ground-rents started to fall. At the same time, the mass of mortgage interest and indebtedness is rising. Landowners are increasingly unable to meet their obligations: unless something unexpected happens, the mortgage lending banks are heading for heavy losses.
Nationalising mortgages would now be a means of guaranteeing that capitalists received their interest since their debtors would become the state, rather than individual owners. Their interest payments would be safe. In return, the state would be permitted to burden itself with the entire risk previously borne by the capitalists. The latter would gain—and landowners too, at least temporarily, should nationalisation lower the interest rate on their mortgages. The bill would be met by the taxpayer.

The situation would not be much different were land to be nationalised with compensation and no change in the capitalist mode of production, as demanded by bourgeois land reformers like Henry George. No one would have benefitted more than the bought-out landlords had such reformers succeeded in pushing through land nationalisation in England in the late 1870s. The state would have taken the entire loss on ground-rents—up to 30 per cent or more, now borne by the landlords—leaving the ex-owner free to enjoy the interest on the capital supplied to them by the state at their leisure.

Unlike the nationalisation of mortgages, nationalisation of land does admittedly have the advantage that the state can introduce improved farming methods to offset the consequences of the drop in ground-rents: nationalising mortgages confers no such influence over actual cultivation.

However, not too much trust should be placed in the state as farmer. The state is principally an institution of domination, of rule. And it will not abdicate this character when asked to exercise economic functions. The dominant outlook will be that of lawyers, policemen and soldiers, not technicians or the business-minded. This will only change when the proletariat succeeds in overcoming class differences and depriving the state of its character as an institution of domination. Under present conditions, the state is more expensive and less competent in its economic activities than the private capitalist—an argument gladly employed by the bourgeoisie against socialism, but in fact merely an argument against the modern state. Nevertheless, the nationalisation of an enterprise can economically benefit society as a whole where such establishments are either natural monopolies—such as railways, and some mines—or social monopolies such as cartels and trusts. The exploitation of the public by private monopolies can reach such levels that running them under state administration will appear as a deliverance, especially if the state is dependent on the people, preventing the Exchequer from merely perpetuating the exploitation of the private monopoly.

But where there is no such situation, there is no economic reason why a
business undertaking should pass into state administration under the present-day state. On the contrary. The economic reasons militating against state administration are joined by political reasons which originate in the state's character as an institution of domination. Multiplying the economic powers of the present-day state means multiplying its means for oppressing the ruled classes. This becomes less and less applicable, as do the economic arguments, the more the state comes under the influence of the proletariat. But democratic forms alone offer no guarantee against the use of state power to suppress the proletariat. Where peasants and petty bourgeois are in the majority, they may well be perfectly happy to restrict the exploitation of workers by big capitalists, but are extremely jealous of the 'economic freedom' of the small exploiters. The Swiss peasants and petty bourgeois give workers full scope in all political matters, but can barely control themselves should these workers strike against their handicraft masters: with the state behind them, they often behave more brutally than their comrades in unfree countries. And should government workers and civil servants seek to improve their working conditions, democratic freedoms, in particular the referendum, are set to work to force them to tighten their belts even more.

Social Democracy has no reason to enthuse over the extension of state economic activity and state property where the proletariat does not play a major role—except possibly where a particularly grave situation exists. Is there such a grave situation in agriculture?

Up until the 1870s, the ownership of land constituted a monopoly, which led to the increasing exploitation of the population. This monopoly was broken in agriculture by the development of transport and trade, at least where the state refrained from imposing artificial restrictions. On the other hand the organisational form of the enterprise in agriculture is not yet suitable for state administration. The agricultural industries—sugar-refining, distilling, brewing and so forth—will be ripe for nationalisation long before agriculture proper. The state itself currently prefers to lease out its estates to capitalist farmers rather than farm them itself. Social Democracy has no reason to multiply the number of capitalist state tenants, and thus render the government even less dependent on revenues voted for by the representatives of the people.

The Nationalisation of Forests and Water

One significant branch of rural economic life, albeit not a part of agriculture proper, represents an exception to this: forestry. Rational
husbandry of woodlands is incompatible with the exigencies of capitalist profit-grubbing. In fact, the subjection of woodlands to capital, and capitalist valorisation, leads to their ruin. Valorisation requires the fastest turnover of capital which can be achieved: however, the turnover of capital in forestry is unusually slow.

The long production time (which includes a relatively slight amount of working time), and the consequent length of the turnover period, makes forest culture a line of business unsuited to private and hence to capitalist production, the latter being fundamentally a private operation, even when the associated capitalist takes the place of the individual. The development of civilisation and industry in general has always shown itself so active in the destruction of forests that everything that has been done for their conservation and production is completely insignificant in comparison. (Marx, *Capital*, II, p. 322)

Marx cites Kirchhof's textbook of farm management:

The production process is also tied to such a long period of time that it extends beyond the plans of a private undertaking, and sometimes beyond a single human life. Capital invested in the acquisition of forest land [in communal production this capital disappears and the question is simply how much land the community can withdraw from arable and grazing land for timber production] only bears fruit after a comparatively long period of time, and turns over only partially, taking up to 150 years in the case of many types of wood. Moreover, effective timber production actually requires a reserve stock of growing timber amounting to between 10 and 40 times the annual yield. Thus someone who does not have other income or possess substantial areas of forest cannot pursue regular forestry. (Marx, ibid., p. 321 quoting Kirchhof, 1852, p. 58)

Where capitalist considerations alone decide, merciless felling can all too easily spell the total extinction of the forests. And the plight of the peasantry is no less ruinous in its effects. However, the forests are of such significance for the habitability and fertility of a country, its climate, the regularity of water levels, the mitigation of floods and the silting of rivers, the protection of cultivable soil in mountainous and coastal areas that their uncontrolled devastation will cause the most serious damage to the cultivation of the land. As with the labour-power of workers, states have often found themselves obliged to protect forests from being squandered by capital, whose blind greed drive it on to kill
the goose who lays the golden egg. Forestry protection laws have been introduced, but unfortunately only inadequately and not everywhere. In the German Reich only 30 per cent of the forested area in private hands is subject to such legislative control. In Prussia, Saxony and several smaller states there are no such provisions at all.

States also attempt – at great expense – to make good the damage so blithely inflicted by capital's mania for profit, either by extending state forests or afforesting barren mountain sides or dunes.

This general development is only partly offset by another process which arises from the growth in capitalist revenues, a process already touched on above in a different connection. Whereas capitalist exploitation is constantly encroaching on the forests, capitalist luxury allows them to creep outwards again. However, the extension of forestry through the indulgence of such profligate whims, for luxury, means that it is neither rational nor planned. In the Austrian Alps, for example, forest can be seen to be creeping forwards at the expense of pasturage, or even arable land in some areas, whilst retreating in another where its presence is vital to protect against avalanches and torrential flooding: the outcome – the ruin of cultivable land by avalanches, floods and mud-slides. Cultivable land is either restricted and agriculture rendered impossible by an excess of forest, or is forced to suffer through the lack of it. This is the forestry of the capitalist epoch.

The one is as pernicious as the other. Both have to be stemmed in the interests of society as a whole. The most efficient way of doing this, and the only measure able to ensure rational forestry, is the nationalisation of the forests – at least where the state is not financially bankrupt and where the government is not under the sway of the very same noblest and best who regard the ruination of agriculture by their sport as one of their most precious privileges. In a financially healthy and democratic state, Social Democracy can certainly press for the nationalisation of forests, even if the proletariat still has only meagre influence.

Closely related to the nationalisation of forests is the nationalisation of water. This is not a demand related solely to the interests of agriculture, such as irrigation and drainage; many other very important interests also enter the picture. In particular, these include transportation (river, lake and canal navigation), industry (which uses a great deal of hydro-power, and will use even more, the greater the development of the electrical engineering industry), hygiene (the draining of swamps, the provision of drinking water, removal of sewage and other wastes) and finally, public safety (in particular, protection against floods).

The need for the rational management of water increases, the more
the capitalist mode of production develops. Of all modes of production, the capitalist intervenes the most in the naturally-given pattern of water through deforestation, draining, lowering the water level of lakes, pipelines, canal construction, flood control and dams. And it has created more means than any other mode of production for forcing water to conform to its requirements. The more artificial the system of water-courses becomes, the more ruinous the effects which improper development can wreak. The divergence of the interests of the individual from those of society in general is especially acute in this sphere. Although a river can be juridically divided into separate parts, and a title of ownership allotted to each, it nevertheless remains a river, in fact a complete river basin, one single entity from source to mouth: and what might be beneficial to the lord of the river in one stretch, can mean devastation for those living downstream. Rational management of water has to be a system of management which regulates the entire basin in a planned fashion according to uniform criteria: this necessarily involves linking it with forestry. The lord of the river has to be lord of the forest too.

The demand for the nationalisation of water is currently especially legitimate, since the ground-rents yielded by flowing water are rising, not falling, as a consequence of the increasing capitalist exploitation of water for industrial purposes. Such nationalisation would not impose a financial burden on the population at large; in fact, it would enrich the state, at least where it was carried out skillfully. It is therefore quite permissible to demand the nationalisation of water wherever the state is not so corrupt that any act of nationalisation simply leads to the plundering of the state's coffers, or so bureaucratically fossilised that it is incapable of undertaking any technical task; and as long as it is passably honest and subject to the control of a democratically elected assembly.

Although doubts may be raised as to administration by the bourgeois state, and even more to administration by the police state, as far as forests and water are concerned, both are superior to private management.

The nationalisation of forests and water should not be equated with the common ownership of forests and water practised in the Mark community. Such communal ownership was the product of the communal exploitation of forests and water, of common fishing, common hunting, common pasturage. Forest grazing has now virtually ceased; the hunt has become the private pleasure of the aristocracy, and fishing from rivers is no longer an important element in the popular diet. Considerations of fishing, hunting and grazing are not relevant to the
present need to nationalise forests and water. They have been replaced by factors which played no part in the Mark community, since none of the preconditions for them were then in existence.

Village Communism

So much on the subject of state administration of the land. But in addition to state administration 'state socialism' – there is also administration at commune level, 'municipal socialism'. Should this be the preferred lever for accelerating stagnating development in agriculture and pushing it towards socialism? Isn't village communism a venerable institution, closer to the heart of the conservative peasant than that of the town-dweller, with numerous vestiges still in existence?

According to the 1895 Census there were in Germany:

<table>
<thead>
<tr>
<th></th>
<th>Parishes</th>
<th>Farms</th>
<th>Cultivated area (hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>With undivided pasturage</td>
<td>12,492</td>
<td>429,468</td>
<td>441,635</td>
</tr>
<tr>
<td>With undivided woodland</td>
<td>12,386</td>
<td>570,846</td>
<td>1,340,100</td>
</tr>
<tr>
<td>With divided land, but in</td>
<td>8,560</td>
<td>382,833</td>
<td>264,309</td>
</tr>
<tr>
<td>communal ownership</td>
<td></td>
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Couldn't these vestiges of village communism simply be extended in such a way that the growth of peasant agriculture within them would propel it into socialism?

This sounds very tempting. In Russia, where village communism was still very strong until recently, a very powerful tendency within the socialist movement did in fact live in the conviction that such communism placed Russia closer to socialist society than Western Europe. In the West it was bourgeois social reformers, such as Lavaleye, who first became interested in, and enthusiastic about, the original village communism of the soil, and regarded its revival as a means of solving the social question in the country, and hence in the town, which would be cut off from the steady supply of new proletarians from the land. Some Social Democrats have also recently come out in favour of strengthening and extending this primitive communism in their search for an agrarian programme, at the same moment as Russian Social
Democracy, learning from experience, has completely broken with the view that the village communism handed down from the Middle Ages could become an element in modern socialism.

Communism and communism are clearly two different things! The revolution sought by Social Democracy is not, in the final analysis, a juridical, but an economic revolution: its aim is not a transformation of property relations, but of the capitalist mode of production. Its only motive in abolishing the former is to effect the abolition of the latter. Socialism's main problems are not juridical, but economic.

The mere extension of communal property in land as preparation for the socialist mode of production is pointless if it is not intended to facilitate the extension of communal production, or if the preconditions for communal production, understood as modern socialism, are lacking.

Communal property in the Mark community arose out of the requirements of a type of agriculture which is now completely obsolete. The demise of this type of agriculture would have been impossible without the suppression of the type of common property corresponding to it. Where common pastureland (Allmend) or its remnants can be found, they still generally represent an obstacle to agricultural progress. The only economic justification for it is under exceptional circumstances, such as the alps in Switzerland, which can only be used as pasture. Its revival and extension would be meaningless without a simultaneous return to the old method of farming – the three-field system with pasture on the common land and grazing in the common forest.

Those agronomists now calling for the creation of new common pastures are definitely not socialists. Their demand is in the interests of large landowners, and their purpose is to bind agricultural labourers to the land permanently by tempting them with the possibility of acquiring a small holding (either on lease or as free property). Common grazing is an essential complement to this, since it would be impossible for them to keep cattle or obtain manure on such small holdings without it – that is, to sustain themselves for any length of time. The fresh creation of feudal common pasture (Allmend) is intended to round off and secure the work of the fresh creation of a class of feudal dependents (cf. Goltz, Die ländliche Arbeiterklasse, p. 262ff.; Sering, in Thiels landwirtschaftliches Jahrbuch, 1897 Supplement, pp. 131, 271ff.).

But, if common land has become a means for impeding agricultural progress and perpetuating feudal conditions, the right to use this common land has become a feudal privilege. The hereditary peasant inhabitants of the Mark have become an aristocracy, a commune of burghers which isolates itself from that of the general populace, the mass of incomers, and sets itself above it. Miaskowski, a warm admirer of the Allmend, says:
Inasmuch as this usage increasingly no longer occurs without payment, and nowadays frequently only benefits a part of the resident population, the *Allmenden* have become transformed from free goods for all those resident in a locality into a kind of collective fee-tail, the usage of which is now only accessible to members of a private corporation and not always free of charge. (Miaskowski, *Die schweizerische Allmend*, p. 3)

Where original communal property is still plentiful, and is used by a plentiful peasantry, it has become – as Miaskowski tellingly puts it – a fee-tail, only distinguished from other aristocratic fee-tails by the fact that it belongs not to a single family but is owned collectively by a number of families. Social Democracy must oppose it, as it would any other feudal fee-tail.

However, where original communal property only exists as meagre remnants, as small pieces of common pastureland, the collection of leaves for animal litter in the woodland and so on, and is only used by poor people, it has become a prop for entailment and the exploitation of the agricultural working population in general by helping to bind them to the soil. It has exactly the same effect as some of the charitable works of manufacturers, such as dwellings, which are built and let out to their workers. There is no reason why Social Democracy should interest itself in the extension and expansion of this type of communal property.

On the other hand, it would of course be going too far simply to demand the *abolition* of common forest or grazing rights where a poor population has managed to retain them. The abolition of such rights is a part of the larger process of the expropriation of the mass of the population to the benefit of a small number of owners. This process is immutable and the necessary prerequisite for the development of modern socialist production. But as we noted above, its furtherance does not figure amongst the historical tasks of the proletariat. Inasmuch as it intervenes in the process at all, its task should simply be to render what support it can to those displaced, to mitigate the consequences of this necessary and inevitable development as much as possible without obstructing it as far as the constraints set by prevailing power relations and economic conditions allow.

Social Democracy does not, therefore, have to work for the abolition of the grazing and forest rights retained by small peasants and day-labourers. We have compared their effects with those of the dwellings put up by manufacturers for workers. But as much as one may regret the binding and subjugation of workers fostered by such dwellings, it would be perverse to advocate the eviction of their inhabitants.
Social Democracy can quite safely leave the abolition of all forest and grazing rights to the ruling classes, wherever these block the path of rational agriculture or forestry. Social Democracy's task is to ensure that where such abolition takes place, those whose rights are at stake suffer as little as possible, and are not - as usually happens - cheated of their meagre entitlements.

At the same time, Social Democracy must never mistake the way backwards for the way forward: it should not regard the revival of medieval communal property in land, the extension and new creation of common pasture land, common woodland, and the extension of woodland use for agricultural purposes as the creation of a transitional stage to socialism.

But if the basis of medieval agrarian communism, and hence that system itself, is now irrecoverable, the conditions for a type of modern communal socialism are now developing within contemporary society - not in the countryside, but in the towns. The concentration of population in the towns is creating new tasks for communal administration, necessitating the replacement of private property by communal property in a large number of spheres.

On the one hand the accumulation of large masses of people within a small area means that economic functions exercised by individuals on their own behalf in villages - such as lighting, obtaining water, and transport - are assigned to large centralised bodies which would become intolerable monopolies in the hands of capital, such as gas works, power stations, water supplies, trams and so on: sooner or later these have to pass into communal hands. On the other hand, the concentration of population creates new tasks for communal administration and new means for solving tasks which would prove insoluble for rural parishes. The crowding together of large masses of people in a small area, the increase in ground-rents which drives landowners to cover every square metre of land with as many buildings as possible and deprive the population of light and air, the masses of foodstuffs which are constantly shipped into the towns, the masses of waste and refuse which have to be shipped out - all create a profusion of very difficult tasks unknown to the rural parish, the solution of which requires a number of major communal utilities - the creation of a sewage system, public squares and gardens, markets and so on. The accumulation of population in towns not only creates new needs, unknown to the country, but also provides the conditions for meeting needs existing both on the land and in the town, but which the former is unable to satisfy. This concentration also allows the creation of institutions unknown in the countryside. Secondary schools, hospitals, and almshouses are just as necessary in the
open country as in the town, but the 'raw material' for them is not available in sufficient volume, and there is an even greater shortage of the necessary physical and intellectual resources. The countryside gets poorer whilst wealth piles up in the towns; the land also withers intellectually whilst intellectual life blossoms in the town.

The consequence is that communal administration increases in scale in the towns, and grows much more quickly than the municipalities themselves.

However, the commune is still primarily not an institution of domination but of administration, at least where it does not coincide with the state, which is usually the case in the modern system of government. The more independent it remains from the state, the less subservient it has to be to state authority, the less it will be an institution of domination. The industrial towns are also the site at which the proletariat first asserts itself, where it collects in masses, attains class consciousness, organises itself, achieves political maturity and sets about defending its interests against the capitalist class. If it obtains universal suffrage for municipal elections, it can, with sufficient communal independence, go as far as to organise communal administration in line with its own interests – hence the interests of society in general – and practise municipal socialism. Although this may be within the very narrow limits set by the general capitalist character of the state and society, much of significance can still be achieved given the knowledge and skill.

Communal administration will be more planned and rational, the more the commune is mistress of its own territory, the more of it is municipal property. Ground-rents are rising in the towns; the results of this increase accrue to the municipality wherever it owns the land. Given communal independence, universal suffrage and a given level of proletarian development, this increase can be used not to augment the powers of the ruling classes, but to promote the welfare and educational policies of the commune. The municipalisation of land also allows a fundamental reform of the living conditions of the population via the positive act of building municipal housing: mere building regulations, bans and building and housing inspections only remove the most glaring abuses, but do not get at their roots – rack-renting by the monopolists in land.

The maximum possible extension of the municipal ownership of land is therefore one of the most important tasks of a modern, independent, democratic town council. Modern urban administration should not only refrain from selling any municipal property, but should buy land wherever it can be had on favourable terms. At the level of the state,
the proletarian parties should work towards as wide as possible an extension of the powers of municipal administrations over rack-renters, with as extensive a right of expropriation as can be obtained.

The position is different in the countryside. The proletarian has no say in the commune, even where universal suffrage prevails. It is too isolated, backward and economically over-dependent on a few employers, who can control it very tightly. It is inconceivable that a rural parish could pursue any other policy than that consonant with the interests of land-ownership. The economic, as well as the political, foundation for 'municipal socialism' is lacking. It is impossible for the economic functions of the modern urban municipal council to be transferred to the village. The old feudal agriculture, the object of so much communal administration, has gone. And it is not yet possible to conceive of a modern type of agriculture which could be practised by the commune, of a large-scale cooperative agriculture run by the village commune. Production cooperatives seldom have success even in the towns; large-scale producer cooperatives in the hands of peasants would lack all the elements needed for success – the necessary intellectual capacity, discipline and money. Not one village commune would, in our view, be prepared and able to assume the cultivation of a modern large-scale farm. But if this is so, if the basis of the communism of the soil is gone, and municipal socialism as practised in the large towns is impossible, what is the point of demanding that rural parishes should buy land or extend their holdings? The point is not for them to buy land simply to own it, but to put it to use. And where no use can be found, the purchase is more than superfluous. At most they could lease off their land, but this would not cover their long-run costs because of falling ground-rents.

The creation and enlargement of communal property in land might perhaps constitute one of the methods for the socialisation of the means of production in the countryside, just as it does in the town. However, under present circumstances it should only be raised as a general demand for the towns – and general demands are what we are talking about here. Our concern is not with what might become necessary under specific local circumstances since the object of our discussion is Social Democratic agrarian policy in general.
The Protection of the Rural Proletariat

Industrial and Agricultural Social Policy

Our discussions of Social Democratic agrarian policy have so far come to an overwhelmingly negative conclusion: this is not very encouraging for those who are looking for a Social Democratic 'agrarian programme' — that is, for demands which should be raised by the proletariat in order to save the peasant mode of agriculture or to offer a painless route to socialist farming, avoiding the capitalist transitional state, but yet still within capitalist society.

Such a negative judgement does not mean, however, that our position implies that no positive Social Democratic agrarian policy is possible and that we are condemned to agrarian nihilism. If Social Democracy's perspective can have — in fact must have — a positive effect in the sphere of industry in present-day society, the same must also apply to agriculture, by virtue of the fact that, as we have already repeatedly stressed, society as a whole constitutes one unitary organism. The policy of Social Democracy in agriculture cannot differ fundamentally from its policy in industry. One the other hand, the proletariat cannot simply transfer its previous social policy, created out of conditions in industry, into agriculture. It must adapt them to the conditions peculiar to agriculture. This is the first task Social Democracy has to accomplish if it wishes to carry out rural agitation. It does not need to search for new axioms or new programmes for its activity in the countryside; rather it has to investigate the consequences of its previous overall programme when applied to agriculture, and the modifications which its demands will undergo in the course of such an application.

Such a study would represent a major exercise in itself. And given the enormous diversity in rural conditions, it would produce a different result for each country, in fact for each district. Furthermore, it could not be undertaken solely by theoreticians: it would require the collaboration of one, or more, 'practitioners' — that is, people well-acquainted with the agricultural practice of the various types of farming and with the areas under consideration. It could never be brought to a conclusion and, like the Social Democratic programme for industry, would always be
merely provisional in character, since conditions are constantly changing.

If, despite all this, we insist on carrying out such a study here, our only aim is to adduce a few concrete examples: and these show, quite unmistakably, that a positive agrarian policy is possible for Social Democracy from our standpoint too. We have no desire here to provide the definitive and exhaustive declaration of Social Democratic agrarian policy.

Social Democracy's historic task consists in advancing the development of society beyond the capitalist stage: this requires measures both in the interests of society as a whole and in the interests of the proletariat, the sole driving force capable of lifting society beyond this stage. Social Democracy's social policy also displays these two aspects. Its agrarian policy can accordingly be divided into measures:

1) which benefit the rural proletariat;
2) which benefit
   a) agriculture
   b) the rural population as a whole.

There is no place here for measures to 'protect the peasantry'. Measures subsumed under (1) can be further subdivided into:

i) those which remove obstacles to the free activity and organisation of the proletariat;
ii) measures by which state power intervenes to protect the physical, intellectual and moral capacities of the proletariat against the oppressive effects of more powerful economic factors, wherever the activity of individuals or the organised mass of the proletariat is unable to do so.

Freedom of Combination, the Servants Ordinance

The first group of measures consists primarily of those aimed at the abolition of the remnants of feudal dependence still in existence in Germany. Of these, the best known is the Servants Ordinance, in which the ruling classes saved what they could of serfdom when the feudal-absolutist state collapsed. 'No phenomenon in modern civil society', writes Anton Menger, 'more closely approaches slavery and serfdom than that of the relation of the domestic servant to master' (Menger, 'Das bürgerliche Recht und die besitzlosen Volksklassen', p. 403). The feudal character of this relation is still being reinforced
where special laws directed at domestic servants give it statutory confirmation. It hardly does credit to the honour of the drafters of the Reich Civil Code that this feudal remnant — along with a number of others — still remains completely untouched 100 years after the great bourgeois revolutions. Only Alsace-Lorraine is free from the Ordinance, thanks to French law (see on this the very instructive article in Wurm's 'Volkslexikon', 1895, Vol. II, p. 926 ff., and the book by W. Kähler, Gesindewesen und Gesinderecht in Deutschland.)

But in addition to special laws directed against domestic servants, there are also laws directed against the entire rural working class. They still have not yet obtained the right to organise in trade unions in Germany: this right only applies to industrial workers. For the mass of rural workers, domestic servants, day labourers, Instleute, Einlieger, etc., just as with ships' hands in Prussia, for example, the law of 24 April 1854 forbids any agreement to stop work on penalty of up to one year in jail — and this law is still in force. For the modern proletarian, the right to combine is, alongside universal suffrage and freedom of movement, the most important of all basic rights. The proletariat cannot develop without this right; it has become a condition of its life. If Social Democracy wishes to rouse the rural proletariat, organise it and incorporate it into the proletarian army in struggle, it has to win this right for it. However, the right to form trade unions remains more important for the urban worker than for the rural worker, since possession of the right cannot, on its own, overcome isolation and economic dependency.

In England attempts to organise agricultural workers go back to the 1830s. And today? 'Of the nearly three-quarters of a million agricultural workers in Great Britain, not more than 40,000 are organised' (Sidney and Beatrice Webb, History of Trade Unionism, p. 429).

If the right to organise in trade unions is an indispensable right, the importance of which should not be minimised, the right of free movement is of much more practical importance. Any improvement in the position of agricultural workers over the last ten years is due to their freedom of movement, which allows them to migrate from the land and travel to the towns and other industrial districts. This is why freedom of movement is the most hated institution of the modern state from the point of view of the Agrarians. And although they are, as yet, powerless to impinge on it directly, they resort to every conceivable devious method to get around it: binding the worker to the soil by rent-fee farms, reviving the common pastureland (Allmend), either as common meadow or arable and garden land which is rented to the day
labourer, and similar devices, using the authorities to impede emigration (a favoured method of controlling the flight from the land of dwarf-holders in Galicia), increasing rail fares, charging for entry permits to the towns and similar reactionary rubbish.

Social Democracy has to oppose such moves with as much determination as it can muster. The Agrarians may try and establish a gulf between industrial and agricultural workers by claiming that the flooding of industrial districts with workers from the countryside worsens the working conditions of the industrial work force and reduces their power to resist the capitalist. On these grounds, industrial workers are supposed to have an interest in seeing that movement off the land should cease.

And such arguments can be heard amongst industrial workers. It was even claimed during the discussions preceding the creation of the Agrarian Programme, which was rejected at Breslau in 1895, that such movement off the land was the reason why it was necessary to preserve the peasantry and improve the agricultural worker's lot – to keep them in the countryside. Trade union agitation in the industrial districts was regarded as a hopeless task as long as new hordes of proletarian elements kept flooding in from the countryside – low in expectations and intellect, and economically weak – paralysing the efforts of organised workers by acting as strikebreakers.

This argument is correct from the standpoint of the passing interests of particular strata of workers, from the standpoint of the narrow-minded guild mentality of the 'we-are-only-trade-unionist' types, but not from the standpoint of the proletariat as a whole, considered as the driving force in the development of a new social order. Were this argument correct, it would be in the interests of the industrial proletariat to resist any increase in its ranks – that is, destroy the precondition of its victory. The migration of country dwellers into the towns may make it more difficult for organised workers to obtain a privileged position within the proletariat as a whole, but such migration holds out the prospect of organising very many strata of the working population and incorporating them into the proletariat in struggle, people who would otherwise have remained outside its ranks, and may have let themselves be used as weapons against it. Obviously, it is more difficult to lead recruits to victory than to march at the head of veterans. But the recruit armies of the great French Revolution, with their enthusiasm and great numbers, defeated the veterans of monarchist Europe, who had no way of filling the gaps in their ranks. The guarantee of the proletarian army's victory lies less in the training of its veterans than in the rapid growth in the number of its recruits rushing to march behind
its colours.

And it should also be remembered that the proletariat's certainty of victory has much less to do with the absorption of the small farm by the large – a very slow, and in some areas non-existent process – than with the growing dominance of industry in society, the product of the supplanting of agriculture by industry on the one hand, and agriculture's growing dependence on industry on the other.

It would be suicidal for Social Democracy to place deliberate obstructions in the way of this process; to seek to block the growth of industry and the increase in the industrial proletariat by clamping down on the inward movement of fresh labour-power from the land. Fortunately, it cannot.

It is impossible both to put an end to the low expectations and apathy of the rural population and keep them on the land. In present-day society the rural workforce will always live under less favourable conditions than the industrial proletariat: since the development of the former will always trail behind that of the latter, industry will continue to exercise a powerful attraction for the agricultural population. In fact, this attraction will continue to grow the more the rural population is stirred up, woken from its torpor and put into closer contact with the industrial population.

The rights of combination and freedom of movement are the two most important means for the free activity and organisation of both the agricultural and the industrial proletariat. Social Democracy's task is to win these weapons of class struggle and fight for their retention wherever they have already been won, and then to instruct and support all the various strata of the working population in their use. This covers the first set of measures in the interests of the proletariat.

Protection of Children

The second type of measure encompasses laws for the protection of all workers, but especially of working women and children.

Are such laws needed to protect the rural population? One might be incredulous that such a question should even be asked. But incredulity has to give way to astonishment that there are German Sozialpolitiker who would answer no. Their evidence rests on the Enquiry conducted by the Verein für Socialpolitik on the situation of the rural worker, which we have already cited many times above.

This Enquiry did admittedly come about under very singular circumstances. Only agricultural employers were sent questionnaires. For the Sozialpolitiker these were the only source which could be relied on
to tell the unvarnished truth about the situation of agricultural workers.

When the attention of Oberregierungsrath Thiel, one of the directors of the study, was drawn to the absurdity of this, his reply in the Foreword to the publication of the results read as follows:

If there is somewhere where confidence can be placed in information provided by employers, without correction from workers, this might be expected to be in agriculture, as circumstances are more straightforward there: the patriarchal relationship between employer and employee has been poisoned neither by many years of struggles over wages, by strikes and the conduct of class-struggle, nor by deeply antagonistic interests and struggles Subjective judgements may have crept in, and may often have been coloured by the standpoint of the employer; but these were easily identifiable and would not mislead anyone. (Verein für Socialpolitik, Verhältnisse der Landarbeiter in Nordwestdeutschland, I, p. xii).

In other words, those carrying out the study regarded what was to be investigated and what they wanted to see proven as already proven. And it seemed self-evident to them that no one would be more fitted than the employers to answer such questions as: 'Is excessively long working time leading to overwork, particularly for women and children? Does female labour lead to a neglect of the household? How does work affect the intellectual development of the child? Does the existing Servants Ordinance appear to be in need of reform?' etc.

Naturally, a 'subjectively coloured' answer to one of these questions would be 'easily identifiable'!

One can scarcely imagine a more astonishing claim from people who hope to be taken seriously as scientists.

No doubt there were very honest and knowledgeable people amongst the farmers asked, and much could be learnt from them. We have a lot to thank the Enquiry for in this respect. But it was utterly unfitted to provide any elucidation on the issue of the need for reform in the position of agricultural workers - in fact, it was worse than unfitted, it was quite misleading. No reasonable person would seek for enlightenment on the need for reform from people with good cause to frustrate it.

The Sozialpolitiker did have other reasons for only asking the Junkers, apart from their curious confidence in the patriarchal benevolence of these gentlemen. In the first place there was a shortage of resources and workers - a deplorable testimony to the scientific interest of our ruling and favoured classes. They should have come to
Social Democracy: proletarians would certainly have supplied the means and the people to ask the agricultural workers as well as the agricultural employers. And Social Democracy could also have helped to surmount the second obstacle which, according to Herr Thiel, prevented the consultation of farm workers their intellectual backwardness. This backwardness certainly exists thanks to that patriotism which thinks more of Kiaochau than of Prussian elementary schools; but our comrades would have been able to find at least a few agricultural workers who could have given the plain truth to our gentlemen Sozialpolitiker.

Of course, one should not expect German Sozialpolitiker to make links with workers' organisations when they are studying workers' conditions. Those who have done so, such as Sax in Thuringia and Herkner in Alsace, have made rich scientific pickings, but they have had to so in secret. And these were young men without posts or prestige. In contrast, no reasonable person should expect the gentlemen Privy Councillors who direct academic social policy in Germany to investigate the circumstances of workers in anything but the best circles.

But even if they did not want to lower themselves to actually asking workers about workers' conditions, there were other people they could have asked without compromising their sense of rank, people not directly in a situation of a conflict of interest with workers. For example, one might think that the question as to whether child labour led to a neglect of school could be better answered by teachers than by the children's exploiters; or that doctors might have been a more appropriate source of information about the adequacy of diet and housing, or whether work was excessively strenuous, than the farmers. There are also country clerics who take their calling seriously and could be expected to provide more unprejudiced answers than employers.

The procedure adopted by the Verein für Socialpolitik would have been reasonable had it been intended to deal with employers, not workers, from the start; if the Enquiry had not set out to document the distress of workers, but to provide material for a programme of aid to alleviate the distress of employers.

Of all the experts engaged in the study, this point was best understood by Dr K. Kärger; and he came to the conclusion:

In my opinion the rural labour issue culminates in the following question: how can the rural worker, especially in East Prussia, be prevailed upon to take up service in their home area with the local landowners? In putting the question in this way I want to show that in essence there is only a rural labour question from the standpoint of the
The Agrarian Question

employer, not from the workers themselves. Apart from a few exceptions, the material situation of agricultural workers, irrespective of which category they belong to, is a good one throughout Germany, and has showed a steady tendency to improve over the last two or three decades. The rural labour question cannot therefore consist in the question as to what means should be employed to improve the economic situation of the worker. (Kärger, Die Verhältnisse der Landarbeiter in Nordwestdeutschland, I, p. 217)

The only legal reform which Kärger therefore suggests is severe punishment for breach of contract. These are the results offered by German scientific investigation into the situation of workers.

Nevertheless, if the will to see is there, despite the fact that the Enquiry paints as much as it can in the brightest colours, and glosses over the things which cannot be given this treatment, there are ample facts available which show the necessity for far-reaching measures for the protection of workers from the standpoint of hygiene alone. And even more naturally from the standpoint of socialism, which not only wants to avoid a degeneration of the workforce, but also to elevate it intellectually and morally, and enable it to assume control of the economic mechanism. A social policy based on the belief that rural workers are so depressed as to be unable to answer questions about their own position, yet which arrives at the result that the position of this same class is a good one and that measures for its improvement are superfluous, has to be condemned from the outset from a socialist point of view.

The most important items of labour legislation are those which aim at the protection of the rising generation. In fact the entire socialist movement is more a movement for our children than it is for ourselves.

The productive employment of children is not something peculiar to capitalism. It is as old as humanity, and in a certain sense older, since animals begin to search for food long before they are fully grown. However, like labour in general, the capitalist mode of production has structured child labour in a unique and distinctly non-beneficial way. It replaces labour within the family by wage-labour for an employer; the one-time helpers of working parents become their competitors; an intellectually and physically crippling monotony takes the place of an eventful alternation between a wide variety of activities which developed, both mind and body; what was almost a game becomes an exhausting drudgery. This is characteristic of all wage-labour in capitalist society; but has especially striking effects in the field of child-labour as children are far more defenceless than adults, and at the
same time much more sensitive to any physical or intellectual damage, which they will have to live with for the rest of their lives.

The devastating effects of the capitalist exploitation of children first revealed themselves in large-scale industry. This was soon followed by the handicrafts and agriculture. As in industry, it is the large-scale agricultural enterprise with its division of labour, which creates a large number of simple and light tasks supposedly easily undertaken by children, and allocates them exclusively to these cheap and compliant workers.

But also as in industry, children's wage-labour is not confined to the large establishment; in fact by supplanting cheap labour it is a means of sustaining the small farm. And the more the flight from the land increases, the more scarce that adult workers become in the countryside, the greater the need to draw children into wage-labour.

Wage-labour by children in agriculture is not accompanied by any harmful effects: at least, this is what the employers questioned by the Verein für Socialpolitik assure us. Other people have different opinions. Although agricultural work takes place in the open air, and the work carried out by children is light — collecting stones, picking hops and the like — the system of wage-labour is always pushing towards the maximum possible extraction of effort from labour-power, the maximum intensity and duration of labour, and at the same time maximum monotony, since transfers between jobs mean a loss of time and more difficult supervision. The lightest and, within certain limits, the healthiest work will become hazardous once it is performed uninterruptedly beyond a certain limit.

The type of nightwork seen in industry does not have to be feared in agriculture. However, encroachments into children's night rest are very frequent in agriculture, where work begins very early in summer (and cattle tending in winter too) and ends late. For example, Konrad Agahd reports cases of children (in the Lissa district of Posen) 'who work in the fields from 4 am until school begins; then go to school and work afterwards until dark' (Agahd, 'Die Erwerbstätigkeit schulpflichtiger Kinder im Deutschen Reich', p. 413).

Dr E. Lauer, an agricultural teacher in Brugg, comments:

Agricultural work can be dangerous for children, especially where their necessary night's rest is shortened. Employers and many parents do not bother about how essential a child's sleep is. To wake children of between 10 and 15 years at 4 or 5 in the morning and not let them go to bed until 9, or later, in the evening is an act of callousness which can seriously impair their development. Child protection must intervene
here and prohibit children under 15 from working before 7 in the morning and after 7 at night. An afternoon break of at least two hours should be guaranteed. If such a provision is to fulfil its aim, it must also be extended to school and domestic industry. School lessons should also be held within these hours. (Lauer, 'Die Beschlüsse des internationalen Kongresses für Arbeiterschutz in Bezug auf die Landwirtschaft', Schweizer Blätter für Wirtschafts- und Sozialpolitik', vol IV, p. 269)

The child's physical well-being can also be damaged by being set to regular work in general at too early an age. No intelligent farmer would harness a colt to a cart. But children of only six are sent to do agricultural wage-labour. Aghah describes a school in Posen in which only 2 children out of a class of 55 children did no agricultural work. 'Twenty are employed by outsiders and have left the parental home, 2 at the age of 6 (!), 1 at the age of 7, 2 at the age of 8, 3 at the age of 9, the others at 10 or over.' Such 6-year-old children are expected to perform a working day of 12 or more hours, excluding the journey to and from work to home, which is often considerable on the land.

How such appalling conditions can develop in the exploitation of children is illustrated by the following order issued for the protection of children by the government of Anhalt – and what they permit is scandalous enough:

Children required for an entire day's labour must be at least 8 years old: younger children should only be employed for half or two-thirds of the day. Working hours are fixed at 6 in the morning until 6 in the evening, with a two-hour midday break. If a journey by foot is necessary after this, working time should end so that the return home can be accomplished by 8 in the evening at the latest. If transport is by cart, care must be taken not to overload carts or let children fall out. No employment is permitted before the early school session. On hot days the employer must provide sufficient to drink. (Agahd, in Brauns Archiv für soziale Gesetzgebung und Statistik, Vol XII, p. 423)

In fact it was conditions on the beet plantations of our sugar refineries which moved the government of Anhalt to take these steps. Schippel writes:

Some tasks were exclusively reserved for children, such as 'beet-plucking', pulling up the unwanted small beets. Imagine children of 6 to 14 daily working 12 to 18(!) hours, crouching on the
ground, bent over so that the blood rushes to their heads. An adult could not maintain this posture for ten minutes: it is hardly surprising that children return mentally abnormal after a week's work, apart from the illnesses which they contract because of the dampness of the soil to which they are directly exposed. And schools allow holidays for such work, so-called 'beet-holidays'. One correspondent writing to the Preussische Schulzeitung about conditions in the Merseburg area notes: 'These holidays are a pestilential nuisance to the schools. When children have been crawling around in virtually sans-culotte dress for weeks or days – depending on the size of the local fields – with all shame and virtue going to the wind with such massive and close proximity of the two sexes, and then return to school, they are so exhausted, so stupified and mentally weakened that all efforts at intellectual stimulation are in vain. Their faces are swollen, their countenance grim, their skin is blistered by the heat of the sun, their hands cracked and roughened by the constant grubbing in the soil, and the dirt has ingrained itself in their cuts and pores to such an extent that repeated washing with the strongest soap is not enough to get their hands clean. The constant animal-like crawling on all fours means that it is difficult to move the spinal column into a straight and erect position when sitting and standing.' If the village children are not sufficient in number, the estate-owners employ agents to go on a child-hunt in the neighbouring villages, paying them 5 to 10 Pfennigs for every child thus obtained on top of their regular daily wage. This hunt is conducted with every conceivable form of enticement and trickery. The children are promised lemonade, cakes and beer: they are then loaded on to carts, preceded by a musical band, and carried off to the village concerned. A child's daily earnings amount to 50 to 80 Pfennigs: for this they have an inhumanly long working day: from 5 in the morning until 9 in the evening. They even have to work on holidays! If children are enticed from surrounding villages it is often 11 o'clock at night before they get home – in a state all too easy to imagine. (Schippel, Die deutsche Zuckerindustrie und ihre Subventionirten, pp. 22, 23)

What has Kärger got to say for himself? 'A rural labour question exists only from the standpoint of the employer.' Perhaps the resources of the Verein für Socialpolitik might at least have been sufficient to send a questionnaire to the government of Anhalt. The Privy Councillors would have been well-counselling had they bothered to do so.

But we are being unjust to the Enquiry. Now and then we find a few strong utterances against child labour. For example, Weber tells us that,
'in a report on the Johannesburg district it was confirmed that the child labour of shepherd boys was "very long" and "contributed a good deal to the corruption of their morals"'(Weber, *Die Verhältnisse der Landarbeiter im ostelbischen Deutschland*). A general report from the Labiau-Wehlau area identified 'the system of child shepherds as a clearly visible abuse, but one difficult for farmers to avoid, leading to the brutalisation of children' (ibid., p. 125).

This is in full accord with Agahd's arguments:

The greatest damage is caused by the shepherding system. This has been quantitatively exposed, in particular by the teachers in Pomerania, where 58 informants on the theme 'Child labour in agriculture' noted that out of 3,275 children, 2,310 were exposed to moral danger, with 312 doubtful cases and a further 653 denied. In addition, 1,382 were exposed to danger to their health. (ibid., p. 414)

Von der Goltz also refers to the 'morally and economically pernicious system of child shepherds' (Goltz, *Handbuch der gesamten Landwirtschaft*, p. 265).

Our poets have lyricised the life of the shepherd boy. And formerly, when it involved driving large numbers of animals into woodlands and inhospitable places, keeping them together and protecting them from dangers, the shepherd's life certainly had its attractions and excitements. It developed strength, suppleness, courage, stamina and keen senses. But the young shepherd's day now merely consists of tending a couple of animals on a speck of grass, and making sure they do not stray outside their prescribed limits. No more is expected of his intellect than to exercise the function of a fence. That such enforced inactivity and lack of movement calls forth all manner of wicked and stupid thoughts and instincts is entirely understandable. The system of child shepherds must be opposed on educational, if not hygienic, grounds.

But why _do_ the Sozialpolitiker farmers oppose the system of child shepherding? What is the source of this philanthropy? Very simple: 'Shepherd boys are predominantly employed by peasants, since the large landowner has his own shepherds' (Weber, *Die Verhältnisse der Landarbeiter im ostelbischen Deutschland*, p. 127). It is not the lot of the children which upsets the large landowner, but the waste of this cheap labour by the small farm in the face of labour shortages: 'Consider how much more usefully the energy of these children could be used if they were employed in field work; this would not only benefit the children and their parents, but also the agricultural employers' (Goltz, *Handbuch der gesamten Landwirtschaft*, p. 265).
This is a form of beneficence towards children which is at the same level as that of a reporter from Westphalia who denounces the local mine-owners for violating the provisions against the employment of young workers, and would prefer to ban such workers from industry completely:

If a strict ban was placed on employing children before the age of 16, and preferably before the age of 18, they would be forced to take up service with farmers or craft-masters, to the considerable benefit of both agriculture and industry. (Kärger, *Die Verhältnisse der Landarbeiter in Nordwestdeutschland*, p. 140)

Thus, the hearts of the farmers questioned by our Sozialpolitiker are not completely hardened on the issue of the protection of children. As long as protecting them in one sphere helps round them up for the other, it is welcome.

The position of children in wage-labour is especially wretched where they are away from home, and have no one to offer them protection and support, where they are completely at the mercy of their exploiters. And this is not an infrequent situation. Migrant labour without the accompaniment of parents is often seen, especially in South Germany, Baden and Württemberg. In Tyrol there is a specific corporation – the 'Child Shepherd Corporation' – which concerns itself with the trade in children. In the Vorarlberg the 'Swabians' are a group on their own amongst the other schoolchildren; these are children who from the age of 10 enjoy the 'concession' of being freed from the obligation to attend school from 15 March to the middle of November in order to hire themselves as farm workers in the neighbouring states. The principal market is Ravensburg to which hundreds of children are driven from the Tyrol and Vorarlberg to be sold to the highest bidder for the summer. The carriage of this delicate human cargo is entrusted to the village priests.

One can imagine the type of treatment which these poor, completely friendless, children receive. The peasant journal *Bernische Blätter für Landwirtschaft* observed in an article (1 September 1896) on the 'Labour Question in Agriculture', that the bulk of the responsibility for the shortage of labour on the land lies with the poor treatment of house-servants, especially 'farm boys'.

Supplying peasants with children who have fallen on poor relief can be placed at about the same level of humanity as the temporary sale of children abroad. A specialist working on *Neue Zeit* (XVII, 1, p. 197ff.) prepared a report in Switzerland under the pseudonym of Rusticus – but
the system is not unknown in Germany too. Rusticus's article illustrates how the maltreatment of children under the influence of the peasant milieu even continues in reformatories.

One incidental result of the investigation into the Jordi case (sexual and disciplinary abuse of foster children, January 1898) showed the lively methods used to train girls in Bernese reformatories for higher agriculture. Girls at the Kehrsatz reformatory had to get up in summer at 4 or 4.30 to load feed. They also had to muck out the stalls, load manure, pump liquid manure, turn the soil in places too steep for the heavy plough, and clear and plough marshes in the valley floor. All of these duties are far beyond such young capacities, and for the most part not appropriate for women at all, according to common opinion in Bern. They are a brutal imposition in the eyes of all right-thinking people, a brutality irrespective of how often the 'blessings of work' are reiterated – blessings which combined with biblical texts and prayers are intended to extirpate the 'roots of evil'.

However, those children who leave their homes to toil as slaves under the iron hand of a gang master, an agent, are in an even worse position. We shall come back to the gang system and migrant labour in general in another connection: 'Those of very youthful years must be protected from the dangers posed by the Sachsengängerei not only to morality, but also to the health of a still weak body as a result of the excessively hard work on the beet estates' (Kärger, Die Sachsengängerei, p. 207).

In view of all this, it should not be surprising to find that not only theoreticians, but also 'practicians', well-acquainted with agricultural circumstances, energetically speak out in favour of legislative protection of children. Thus, Dr R. Meyer stated at the Conference for Labour Protection at Zurich:

The informant appears to believe that agricultural work is very healthy for children. I believe that this gentleman has never seen North Germany, Bohemia and Hungary, the large sugar-beet fields and extensive potato acreages. He has never seen how children have to crawl around on the ground in autumn in the cold and wet from dawn to dusk to cut beet or dig up potatoes. And there are many more such children than there are factory children, the sole focus of your interest.
In fact, there were 460,474 children in employment below the age of 15 in the German Reich in 1882; of these 143,262 were in industry, mining and construction, and 291,289 – more than double – in agriculture. 1895 was the first year in which separate records were kept of employed children below the ages of 14 and 12. In all, 214,954 children below the age of 14 were in employment – 135,125 in agriculture. Of the 32,398 children below the age of 12 in employment, no less than 30,604 were in agriculture. All these figures should be treated as minima. The number of children really in employment has been estimated as much more, a million and over. Von der Goltz estimates the number of child shepherds in East Elbia as ranging between 50,000 to ‘far over 100,000’ (Goltz, Die ländliche Arbeiterklasse, p. 265). Nevertheless the official occupational statistics do give some idea of the proportions of industrial and agricultural child labour.

The exploitation of children in agriculture is therefore widespread, and the protection of children an urgent necessity.

However, the question of child labour is by no means an entirely straightforward one, as Bernstein has already observed in a very commendable article on 'Socialism and the Industrial Employment of Youth' published immediately after the Zurich Congress.

The productive physical labour of children contains a number of important educational elements. Nothing is more damaging than one-sided mental labour during the years of development. Plentiful physical activity is vital, and anyone who does not learn how to do physical work at this age will later have to live in the knowledge that they will never attain that confidence and ability in work achieved by those who have performed it from childhood. But there is also a strong ethical element in productive work; one should not be indifferent to whether children grow up as parasites on society or as useful members of it. The bourgeois son who lives from the labour of others during his formative years will all too easily emerge as nothing more than a characterless weakling, a grovelling and apron-string tugging creature seeking to live from the favour of others and not from his own powers, when eventually forced to stand on his own two feet. In contrast, the proletarian comes to an early awareness of the need to work productively both for themselves and possibly even to care for others – a feeling of responsibility, but also an awareness of the individual's own capacities.

The great Utopians of socialism, who were at the same time great teachers, also wanted to introduce young people to work early on in their lives. John Bellers, like Fourier, allowed children to start carrying out useful work between the age of four and five. Robert Owen started them
at eight.

In this they shared common ground with the industrial capitalists. But what can be seen as one of the most effective means of elevating and ennobling humanity in the social plans of the utopians, becomes one of the most effective means for inflicting the most appalling degradation on the working proletariat in capitalist reality. There is no need to prove this here – since Owen's work, proof has been supplied countless times.

Capitalist society is therefore confronted with the dilemma of either abandoning youth to capital and hence leading the workers of the future – including the future of the working class – to ruin, or excluding youth from productive work, and thereby seriously jeopardising the formation of their character and capacity for work.

No complete solution to this contradiction – and hence no completely satisfactory way of educating the mass of the population – is possible within the capitalist mode of production.

Inasmuch as the more perceptive and unprejudiced of its representatives win out over the short-term interests of the manufacturers, capitalist society has to make do with a compromise. Productive labour is completely expunged from education up until a certain age (12 to 14 years). At that point it declares the education of the growing proletariat completed and gives it over exclusively to productive work – that is, under current circumstances, capitalist exploitation.

Thus far, Social Democracy's practical interventions into this field have been based almost totally on this compromise. It has only distinguished itself from those friends of the workers amongst the bourgeoisie by seeking – in a completely mechanical fashion – to raise the age limit for the total ban on children labour as high as possible. But the further one goes along this path, the more one approaches the aim of only allowing productive labour for young people to begin at maturity, the more remote one becomes from any opportunity of allowing productive work to influence the formation of character and the capacity to work of the rising generation: one avoids Scylla, only to be driven to Charybdis.

It is scarcely in the interests of the working class to extend the age limit up to which child labour is absolutely forbidden beyond the current level of 14 years.

However, the lower one makes this age limit, the more strict provisions for the protection of children at work must be – and we take the notion of 'children' here in its broadest sense, up to 18 years of age. In a period in which the intensity of work on the one hand, and on the
other, the need of the worker to be active as a human being outside work, in particular to educate themselves, have grown so markedly that there is a universal call for an eight hour day for adults, the same working time seems to us to be too long for young workers. We would have preferred it had the Zurich Congress demanded the four-hour working day for young workers, instead of increasing the age at which all work is prohibited up to 15. The system presently operating for children up to 14 working in English textile factories, who are only permitted to work half a shift — four and a half hours a day — should be put into effect for young workers up to 18 years of age.

A lower age limit for the employment of children requires stricter legislation on the exclusion of those branches and types of work in which the use of children and young workers is totally forbidden, stricter hygienic provisions at work, and more thorough factory inspection — requiring more numerous and independent inspectors: and the more important it becomes for doctors, teachers and practical workers to also have a say in the inspection of premises, as well as technicians.

Naturally, this must not only apply to factories, but also to handicrafts and domestic industry where child labour has given rise to the most appalling conditions.

The School

However, the desire to organise child labour as rationally as present-day society will allow cannot really fulfil its purpose if it restricts itself to workplaces: it must also take in the school, and adapt education and work to each other's requirements. The gulf between Social Democracy and reactionary, petty bourgeois, Christian 'socialism' is revealed very starkly here. Both parties want to limit capitalist exploitation: but whilst the latter seek to accomplish this by bringing the development of society to a halt, the former want to accelerate this development. 'Christian' socialism wants to lead the proletariat back, if not to petty bourgeois conditions of existence, then at least to a petty bourgeois, medieval, mentality. Social Democracy seeks to raise the proletarian mentality to a higher level, to empower the proletariat to advance beyond capitalist society. Both Social Democracy and Christian socialism have an energetic interest in the modern school: but whereas Social Democracy needs it to achieve its purpose, Christian Socialism, of necessity, presents a face of hostile opposition.

The importance of schooling should not be overestimated. Nothing could be more erroneous than to believe, as some do, that those who own
The Agrarian Question

the schools will own youth – the future. Education is not obtained solely in school but in life in general, of which school is only a small part. Conflicts between the lessons of school and those of life are inevitably resolved to the benefit of the latter. Schools may be as pious and sycophantic as one likes: if life teaches materialism and democracy, then it will produce neither grovellers nor bigots. Where the lessons of school conflict with those of life, school's only effect is to damage children by wasting their time: any educational effect on the child soon turns into its opposite. But at least it is of precious little use to the rulers, whose power it is meant to cement.

And even the best school cannot contribute much to the intellectual and moral elevation of humanity if the overall milieu does not support it. The reform of society cannot begin in the schools.

However, every form of society, every class, needs a particular type of education and upbringing; without this it would be unable to thrive and carry out its task to the full. In this respect the structure of the school system is by no means irrelevant.

There is no reason to believe that the possession of academic knowledge raises the modern average human being to a higher intellectual and moral level than those who peopled primitive society. In fact, both the singers and the public of Homeric poetry and of the Edda not only appear superior to the singers and audience of modern folk poetry in terms of aesthetic sensibility: their moral insight, intelligence, and understanding of nature and humanity also seem higher. They did not require a school to sharpen and ennoble their senses and spirit, to obtain knowledge. The public life of their communes, tracing the same course over millennia, was all they needed; oral communication and personal observation were fully sufficient to convey all the stimulus and knowledge of society to the average individual.

The life of society in the current age of world communication, the age of constant revolution – not just political, but above all technical and commercial – is acted out on such a scale, and in such giant leaps that any individual reliant solely on oral communication and personal observation would be rendered helpless. Reading, writing, mathematics, the elements of natural science, geography and statistics, political history are an absolute necessity for anyone wishing to find their way through the mechanism of society. However, in itself this school knowledge, especially in the form in which it is taught today, offers much less stimulation or reliable insight than the knowledge once disseminated through the oral tradition and personal observation in the public market place; academic knowledge is a poor substitute for actual observation, and customary popular reading – cheap sensational papers
and trashy novels - tends to stupefy rather than elevate. Contrast it with our forbears' observation of nature, against which they constantly had to struggle, and with the tales related by travellers from afar which provided them with continuous intellectual refreshment and knowledge. Although the replacement of observation by academic knowledge does not in itself mean that the civilised individual is morally and intellectually superior to the primitive, such knowledge is still an indispensable prerequisite for the former to fulfil his or her tasks. The life of civilised humanity has become so enormously extended, both temporally and spatially, that no individual, no matter how gifted or industrious, can comprehend it all through the medium of personal observation. Important as this might be, it can never do more than encompass a small segment of life: the rest has to be learnt in school.

Neither individuals nor nations can maintain their position in the competitive struggle, and meet the demands of modern civilisation, without a certain level of school education. And the more that society develops, the more inadequate the education offered by the present-day elementary school; the improvement and extension of elementary schools, and the addition of general further education for some years beyond 14 is now indispensable.

When assessing the amount of child labour which should be permitted, this educational aspect has to be considered in addition to the considerations of hygiene. Child labour over the age of 14 must also be kept within limits which allow a regular, ample and productive attendance at school.

However, school is not meant merely for the instruction of children, but also their upbringing.

As long as social life remained public, it offered all the elements of education and upbringing necessary to meet the aims of society. The company of their peers, their contemporaries, in play and at easy tasks, the model of the adults and helping in their daily round, and the lessons of the elderly all sufficed to develop the social virtues. Today public life has been replaced by family life, especially for children and in particular in the towns. It is now supposedly parents, not society, who bring up children. But parents are generally lacking in all those educational elements offered by life in society, life amongst one's peers: at best the child may learn obedience from its parents, but not comradeship, common feelings, self-sufficiency. And how many parents have either the ability or opportunity to bring up and educate their children? They are totally trapped in the need to work for a living. In addition, the urban family not only denies the child the company of its
peers, but also useful activity, especially for boys. The separation of the family from society also means its separation from work. And if children do not accompany their parents to work, they lose all the educational and social influences which the example of work and lending a hand in it can provide.

This is where school comes in: it reunites the isolated children and thus offers them the powerful device of education by one's peers, at the same time providing planned and thought-out employment under a set of supervisors. To have its full educational effect this must be an all-round type of activity: it must not simply fill the children with book learning but with a living humanity. The teacher must get to know the children, not simply during instruction, but also at play and at work – that is, an activity which, in contrast to play and instruction, yields up an immediate, tangible result, is an immediately recognisable end in itself for the child and awakens self-confidence and the joy of creating through the joy of accomplishment. This coordination of productive labour and schooling should not be confined to older children; it should also characterise the first years of school attendance – not simply on economic but also on educational grounds.

The linking of instruction with productive work, the linking of school with training workshops and gardens, where the simplest elements of the various crafts and agriculture can be taught and practised, is indispensable at any age where wage-labour is completely banned – and is all the more indispensable, the higher this age limit is set.

The issue of child labour clearly conceals a host of other problems; and very little is achieved by merely mechanically raising the age limit at which wage-labour may commence.

The question of child labour also takes on particular forms when we turn from industry to agriculture. The early acquisition of skills, and familiarity with work, is even more vital in agriculture than in industry. In industry, the division of labour and the machine generally reduce the individual's activity to a few tasks, which demand neither extraordinary physical strength nor dexterity, but whose acquisition is still quite difficult for the completely unpractised. Agriculture has a great variety of tasks demanding care, dexterity and frequently physical strength and indifference to the weather – tasks which need to be practised from an early age. Present-day urban workers are unfit for agricultural work.

In contrast, the countryside is free of the dilemma encountered in the towns – that banning wage-labour for children nowadays almost universally also means banning them from any type of productive work, and that the ban on their exploitation by capital also constitutes a ban
on developing their ability to work and a denial of access to the educational influence of useful activity for society.

All households on the land are linked to an agricultural establishment. Even wage-labourers practise cultivation for themselves if they have a family. Children do not have to turn to wage-labour outside the home to occupy themselves usefully. Under such circumstances, banning wage-labour for children does in fact only mean a ban on their exploitation by capital. If the minimum age of wage-labour in industry has been set at 14 years, this could be made earlier in agriculture. However, the ban on migrant labour by children should be extended up to a greater age. As found in the form of the gang system it represents the most appalling and depraving form of wage-labour.

Such a ban does not solve the problem of child labour in agriculture, however. We already noted that labour on the parental farm already provides sufficient opportunity for activity for children in the country. However, this opportunity is often used by the parents to sweat and overwork their children. Maximising the labour of one's own children is one of the methods employed to keep the small establishment going in both agriculture and domestic industry. The importance which this has acquired for the peasantry is revealed in the massive efforts made to reduce school hours for country children.

These pressures must not be submitted to. The land in particular needs an improvement and extension of the school system, and this is in the interest of agriculture itself. The modern mode of production has simplified the work of the manual worker in industry to the extreme. This is not so in agriculture, which is becoming increasingly more complex, its implements increasingly sensitive and its methods ever more demanding of knowledge and intelligence. Agriculture requires more and more intelligent workers, precisely the ones least attracted to it. We already noted the intellectual desolation of the land in Part I: the most gifted workers flee to the town. And whereas the town can offer innumerable stimulations and aids to education once school is finished – newspapers, associations, meetings and museums – scarcely anything exists in the countryside to counteract the atrophy of what scanty academic knowledge the adult country-dweller still possesses. A rich school education, not only up to 14 years of age, but beyond this, is even more important in the country than in the towns – a form of instruction which carries within itself the impulse to further education.

The country-dweller is demanding more child labour. And the demand will become more vociferous, the more of a rarity wage-labourers become. But they also need further education. This could be achieved
without any lengthening of school hours – in fact possibly with some shortening of them, were the morally, educationally and scientifically utterly useless – in fact damaging – teaching of religion to be replaced by instruction in the basics of those disciplines required for rational cultivation (chemistry, mechanics, botany, zoology, geography); knowledge of these would also enable the farmer to enjoy subsequent further education.

But it is precisely those parties which have made the salvation of agriculture into their hereditary property, who advocate a restriction of compulsory school attendance whenever the opportunity is favourable, and continually urge replacing what meagre factual instruction there is by yet more religious instruction, who already dominate the elementary schools. If any parties sacrifice the prosperity of agriculture to their philistinic transient interests, it is these 'loyal' 'Christian' parties.

The worst of these are the Ultramontanes of Austria. But one can note similar movements in Germany, even amongst Protestant clerics. One rural priest from Thuringia, for example, has written a book on peasant morals and beliefs, in which a highly unfavourable view is taken of the effects of the new schools on the peasantry.

This obsession with reading is leading straight to the madhouse: though rarely for the peasant – they are already accustomed to it in school. But this does seem to present one, all-too neglected, danger: namely that the amount of reading undertaken in instruction, as in present-day school education in general, will rob the country dweller, while still in youth or childhood, of practise in manual work and what is more important, of joy and satisfaction in their lot. Any unprejudiced observer can see how boys and girls who, disregarding infant and secondary schools, are kept at their 'books' and away from agricultural work between the ages of seven and fourteen, stuffed full with 'every type' of knowledge and trained to be virtual scholars [K.K.], subsequently lack the taste for employment in the fields, with animals and other agricultural work: as I have encountered, in particular, with the keenest and most diligent schoolgirls, such children are very loath to leave school and only take up their destiny of helping their fathers and mothers with a great deal of hidden resentment. It is also quite understandable that 'education' in school not only prevents punctual – i.e. early – training in agricultural work, but also awakens and feeds a yearning for the richer and more pleasurable life, free of sweat and toil, of the 'better off' depicted in the 'pleasant tales' of young people's and popular books, particularly amongst the more intellectually able children.
fanatics will one day realise, perhaps in a very hair-raising fashion, that 'intelligence' in the populace also has its shadowy side. Since nowadays everything moves at full-steam – including the drawing of conclusions, and if the disgruntled country dweller begins to incline towards 'freethinking' or 'progress' as a result of dissatisfaction with their station, it is logical that this will bring the poor country dweller much nearer to Social Democracy: 'Something's afoot,' said an experienced old parish chairman; he added 'people never used to think about such things, they accepted everything that they had; now they compare their circumstances with those of other people and ask, "Why should they be better off than we are?"

One could not put it more cynically; the people should be kept in ignorance, because education turns them into Social Democrats. Who cares if ignorant peasants are much less able to practise rational agriculture than knowledgeable ones! We want subservient not prosperous peasants, so bring on the hymn book and catechism, and out with the little bit of education about nature and society which trickles down through the village school into the heads of the village children.

Hardly surprising that our peasants' friend notes the diminishing interest of the peasant in education with such satisfaction (Zur bäuerlichen Glaubens und Sittenlehre. Von einem Landpfarrer, p. 24–6).

A correspondent from the Wiesbaden district writing for the Enquiry carried out by the Verein für Socialpolitik has similar views: although educational standards amongst the peasantry had improved as a result of better schools, their coarseness had increased too other correspondents claim the opposite. The cause of this coarseness is supposed to be the excessive reading of newspapers.

A report from the same, mainly small peasant, district also reports that attendance in agricultural secondary schools which were still heavily frequented in the 1870s, has dropped off considerably (Auhagen, Die ländliche Arbeiterverhältnisse in der Rheinprovinz, pp. 54, 61, 63).

As the following table shows, there is still an enormous amount to be done in the sphere of further education in the countryside:
The Agrarian Question

<table>
<thead>
<tr>
<th>No. of agricultural secondary schools in winter 1896/97</th>
<th>Upkeep Marks</th>
<th>No. of pupils</th>
<th>No. of young boys on the land 14-18 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Prussia</td>
<td></td>
<td></td>
<td>64,000</td>
</tr>
<tr>
<td>West Prussia</td>
<td>8</td>
<td>1,265</td>
<td>91</td>
</tr>
<tr>
<td>Brandenburg</td>
<td>1</td>
<td>50</td>
<td>26</td>
</tr>
<tr>
<td>Pomerania</td>
<td>3</td>
<td>150</td>
<td>25</td>
</tr>
<tr>
<td>Posen</td>
<td>21</td>
<td>1,441</td>
<td>213</td>
</tr>
<tr>
<td>Silesia</td>
<td>33</td>
<td>5,297</td>
<td>910</td>
</tr>
<tr>
<td>Saxony</td>
<td>41</td>
<td>4,932</td>
<td>735</td>
</tr>
<tr>
<td>Schleswig</td>
<td>50</td>
<td>5,027</td>
<td>394</td>
</tr>
<tr>
<td>Hanover</td>
<td>133</td>
<td>14,753</td>
<td>1,982</td>
</tr>
<tr>
<td>Westphalia</td>
<td>8</td>
<td>1,430</td>
<td>138</td>
</tr>
<tr>
<td>Hesse-Nassau</td>
<td>320</td>
<td>27,812</td>
<td>4,518</td>
</tr>
<tr>
<td>Rhine Province</td>
<td>206</td>
<td>26,132</td>
<td>3,791</td>
</tr>
<tr>
<td>Hohenzollern</td>
<td>51</td>
<td>3,519</td>
<td>504</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>875</strong></td>
<td><strong>91,808</strong></td>
<td><strong>13,317</strong></td>
</tr>
</tbody>
</table>

The total costs for these schools amounted to 91,808 Marks, of which 33,174 were paid by the state! About the same as a couple of rounds from a big cannon.

At the same time huge sums are expended to 'save agriculture'. Of course, further education does not contribute to raising ground-rents.

The peasant is in a serious dilemma as far further education is concerned: the more ignorant they remain, the more irrational their cultivation, and the less able they are to make use of even that little bit of technology which can be used on a small farm. But the greater their education, the more they will suffer under the struggle for existence which forces them into overwork and a reduced standard of living, and the more they will begin to turn their back on the job at hand.

This is very unpleasant for those who want to preserve the present peasant mode of cultivation as the firmest foundation of present-day society, although not for the representatives of social progress. If the peasant economy is incompatible with the demands of a higher
Protection of Rural Proletariat

civilisation, of the type created through a rich and useful school education, this constitutes an argument against the former, not the latter. The improvement of school instruction must result in a more rational organisation of the peasant farm in areas where it is still capable of improvement. Where circumstances do not allow for this, higher school education will inevitably lead the population increasingly to turn away from peasant life: it will be a factor for economic progress in both instances.

School education also has a further good side. It steps in where child legislation fails: it has already proved to be an excellent means of combatting the excessive sweating of children by their own families in both agriculture and domestic industry – something to be valued, the more that legislation refrains from intervening in the inner life of the family. Compulsory school attendance would be necessary to stem wage-labour by children in the countryside even if child labour were to be banned completely, since the great distances, and the dispersion of the children over large areas, make the enforcement of child legislation much more difficult than in big industry. A ruthless implementation of compulsory school attendance would reduce wage-labour by children to such dimensions that it would no longer be worthwhile.

It is indicative that the only labour legislation in agriculture, the English 'Agricultural Children(s) Act' 1874, has only suppressed child labour indirectly through compulsory school attendance. According to this law, children under 8 may not be employed in field work at all. Between the ages of 8 and 10 they can only be employed if it is shown that they have attended school 250 times in the year: and between the ages of 10 and 12, 150 attendances per year are required. Migrant labour is prohibited. As meagre as these provisions are, and they do have a number of loopholes, they have nevertheless reduced child labour before the age of 12 to a minimum.

School, both elementary and secondary, has a more significant mission in the countryside than in the town. Attempts to protect working children must address themselves to extending it.

A ban on the wage labour of children up to 14 years; a ban on work between 7 in the evening and 7 in the morning for all children and youths without exception; a ban on migratory labour by youths; a ban on exemptions from compulsory school attendance on commercial grounds; adequate obligatory secondary schools for young persons – these are the demands of Social Democratic social policy towards child labour in the countryside.
Women's Labour

We can be a little briefer on the question of women's labour.

The development of women's labour in agriculture does not run at all parallel to that in industry. It provides a clear example of how variable the division of labour is between the sexes, how the lines of demarcation between women's work and men's work are constantly shifting, and why it is therefore inappropriate to regard such lines as natural – that is 'eternal' as far as social institutions are concerned.

When cultivation first began, it was exclusively carried out by women, with men attending to hunting and tending the stock. The more importance that arable farming had for society, the higher the status of the woman in the family and society, for which she was, literally, the main breadwinner. (Cf. von Cunow, 'Die ökonomischen Grundlagen der Mutterherrschaft', Neue Zeit, XV, pp. 106ff.).

However, as cultivation began to push hunting and stock-tending into the background, the men had to become involved too. But the more that arable farming developed, the more the population began to settle in one place: the cramped tent became the permanent spacious house, with a substantial household. The woman's labour in the household grew and soon occupied her fully; the once purely female art of cultivation, whose invention the Greeks and Romans quite properly ascribed to the female deities, became a male affair.

Lippert asks how it came about that in Jewish mythology cultivation was practised by men from the outset – Adam, Cain, Noah: his answer is that the Jews did not pass through the stage of inventing cultivation, but learnt it at a higher level when they conquered Canaan whilst themselves still living a Bedouin-like nomadic existence (Lippert, Kulturgeschichte der Menschheit, p. 447).

In contrast, the more that the predators from whom the flocks had to be protected disappeared, the more stock-tending became a matter for the women. More stock was kept in stalls, and constituted part of the household apart from periods of migration to other pastures [Weidegang].

The capitalist mode of production drives women back into the fields, partly by creating a mass rural proletariat whose wages are so low that the male income is not sufficient to keep the family, which means the use of women and children to supplement the wage – naturally with the result that the man's wages fall even lower – and partly because of the worsening of the position of the peasantry which is forced to flog every last drop of sweat out of anyone able to work, including women and children, in order to eke out some kind of existence.
Where the peasant is well off, the woman will confine herself to the household where she has more than enough to do. The same applies to the wife of the rural day-labourer. In America she does not even participate in the harvest, despite the shortage of wage-labourers. Sering notes:

Nothing is more indicative of the attitudes and expectations of the American farming population than the position of women there. Female members of the farmer's family concern themselves solely with the household, in the narrow sense of the term, and leave heavy work to the men. One rarely sees women working in the fields in America, and those that are are certain to belong to the family of an immigrant farmer. (Sering, Die landwirtschaftliche Konkurrenz Nordamerikas, p. 180)

This fact is difficult to record statistically, since occupational statistics only establish the fact of employment in a particular occupation, and not its nature. Nevertheless, it is indicative that in 1895 there were 2,380,148 female wage-labourers in agriculture to 3,239,646 men, whilst in the United States there were 2,556,957 male, and 447,104 female 'agricultural labourers' and 1,858,558 male and 54,815 female 'labourers' (often agricultural too).

However, this tendency is not confined to America. In England, the position of rural workers has by and large changed for the better over the last few decades, thanks to migration off the land. This is partly due to increases in wages and partly to the fall in the price of foodstuffs. The reduction in female wage-labour has gone hand in hand with this development. 'The widespread withdrawal of women from fieldwork is proof of the improvement in the position of the workforce', observed the Royal Commission (p. 37). The number of agricultural workers in Great Britain (excluding Ireland) changed as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1871</td>
<td>1,060,836</td>
<td>100,902</td>
</tr>
<tr>
<td>1891</td>
<td>878,480</td>
<td>46,205</td>
</tr>
</tbody>
</table>

The number of men fell by 18 per cent, and that of women by 54 per cent.

In Germany such a change is less apparent: but here too the number of women engaged in fieldwork as day-labourers is falling. Weber reports from West Prussia for example: 'Women's labour has disappeared completely in some areas; the wives of free day-labourers do their utmost to avoid it.' From East Prussia: 'The wives of free day-labourers
work only very infrequently with their husbands. Women's labour seems generally to be on the decline.' From Pomerania: 'The decline in women's labour is evident when compared with 1849' etc. (Weber, Die Verhältnisse der Landarbeiter im ostelbischen Deutschland, pp. 49, 185, 202, 377).

Developments in agriculture therefore by no means follow the same course as in industry; and this is easily explained when one considers the great importance which the private household still has in the countryside, and the different demands this makes on the housewife compared with the town. Only the severest distress, which both reduces the household to the extreme and necessitates an excess of overwork, will get the wife of the day-labourer or small peasant into wage-labour in the fields. It is indicative that English tenants give increased concern for children, for whom wage-labour is forbidden, as one of the reasons why women's labour has declined. The Education Act 'not only removed the labour of children from the tenant farmer, but also the labour of women; the women now stay at home to look after the children' (Kablukov, Ländliche Arbeiterfrage, p. 102).

Since wage-labour by married women on the land is a phenomenon which disappears as the position of the agricultural working class improves, there is no need for special protective legislation where overall social policy is sufficiently strong to effect such an improvement.

Similarly, the predominant form of wage-labour by young girls as house-servants requires no particular protective provisions separate from those affecting all house-servants, or the agricultural working class as a whole.

However, this statement does not apply to migrant labour by girls.

Migrant Labour

Migrant labour found its classical form in the now banned gang system in England. Marx described it in Capital in the following terms:

The gang consists of from 10 to 40 or 50 persons, women, young persons of both sexes (13–18 years of age, although the boys are for the most part eliminated at the age of 13), and children of both sexes (6-13 years of age). At the head of the gang is the gang-master, always an ordinary agricultural labourer, and usually what is called a bad lot, a rake, unsteady, drunken but with a dash of enterprise and savoir faire. The gang-master goes from one farm to another, and thus employs his gang for from six to eight months in the year. The 'drawbacks' of this system are the over-working of the children and young persons, the
enormous marches that they make every day to and from farms and finally the demoralization of the gang. Girls of 13 and 14 are commonly made pregnant by their male companions of the same age. The open villages which supply the contingents for the gangs become Sodoms and Gomorras and have twice as high a rate of illegitimacy as the rest of the kingdom. (Marx, Capital, I, pp. 851–2)

Some types of German migratory labour are not much better. Let us listen to one witness who is above suspicion, that fond eulogist of the Sachsengängerei – or as fond as this institution could tolerate – Dr Kärger.

The Sachsengänger are workers from poor, economically backward districts, who move into the beet-sugar areas, in particular Saxony, to hoe and harvest, tasks for which the beet-farmers cannot find local willing and cheap workers. The Sachsengänger are recruited by agents who appear to bear an astonishing resemblance to the English gang masters. Recruitment takes place in the tavern, and is effected using every possible type of crooked trick.

If the recruiting agent is dealing with really stupid people, he makes a great show of the seal on the contract, giving the impression that the authorities have sanctioned the whole thing. Before the business gets going he tries to take on an aide who is skilled in a couple of languages (German and Polish): the aide moves around amongst the workers to make accepting the contract seem a plausible thing to do from their point of view, and acts as a bell-wether by being the first to sign the contract.

Unfortunately in some villages with Polish-speaking inhabitants, agents sometimes offer the people better conditions than the contract actually specifies. (Kärger, Die Sachsengängerei, p. 21)

The same agent who recruits the workers stays on as their supervisor and has ample opportunity to continue with his roguery. Having deceived them with the contract, he proceeds to exploit them through a hidden truck system:

Supervisors have been known to discriminate against workers in the distribution of jobs, by only giving them poorly paid and uncomfortable work, for not wanting to buy at 'his' merchants – that is, those he has taken under his wing in return for concessions. Even greater dangers face the Sachsengänger if the supervisor also controls the payment of wages.
He simply embezzles a portion of them, and in fact this is so widespread, 'that on some estates where this is supposed to have been abolished, the supervisors are impertinent enough to demand a small percentage of the overall wages of their workers by right'. As a consequence, this type of wage-payment has been abolished in many areas.

The workers under the supervision of these gentlemen are mostly girls, 'whose numbers regularly exceed those of the men severalfold' (p. 43), and mostly girls at a very tender age. Kärgen counted 337 female and 150 male workers on 4 farms in Saxony. Of the young women 48.3 per cent were under 20, and 33.9 per cent between 20 and 25 – that is a total of 82.2 per cent under 25: 93.4 per cent were under 30. Unfortunately Herr Kärgen forgot to note how many were under 16; perhaps he would not have found out even had he asked. The sugar manufacturers are unlikely to have betrayed all their trade secrets even to the likes of Herr Kärgen.

Of the 150 men, 32 per cent were under 20, 19.3 per cent 20 to 25, and 73.3 per cent under 30.

These young, carefree, unworldly girls move around in groups together with the young men, under the leadership of the recruiting agent – who we have already identified as a strict moralist. It does not require a great deal of imagination to see that conditions bearing an awesome similarity to those of the English gang system are likely to develop.

Having arrived at the estates of our Christian and patriotic landowner, they are by no means out of danger. The work is hard, and the working hours inhumanly long.

In the West – from what I have seen of such contracts – the work always begins at 5 in the morning, and ends at 7 in the evening, with a half-hour break for breakfast, one hour for lunch, and a half-hour break for Vespers. However, overtime is universally insisted upon. (Kärgen, Die Sachsengängerei, p. 41)

That is, young girls are sweated for over 14 hours a day. Marx described how women work:

The farmers have discovered that women only work steadily under the direction of men, but that women and children, when once set going, spend their vital forces impetuously – as Fourier already knew in his time – whereas the adult male worker is shrewd enough to economise on his strength as much as he can. (Marx, Capital, I, p. 851)
The methods used by these industrial slave-drivers to extract the maximum effort from their workers are well known from the 'patriarchal' regime. The murderous piecework system plays a major role, especially in tasks assigned to migrant labourers. But the East Elbians have invented even more inspired methods of forcing their workers into overwork. Weber gives us a hint of this in his book – which we have extensively quoted elsewhere.

We were repeatedly told that workers are more easily induced to overwork through the provision of 'refreshments' (schnapps) than through money. One inherently unpleasant aspect of overtime experienced in the Heiligenbeil district was that workers – if not as much as formerly – still require 'that damn schnapps' to get them to do it.

In other words, our Christian-Germanic nobles systematically get their workers drunk so as to stoke them up for work, just as in the seventeenth and eighteenth centuries mercenaries were plied with schnapps before battle to inflame them against the enemy, and quell their fear of the prospect of death. The Junkers evidently not only profit from Prussian schnapps as a commodity, but also as a foodstuff.

Migrant workers receive even less mercy than the permanent local workers. Let them get sick afterwards! There is no obligation to keep them through the winter and pay their medical costs.

But worst of all is the accommodation provided for migrant workers. Since it is not worthwhile building permanent homes for these workers, which would then lie empty for seven or eight months each year, the more primitive their accommodation the better. Although Herr Kärger has nothing but praise for the tenements built for the Sachsengänger on some farms, their main advantage is probably that the sexes sleep in separate areas – by no means an automatic institution. This was enforced by an order of the police.

Matters have not yet advanced quite as far in East Elbia.

In West Prussia accommodation is provided out of barracks, cattle stables and empty barns, into which workers crowd ten or more together. It is impossible to say whether the sexes are kept separated: a half, two-thirds or more are girls. This will be more likely on the more progressive estates than elsewhere. (Weber, Die Verhältnisse der Landarbeiter im ostelbischen Deutschland, p. 240)

How much one should share this expectation is revealed by the fact
that a few pages earlier Weber himself complains that there are no opportunities for the separation of the sexes even in the dwellings of permanent Instileute. 'The family has to share their living room and bedroom with outsiders on gang-work (p. 183).

This economics of the rabbit warren is not a product of the 'state of the future', but of our present-day state where Christian-Germanic discipline and respectability still live on uncontaminated by Social Democratic poison, and where the noblest and best still reign untrammelled: it is our defenders of the family and marriage who, in their efforts to lower the production costs of schnapps and sugar, herd together their human stock into cattle sheds without distinction of age or sex.

That such scandalous conditions cry out for legislative remedy is now recognised even by bourgeois Sozialpolitiker.

The principal demand must be a ban on migrant labour by female minors. Dr Kärger will, of course, hear nothing of this - and he has his good reasons.

The proposal for a complete ban on migrant labour for girls below the age of majority results from the hope that it will reduce the dangers of moral depravity. My first observation is that I do not believe that the percentage of girls who abandon their virtue will be reduced by such a measure, as a girl who has been protected by her parents up to the age of 21 and is then cast out into life will be no more victorious in resisting the temptation of immorality than the younger girl. (Kärger, Die Sachsengängerei, p. 206)

The sentence may not be absolutely perfectly expressed, but our conclusion on reading it is that Dr Kärger would take Marx's report of girls of 13 and 14 getting pregnant under the gang-system very coolly indeed. He seems unconcerned as to whether this happens earlier or later.

But his main objection to such a ban on migrant labour is posed in terms of the interests of the fathers of migrant girl workers. What are these poor devils supposed to do with their young daughters if they cannot sell them off into contract slavery?

'To take a somewhat crass example, what should a small landowner from the Landsberg district, whom fate has presented with a gift of a daughter every year for six years, do with his blessings when the last of his daughters is 16?' We wouldn't dispute that this is a crass example: and if it is meant to offer conclusive proof, we can supply another, equally arbitrary, and no less conclusive example which is certainly no
more crass. What happens if the farmer sends his six daughters to Saxony as migrant workers and each comes back with an illegitimate child? What's he going to do with his 'little blessings' then?

But Dr Kärger has another weighty reason: the exploitation of girls between 16 and 21 yields the greatest profit of all for beet farmers and sugar manufacturers, and prohibiting their employment 'should consequently be rejected from the standpoint of the interests of beet cultivation'. Our noble doctor is therefore fighting a genuine cultural battle on behalf of the right of beet cultivation to prostitute young girls. However, we Social Democratic vandals do not share his appreciation of such cultivation for sugar beet based on the barbarisation of people, and so we stand by our demand that migrant labour should be banned for girls below the age of majority.

Admittedly, this will not accomplish everything. Although a 21-year-old girl may be less easily corrupted than a 15 or 16-year-old since she has more experience and a more resolute character, the conditions under which present-day migrant labourers work are bad enough to corrupt even mature girls. Nevertheless, it would be going too far to ban migrant labour completely. Such a ban would deprive a large part of the working population of their freedom of movement, and rob them of a means of looking for higher wages than they can obtain at home. But migrant labour could take other forms than contract slavery and the gang system. These must be done away with. The most effective means of abolition would be the development of a public system of labour exchanges, which would supplant the trade in human beings now practised by the agents.

The need for strict regulations to enforce the provision of proper accommodation needs no further proof here. In addition a reduction in the inhumanly long working hours is also vital.

But not, of course, just for migrant labourers.

The Normal Working Day – Sunday Rest

This brings us to the issue of the normal working day, the main issue in the protection of workers.

Opponents of the proletarian movement are fond of saying that the normal working day – whose appropriateness and even necessity they no longer dispute for industry, although most are against reducing it – is incompatible with the conditions prevailing in agriculture, which lacks the regularity and uniformity of industry, is more dependent on external circumstances – wind, weather, rain and sunshine – and must therefore be more flexible and not squeezed into the straitjacket of a normal working day.
In fact, however, agriculture requires much less flexibility than industry. A farm's plan of work is fixed for the entire year, whereas an industrial enterprise may have to vary its operations depending on the state of business. Industrial entrepreneurs moaned more than anyone that the normal working day made it impossible for them to exploit the state of the market, and complete orders which had to be delivered very quickly. And they were much more vigorous than farmers in demanding flexibility in working hours, to satisfy the changing needs of the market — a much more capricious entity than wind and weather. But events took their proper course. Technical ability and organisational talent have surmounted all obstacles. The introduction of the normal working day has not killed off industry, simply industrial inefficiency.

There are examples of a normal working day in agriculture. However, we are unaware of any legally fixed normal working day. Attempts to implement such a regulation have been tried here and there, partly under pressure from angry farm workers, and partly, on more idealist grounds, by the agrarian ideologues themselves who were certainly well acquainted with the circumstances prevailing in agriculture. Dr R. Meyer notes in the Introduction to his essay on the 'History of the Normal Working Day' (in the Zeitschrift für Sozial- und Wirtschaftsgeschichte, VI, 1):

The legislative restriction of working time for men was first implemented in 1848 in Mecklenburg. (The revolt of the farm day labourers led to the establishment of a Commission of Arbitration over the disputed circumstances of day labourers (15 May 1848), which also regulated the working time on large estates) The Prussian conservatives Wagener and von Brauchitsch attempted to introduce a normal working day in 1869, but this foundered on the opposition of Herr Stumm In 1872 together with Herr Schumacher I got a resolution through the Conference of Rural Employers which demanded a statutory normal working day, and in 1874 or 1875 drafted a bill with Wagener which restricted the work of adults to 56.5 hours both in the town and on the land, which we communicated to Bismarck.

These efforts were not rewarded with success. However, since then economic developments now favour a normal working day on the land.

The techniques employed on large establishments have also introduced a greater regularity of work into agriculture than is customary on the small farm, and the growing pressure from farm workers is also pushing in this direction.
The daily working time on the beet farms, contractually specified for the Sachsengänger, is nothing other than a normal working day. Weber also confirms that the tendency towards the fixing of a normal working day is growing. He reports from Lithuania, for example:

The most effective way of reducing working time; beginning work at a fixed hour, not at sunrise, is quite recent in origin in many cases, and is only now being introduced into some farms in the southern districts. Starting times vary between 5 and 6 o'clock in the morning. In places a fixed time for finishing (between 7 and 8 in summer), which may not coincide with sunset, has also managed to get through. (Weber, Die Verhältnisse der Landarbeiter im ostelbischen Deutschland, pp. 48, 121, 84)

From the district of Königsberg: 'Farms on which work begins in summer at sunrise are usually of medium-sized holders: the large estates are more prepared to go over to fixed starting times – 5, 5.30 or 6 o'clock' (ibid., p. 121).

From Masuria: 'A fixed start to the day in summer is already established in quite a large number of instances, as are fixed finishing times too' (ibid., p. 84).

Weber also notes that farmworkers are becoming increasingly disinclined to work overtime. We can therefore already see the beginnings of a normal working day in agriculture in Germany, and although these first steps may still be small ones, this fact has less to do with the peculiarities of agriculture than the dependent situation of agricultural workers, whose power to insist on a reduction in working time and regular observance of it is still very slight. All the more reason why their comrades in industry should shoulder the task of bringing them the legislation which they cannot obtain by their own efforts.

What determines the limit to the agricultural working day is beyond the scope of this book; as in industry, what turns out to be the practically attainable limit will be quite variable – all the more so since it will be determined not simply by objective technical factors, but the very subjective factor of power. However, we see no reason why the eight hour day should not be the aim of the labour movement in capitalist society in both agriculture and industry.

One might object that agricultural labour is carried out under hygienically much more favourable conditions than industrial work: in the latter we have monotonous work in enclosed rooms, often filled with poisonous fumes, and in the former a variety of activities in the fresh air. Although this is quite a valid distinction in most cases, in turn the
position of the wage-labourers in the town is also different to their counterparts on the land. As we have already repeated many times, the rural household is necessarily linked with an agricultural establishment. The day-labourers have not ended their working day once they get home after wage-labour – they still have to look after their small farm, clean the stables, get fodder for the cow, dig over the potato field and so on. Were wage-labour to occupy their entire time, from dawn to dusk, they would only have nights and Sundays for their own farm.

As in the case of the married female factory worker, the duration of wage-labour is by no means equivalent to the actual duration of work for the agricultural day-labourer. And any advancement in the position of the wage-labourers is associated with an increase in work on their own farms. This will not change overnight. The reduction in the agricultural worker's working day to eight hours therefore falls far short of giving preferential treatment to the agricultural worker over the town worker.

Although we might regard it as just as feasible to introduce a normal working day into agriculture as it is into industry, this does not mean both can be treated in exactly the same way. The length of the natural day has an entirely different impact on the length of the working day in agriculture to that prevailing in industry, where work is also carried out under artificial light. On the other hand, industry has a very different reserve army at its disposal from that available to agriculture. It may well prove necessary, therefore, to fix a different normal working day for each season, rather than a uniform working day for the whole year: whilst an eight hour day could be retained as the norm, a winter working day of six hours and a summer working day of ten hours could be worked. Overtime could be allowed for acts of God and urgent harvest work. At any event, we do not have to rack our brains too much over this question. Once the establishment of a normal working day for agriculture actually comes about, those with a direct interest will soon ensure that it has the necessary elasticity. Social Democracy's task will then not consist in raising anxious doubts about this elasticity, but in ensuring that it does not become a purely arbitrary matter, rendering illusory any limitations on working time.

Although we may concede that the normal working day in agriculture will not exactly resemble that practised in industry, we are not aware of any special characteristics of agriculture to justify confining the agricultural normal working day to the large farm, as the Zurich International Congress on Labour Protection recently decided. That small establishments are generally run in a more slovenly way than the large, and that the strict observance of regular working hours requires external
compulsion applies just as much to industry as agriculture. And if Social Democracy demands the normal working day for handicrafts and the factory, then it should also demand the same rights for the wage labourer working for the large peasant as for those working for the estate owner. Its task is not to grant the small establishment a privileged position in relation to the large.

Although we may not be able to develop any enthusiasm for confining the normal working day to the large farm, this does not mean that we consider the normal working day can be applied to every type of agricultural labour. Distinctions have to be drawn – but not between the large and small farm.

Social Democracy demands the normal working day for every type of wage-labour, with one exception: work in the household. This is not because house-servants do not need their working hours reduced, but because the requirements of the household do not easily allow working hours to be restricted to certain times of the day. This applies both to the rural and the urban household. The rural household is intimately connected with the farm, or at least with certain aspects of it. The closer a branch of work on the land is connected with the household, the more difficult it will be to subordinate it to the normal working day. One therefore has to be very precise in specifying which types of labour will be covered by the normal working day. Field work will be more easily subsumable than work in the house or farmyard (especially the tending of animals), and the work of the day-labourer more easily than that of the domestic servant. The labours of the former are usually determined, regular and measureable – hoeing, mowing, threshing; that of the latter, variable, and not easily subject to control.

The institution of the normal working day will not therefore fully prevent the overwork of domestic servants. The normal working day is the form of the protection of labour which corresponds to the conditions of modern wage labour. To protect the domestic servant, this vestige of the Middle Ages, we have to resort to medieval methods. During that era, the natural day counted as the working day; there was no restriction on daily working time, but there was a restriction on annual working time through the numerous holidays which, corresponding to the thinking of that age, were occasioned by religious traditions. Religious holidays were legion (see p. 111). The struggle over the working day in the Middle Ages was the struggle over holidays – in the handicrafts, journeymen added 'drunken Monday' to the religious holidays. The suppression of the democratic classes by mercantilist-feudalist absolutism led to a reduction in the number of holidays, first in the Protestant and then in the Catholic countries. But the Sabbath
The Agrarian Question remained.

Today even this is no longer so strictly observed, and least of all by that section of the population which still clings most to religion, the agricultural population. 'I can still remember the time', complains our 'country priest from Thuringia',

when Sunday on the land was an evangelical sabbath: any business on the fields which could not be put off was performed very early in the day, at the latest before 6 o'clock. Only in years of really poor harvest would the priest announce on Sunday morning, at the behest of the mayor, that midday mass would not be held and field work would be allowed. I have also lived through decades in which although there was a Sunday Act on the lawbook, it was virtually repealed through the almost total forbearance of the authorities. Sunday work is increasing from year to year with progress in agriculture, with the increase in yields, with the ever more nervous haste and greed in buying and the steady decline in the old peasant trust in God, proper devotion to God and surrender to Him.

He had hoped that a new law on Sunday rest might bring an improvement, but soon everything was as before.

Sunday working has also increased in areas of large estates as well as amongst the peasantry. As with overtime, schnapps serves as the slave-driver here too (cf. Weber, op. cit., 1892, III, p. 289). Those pillars of piousness, who strive so hard to keep the population to religion, stoke it with booze in order to ignore its ordinances.

However, the decline in church attendance is no concern of ours: instead we should work towards preventing the meagre rest time which tradition still leaves the farmworker from being eroded yet further. Indispensable is the strict prohibition of all work on Sunday that is not absolutely necessary, and the securing of every second Sunday as a completely free day for the domestic servant, even if a normal working day is introduced into agriculture. At any event, the former is easier to win than the latter, and should therefore be demanded all the more vigorously.

As far as other provisions for the protection of workers are concerned, the problems encountered in agriculture will be much simpler than those seen in industry. The attachment of protective devices to machines, and the prohibition on using untrained, in particular, young workers, on them, is just as vital in agriculture as it is in industry. In contrast, night work does not yet play a role in the former – although this might change as electricity encroaches on to farming: and regulations regarding space,
cleanliness, ventilation are certainly not necessary for field work.

The Housing Question

In contrast, housing policy poses the protection of labour much greater tasks in agriculture than in industry. We cannot rehearse the whole housing question here, however: and we certainly do not want to minimise the fact that housing misery in the towns creates conditions which are as bad as any on the land. Some sections of the industrial population live in even worse conditions than the agricultural – if this is possible; the living conditions exposed by Professor Singer in the industrial districts of Northern Bohemia are as dreadful as any of the 'rural shanties' revealed by Pastors Göhre, Quisdorp, Wittenberg and others. The garret which Göhre saw, in which four different couples slept on eight straw sacks on the ground, is no worse than the room in a workers' tenement visited by Singer in Trautenau: only 15.2 square metres in area, 'it contained a bed of the usual dimensions, which held one family consisting of five individuals (three adults and two children). A further nine persons of both sexes, young and old, lay sleeping densely packed together on the hard plaster floor – which lacked even a covering of straw' (Singer, Untersuchungen über die sozialen Zustände in den Fabriksbezirken des nordöstlichen Böhmen, p. 186).

Of course, the situation is not as bad as this everywhere: but wage labourers suffer from the virtually universal 'disproportion between the size of rooms and the number of their occupants', which Pastor Göhre observed in Chemnitz. Not only must married couples share their dwelling, and this usually means the bedroom, with half or fully-grown children, but also with lodgers of both sexes.

However, our concern here is not with how the poorer classes are housed in general, but with those dwellings which constitute part of the wage. The role of such dwellings is quite different on the land to that in the towns. In towns, living-in by wage-labourers in the employer's residence is a fast disappearing remnant of medieval handicraft customs; on the land, even the most modern large farm has to provide accommodation for some of its workers. Whilst the labour of the house-servant is no longer important in the handicrafts, and especially in large-scale industry, matters are quite different in agriculture. Agriculture is also distinguished by the number of contractually tied married workers with their own household, but living in the employer's house – the Instleute, and rent-fee farmers, who are contractually obliged to provide a number of days' labour in return for their accommodation.
However, of all areas of the welfare of workers – meaning, in the broadest sense, all those classes who perform so-called manual labour – workers themselves place least weight on housing. Any loss of nourishment will be immediately noticed by its effects on the body; remaining fit for work requires a proper diet, especially for those carrying out heavy work in the open air, such as farm workers. The pleasures of the palate, not simply eating but drinking and smoking too, are also familiar to the worker on grounds of tradition and physiology, are easily attainable, and hence greatly appreciated.

Dress provides the clearest expression of differences in social rank and social aspiration. As a consequence every aristocracy and hierarchy lays great store by rules of dress and insignia for the individual ranks and estates. The arrogance of rude soldiery is most clearly evidenced in the veneration which they demand for the so-called 'king's mantle'. Where there is no militarism, as in England, and where the soldier's uniform is an apparel of service, not of honour, an officer sporting himself in uniform when not on duty would be considered laughable.

The advance of democracy is accompanied by a tendency for differences in dress between the classes to disappear: as equals before the law, they demand the same respect in society. Proletarians do not want to bear the marks of their wage slavery outside work, do not want to distinguish themselves from the bourgeois in external appearance. Like the bourgeois, they want Sunday best too. The social rise of any stratum of the proletariat is probably more clearly revealed in improvements in their clothing than in their diet.

Housing is accorded the least importance. The physiological damage caused by poor housing is not felt as rapidly as that induced by an inadequate diet. Recognising the link between poor housing and physical deterioration requires observations and knowledge unattainable to those whose entire understanding is a product of our elementary schools, apart from that gleaned through personal experience. And what in fact is a dwelling for most workers today? Somewhere to sleep, basically. The worker arrives home late in the evening, dog-tired, and falls asleep. They leave early the next morning for the day's work. One room is quite sufficient.

Workers' frugality in the field of housing is even acknowledged by economists hostile to the working class. Although they might continue to rail against the workers' love of pleasure and finery, the champagne cellars of masons and the silk dresses of factory girls, we have not, as yet, come across any complaints about their luxury housing.

The gap between the proletarian standard of living and that of the middle classes is at its widest in the field of housing. But this also
represents both the point at which workers offer least resistance to all the factors pressing down on them, and the point at which these factors are felt most acutely. The prices of factory-produced goods and many foodstuffs are falling, except where artificially kept up by tariffs and price rings. Set against money wages, many strata of the proletariat can be seen to be experiencing a rising standard of living. Matters are different with housing. Whilst ground-rents in agriculture are falling, they are rising rapidly in the towns: the price of housing is increasing fast and forcing workers either to spend a large proportion of their wages on rent or to cut back more and more as far as their standards are concerned. The position is not much better on the land, where wage-labourers obtain a house *in natura* as part of their wages. The more widespread the system of employers supplying housing, the greater will be the pressure to reduce production costs, then the more determined any resistance by workers will be to cuts in their rations or food allowances; and the higher the wages which have to be paid to them, the more employers will seek to worsen the housing provided to workers, or – where this is no longer possible – to oppose any improvement.

But if housing represents that element in the proletarian standard of living most resistant to improvement, and in which the tendency towards immiseration is felt most sharply, it also represents one of the most weighty forces holding the worker down. Inadequate housing does not only lead to physical deterioration, like an inadequate diet: it also leads to a degeneration in moral and mental capacities – in fact to the complete suppression of those most tender of feelings which develop out of the most intimate relationships. Anyone interested in understanding the shamelessness and brutalisation which prevails in slum districts would find it more instructive to examine where lumpenproletarians live, rather than investigate the shape of their skulls.

Migrant labourers and many other working proletarians also live in similar hovels to those of the poorest big city lumpenproletarians: married couples with children, young girls and lads, sick and healthy, all heaped together, huddled both for warmth and to make more space in their confined quarters. Worked like beasts of burden by day, housed worse than beasts of burden by night – what else could thrive there except animal brutality and lewdness? And the customary dwellings of factory workers, as described by Göhre above, or the dwellings of *Instleute*, who sleep together with gang-workers, are hardly suited to develop the more refined sensibilities.

However, there is one great distinction between town and country. Although the dire housing situation in the town is degrading and morally stultifying to the worker, the town also harbours forces which
work against this, not only mitigating the effects of the housing problem but in places overcoming them completely. Work, in itself, in the town brings workers together, not simply to work but also for mutual stimulation, the discussion of public affairs, at least before and after work and during breaks. Labour on the land disperses the population over large areas and isolates them from each other. Town life outside work offers innumerable stimulations, associations, meetings, exhibitions, museums, theatres – even the pubs become an organ of public life, through which a part of the stream of urban culture flows. They are a place where workers can read newspapers and discuss what they have read. The individual develops independent thought; he or she becomes an individual and as such begins to feel the need for a home, a place in which to live, for friends, books, ideas. And if the stimulations of town life allow the better-off sections of the working class to surmount the degrading effects of the housing situation, these strata also develop a certain 'covetousness' towards housing and impel the worker to set even higher standards in this field.

The situation is different on the land. There are no stimulations to counter the degrading influences of poor housing. Work serves to isolate the population; associations and meetings are virtually impossible in view of the farmworker's economic dependency. No intellectual life exists to edify the worker. Public life rotates exclusively around the inn, which merely reflects the intellectual barrenness of the countryside. Any smidgeon of intellectual stimulation it might offer is generally drowned in booze, exacerbating rather than mitigating the depressing effects of the housing situation.

The specific effects of living in one's master's house, with one's employer, are also experienced far more acutely on the land. The public life of the town can offset these effects. A baker or master butcher who forbids his resident journeyman to bring Social Democratic newspapers into the house cannot prevent him from reading such papers in the public house, or stop his attending meetings in his free time. In contrast, the agricultural workers who live in the landowner's farmhouse are not only forced into complete submission in work but also outside it. Their intellectual life, political behaviour, personal relationships everything is under observation; they enjoy no freedom of the press, no right of combination (even where this is guaranteed by legislation), and often not even the freedom to vote as they wish under universal suffrage. They are, only distinguished from slaves by the fact that they occasionally change their master: in return for this freedom they can be thrown on the street once they become unfit for work.

Although no one would deny the importance of improving housing
conditions in the towns, this is even more important on the land. Legislation to protect workers in agriculture would fall far short of accomplishing its most important task were it to exclude housing from its scope. Setting a minimum level of sanitary conditions for all living areas assigned to workers as part of the wage is required.

Such a provision, as extensive as the principles of hygiene dictate and applied without fear or favour, would have an enormously beneficial effect in the country. Not only would it bring about a significant improvement in the housing conditions of a large part of the agricultural labour force, but would also contribute to raising the overall standard of living of the rural population. Such a step would also prove a powerful means of clearing away those remnants of feudal employment relationships which still persist into the twentieth century: farmers would have to undertake a massive reduction in the number of workers living under their roofs and replace them with free day-labourers. The supplanting of domestic servants and Instleute by day-labourers, who would be free individuals outside work, would represent a great social advance.

Such an advance would admittedly be linked with some technical regression, since any landowner wishing to keep free day-labourers in their locality would have to ensure that they could establish their own household – that is, be able to farm a piece of land, be it their own or rented. The decline in the number of house-servants would lead to a multiplication of small farms at the expense of the large farm: however, the technical effects of such an increase would be slight, scarcely worthy of note when set against the social advance associated with the supplanting of the vestiges of feudal servitude by free wage-labour.

However, although the free day-labourers are socially on a higher level than the bondsman or Instmann, once they own their own home and a little land they lose the most important weapon of proletarian class struggle on the land, which is more effective even than the right of combination: freedom of movement. Their property chains them down.

There is only one obvious way of overcoming this obstacle: the construction of worker housing for rent from public funds. Such a demand is clearly dependent on a number of preconditions – primarily, the free self-administration of local parishes, rural districts and so forth, and universal suffrage for those representative bodies which influence their administration. The fulfilment of these conditions, together with the presence of an independent movement of agricultural workers with sufficient strength to be able to and to want to take up the struggle for representation on local councils, is necessary before Social Democracy could actually demand that parishes, or better, administrative districts
on which the economic dominance of a small number of landowners is less apparent, should build houses to rent for farm workers. Such a step would in all likelihood bring agricultural labour to the greatest degree of independence attainable within capitalist society.

However, with the exception of England, we are not aware of any state in which raising this demand would lie in the interests of farm workers at present.

Rent on Land

A number of issues concerned with rent are closely related to the housing question.

As we saw in an earlier chapter, the price of agricultural land is only determined by ground-rent where it serves capitalist commodity-production. Where land is merely attached to the household, its price can far exceed capitalised ground-rent, and does so wherever circumstances favour the growth of population and the demand for land. And the price will be higher, the less the land is used for commodity-production and the more it is a mere appendage to the household – in general, this means the smaller the plot.

This is undoubtedly a major problem for the working population in the countryside, and constitutes one of the richest sources of the exploitation of the farm worker. The higher the price of a parcel of land needed to establish an independent household, the more they have to scrimp to save the purchase price and the more their standard of living is depressed. Under such circumstances the worker will be more inclined to try to borrow a part of the sum and so slip into debt-slavery and dependency. Where the land is leased, rather than bought, a high lease price will force the worker into greater dependency on wage labour: rents have to be met from money wages, not the product of the plot, which is not a commodity as far as the worker is concerned, or is so to only a minor extent. The higher the rent, the more eager and desperate the supply of labour power, and hence the lower any resistance to wage cutting. And the higher the rent, the more susceptible the worker becomes to rent arrears, which also become a source of debt slavery and dependence.

A successful struggle against this affliction would give a major boost to improving the situation and independence of the agricultural labourer.

This can be done where the tenant system operates: tenancy agreements simply have to be subject to the control of a court, which has the power to reduce unfairly high rents in excess of normal ground-rent down to the level of the latter; that is, to bring the rents of proletarian tenants into line with those of capitalist tenants. Such an institution
was introduced in Ireland in 1881 by the supposedly Manchesterist ministry of Gladstone, and has been outstandingly successful.

The effects of a law of this kind, must, to some extent, have an effect opposite to that of the housing law outlined in the previous section. The latter forces large landowners to reduce the size of their holdings by chopping off small parcels for their workers; in contrast, the former renders such a separation less profitable than it would otherwise have been. One measure fosters the small farm, the other the large. However, these laws are not contradictory, but rather complementary: both work in the same direction, since each – if in different ways – are conducive to raising the standard of living and independence of the worker.

Matters are not quite as simple where workers actually buy their parcel. There is no practical legislative way to enforce a reduction in the excessive price of such parcels; and if such a measure were to exist it would be open to a number of objections. The landowners at whose expense the reduction in ground-rents is taking place, are often workers themselves. As beneficial as such a reduction might be to the worker buying land, it would rob those proletarians who have to sell their parcel as the former owner or co-inheritor of their few hard-earned, and saved, pennies. This provides yet another example of where the private ownership of land makes rational reform impossible.
The Protection of Agriculture

Social Democracy – Not the Representative of the Employers’ Interests

The rent reform cited at the end of the previous chapter would not only be in the best interests of the agricultural labour force, but would also benefit agriculture. It would, and should, as already stated, only be to the advantage of the proletarian tenant; capitalist tenants would only gain once rents had been pushed down below the standard of normal ground-rents. But this would mean the end of the tenant system altogether, since landowners would find it more profitable to farm their land themselves. For the proletarian tenants the increase in income which would follow a reduction in rents could not only serve to raise their standard of living, but also allow the more rational organisation of the farm via the purchase of better tools, fertilisers and seeds.

The demand for reductions in excessive rents by means of special courts therefore represents a transition from measures to protect the farm worker, to measures encompassing the interests of agriculture.

Clearly, the latter is of less concern for Social Democracy than the former – the main reason being that Social Democracy is somewhat alone in its intervention on behalf of the rural proletariat. Matters are quite different when we look at agriculture. The interests of agriculture currently coincide with the interests of the agricultural entrepreneurs and the landowners, with the interests of profit on capital and ground-rent, in exactly the same way that the interests of industry coincide with the interests of profit on capital in industry, and those of commerce with profits from trade. As important as these branches of the economy are for the overall life of our society – including that of the proletariat – they have other and more powerful patrons than the proletariat. Agriculture’s distress is not caused by the inadequate representation of its interests or those of the landowners within the present-day state, or the neglect of governments and parliaments: it is due to causes which even a state friendly to agriculture will not be able to surmount as long as it remains rooted in the soil of present-day society and shrinks back from making any deep inroads into that society’s basic
organising principles.

Mere reasons of propaganda cannot possibly induce Social Democracy to take on the task of rivalling the agrarian charlatans in recommending miracle cures which promise immediate recovery for our ailing agriculture. By the same token it is also no part of its task to place even the true interests of agriculture – those in harmony with the interests of society as a whole – in the forefront of its efforts, just as it does not perceive its role as expending its energies in advancing the interests of industry and commerce. This is not because it places a low value on these interests, but rather because it is certain that they have ample opportunity to express themselves in the modern state, and that the state will do everything it can to foster them.

Social Democracy does not see itself in the role of agitator to industrialists and financiers; by the same token, it has no reason to seek to rouse farmers and landowners, both large and small, in the defence of their interests; its role is rather that of an observer, or possibly even a watchman, who looks to see that their special interests do not gain at the expense of the general interest, or their transient interests at the expense of long-term interests.

Social Democracy, whose duty it is to be active and positive in the interests of the proletariat, should adopt a basically negative, defensive, posture when it comes to protecting the interests of society at large under present-day circumstances. The positive elements must take a back seat as long as it lacks a real determining influence on political life.

This consideration alone is enough to ensure that Social Democracy will never be able to supplant the agrarian parties as far as the mass of independent farmers and landowners, who demand special concessions at the expense of society as a whole, are concerned – that is, those not dependent on supplementary employment. Despite all its theoretical goodwill towards the peasantry, Social Democracy, in practice, has never regarded it as necessary to mount a vigorous struggle for the agrarian measures pressed for most urgently by the peasantry.

Nevertheless, there are some areas within which Social Democracy can act positively in the interests of agricultural development.

**Feudal Privileges – the Hunt**

Social Democracy's prime efforts in this respect must be towards the removal of the *vestiges* of the feudal period, wherever they have been preserved or even revived. Social Democracy cannot be enlisted to support feudal privileges, the law of *entailment* and *Fideikommiss*. 
However its opposition to the binding of property under *Fideikommiss* is not, as with bourgeois democracy’s, aimed at encouraging its dismemberment into small peasant farms. For us, this would represent a serious technical step backwards.

In *East Prussia* the right of large landowners to exclude their holdings from rural parishes as *independent manorial districts* (*Gutsbezirke*), and thus to offload their due share of the parish’s burdens almost wholly on to the parish itself is much more pernicious than entailment. Landowners use the parish’s roads and paths, their workers send their children to the parish schools, but they have no other obligation, or only the most minimal obligation, to bear any of the costs incurred in providing them. Instances, such as the following, can be found:

Von Gouedies, a conservative Junker, has virtually dissolved the entire peasant parish in the village of Zuckersdorf, in the Rummelsberg district of Hinter Pomerania through the tactic of buying up land and incorporating it into his own property; *only two* independent peasants are left. These constitute the ‘rural parish district’, while the estate is an independent manorial district. The school currently needs rebuilding; but the costs fall exclusively on the ‘parish’, that is, the two peasants, whilst the estate owner gets off scot free as a ‘lord of the manor’. The two peasants wanted to initiate proceedings against this, but they were advised not to: nothing would come of it. (*Die Epigonen der Raubritter*, p. 46)

The beneficence of the Prussian Junkers towards the peasantry is also illustrated in the *hunting rights* which they have created. This remnant of feudal privileges is not confined to Prussia, but extends throughout Germany and Austria.

The feudal privilege of the hunt had a double character. In the first place, it was a select sport, a ‘feudal’ sport, reserved for the nobility. Only land-owning nobles could indulge. The French revolution eliminated this, as with so many other privileges, and replaced the privilege of rank by that of land-ownership. Anyone might hunt on their own property. The 1848 revolution in Germany had the same effect. Nevertheless, here reaction swept away the equality of peasant and large landowner, although it was not able to restore the former feudal privilege. The large landowners (in Prussia of 75 hectares and upwards) could hunt freely on their own land; the small landowner could only do so on hedged land. The open plots of a number of small landowners (such as a commune or district) were joined into a hunting district, in which only hunting by employees or hunt tenants of the
This restriction of hunting rights leaves us somewhat unmoved. Hunting is certainly not a means for economically or morally elevating the proletariat, or the mass of the population generally; irrespective of whether it is reserved for large landowners or can be enjoyed by all landowners, it will remain closed to the proletariat.

More important for us is the other privilege of the hunt handed down from feudal times: its legal precedence over agriculture. Agriculture, in particular peasant farming, has to serve hunting – not the other way around.

During feudalism's decline the peasants were obliged to feed the game for their gracious lord. They were forbidden to hedge their fields or scare off game animals (see p. 25). This naturally ceased in 1789, but game still occupies a privileged position in relation to the farmer's crops. Whereas the owner of pests is usually obliged to fence them in, this only applies at most to wild boar among the game animals. All other game is free, and the peasants may not shoot it even if it ruins their fields. Admittedly, the peasants are graciously permitted to fence in their fields and drive off game – but all that this means is that the cost of keeping game away from the peasants' crops has been shifted from the hunting lord to the peasants themselves.

The peasant has no influence whatsoever over the number and type of animals kept in the neighbouring woods belonging to a large landowner. And present hunting policy is diametrically opposed to the interests of agriculture.

Beasts of prey do not inflict much damage on the farmer. Even the tiger is regarded as an ally rather than an enemy by the East Indian farmer. Only a small number of particularly vicious tigers make unprovoked attacks on people, and the animals under their protection. And given the vast amounts of game in the typical jungle, the tiger does not need such a haul. By decimating the game which the farmer would otherwise be hard put to keep off the fields, the tiger earns the farmer's gratitude.

Europe does not have regal tigers, and is generally bereft even of wolves: the main predators are little foxes and martens. Like predatory birds, these inflict virtually no damage on the attentive farmers who take good care of their poultry at night. And they are invaluable in their assiduous and effective prevention of the excessive multiplication of mice and other rodents who devastate the farmer's crops. However, the hunter hates the small predator because it might also polish off a hare or deer, to the great displeasure of the sportsman, though not the farmer.
The farmer's interest dictates that the bulk of predatory game should be spared, at least within certain limits, whilst the number of specimens of herbivorous game animals be restricted. Current hunting policy demands the opposite, and has won out over the interests of the farmer.

Of course, there is now an obligation to pay compensation for damage caused by game. But look at how meagre it is. The hunting lord or tenant is relieved of any obligation to make good damage caused by certain animals (hares!). This is simply yet another illustration of the bare-faced impudence of the Prussian Junkers, who struck out any obligation to pay for damage by game from the 1850 Hunting Acts. After a number of Liberal motions to repeal this privilege had been rejected, the Centre Party introduced a game damage compensation law in 1891. This required the containment of all wild boars and compensation for damage caused by game trails originating from outside a district by the owner of the hunting district from which the game came, and compensation by hunting tenants for damage caused to land by larger game. Minor game animals and birds were left free to eat at large.

What was in any event a very modest law was twisted by the Junkers so that (1) any claim for damage from game trails and (2) the obligation to enclose game were both omitted; (3) in place of the obligation for hunting tenants to pay compensation, communes were made liable for repair – that is, the peasantry as a whole had to pay for damage caused by game; and (4) court proceedings were ruled out in instances involving damage by game. Disputes were to be settled by the local police, that is, the large landowner, or the district commission – large landowners again.

It takes the brazen effrontery of the Prussian Junkers, the Prussian government and the Prussian three-class voting system to offer this kind of compensation to the peasantry whose land has been damaged by game.

Although the position is a little better outside Prussia, farmers' needs are nowhere satisfactorily attended to in Germany or in Austria. It is well known that the Imperial Diet has explicitly recognised the hare's right to feed in the Civil Code. The pleasures of the hunt are more important than the people's nutrition. It is high time that this remnant of feudalism was got rid off.

But how to do it? Conferring a free right on each individual to hunt on their own land would offer little protection to farmers surrounded by large hunting tracts: they would have to neglect their field work and spend most of their time in a hide.

And although the peasantry on land surrounded by large hunting forests has been brought to the verge of ruin in some areas rich in game
Protection of Agriculture

and forest, other peasant communes gain considerably by renting out land for hunting, especially in the vicinity of large towns where there is little game and woodland and where the hunter in search of sport is prepared to pay good money for the pleasure of shooting a hare or deer. Freedom to hunt for each individual landowner would remove a valuable source of income from some communes, without benefitting the peasantry, especially those on small parcels of land.

The best solution to the hunting question in contemporary society lies in the restriction of the rights of private property, not their extension. The privilege of large landowners to establish their own hunting districts must be eliminated along with that of the independent manorial district. Both should be incorporated into the parishes, or better the administrative districts. Hunting in the large landowner's woods must be brought under parish or district control, as presently happens with hunting on peasant land. Naturally, parish and district authorities will be the product of direct, universal and equal suffrage, and they should determine hunting policy throughout a hunting tract.

Nationalisation of all woodland would greatly simplify the whole hunting question – at least in democratic states. Hunting could then easily be accommodated to the requirements of agriculture in each individual district. No doubt we shall be able to get over any regrets as to the possible detriment to hunting as a sport.

Mixed Land Holdings – the Gemenglage

The scattering of strips belonging to different peasants, the Gemenglage, causes as much, and in some circumstances more, damage to agriculture than hunting, especially where the land is characterised by small peasant holdings: this is also a remnant of feudalism, of the medieval Mark constitution with its three-field system and enforced cropping pattern. Under this system, the arable land allotted to each individual farmer did not constitute a compact plot, but lay dispersed amongst the different furlongs. The elimination of feudal lordship and the introduction of full private property in land did not eliminate the fragmentation of the individual's property in land: in fact, it multiplied it, especially where the division of the individual parcels was a result of the equal inheritance of all a testator's children. Rational cultivation is impossible on such small and very small parcels. Huge amounts of time are lost moving from one strip to another, and much land is forfeited for paths, ridges and so on – in short, the Gemenglage is not only a powerful obstacle to any progress in peasant agriculture, but actually depresses it still further.
Some figures from the Sachsen-Meiningen area illustrate the extent to which the fragmentation of holdings has advanced.

The open-field of Leutersdorf, in the district of Meiningen, with 520.6 hectares of arable land, 37.6 hectares of pasture, 1.8 hectares of kitchen garden, 55.7 hectares of meadow and 191.2 hectares of woodland – all in all 835.9 hectares including paths, water, farmyards and buildings – is made up of 7,785 parcels owned by 76 households and 363 inhabitants. Herpf, with 598 inhabitants, has 1,808 hectares, of which 836 are woodland, and is divided into 10,973 parcels. Behrungen, with 695 inhabitants, in the Römhild district, has 13,910 parcels over an area of 1,378 hectares, of which 320 hectares are woodland. Wolframshausen, 423 inhabitants, in the same district has 9,596 parcels on 804 hectares, of which 145 hectares are woodland. (Heine, Die bäuerliche Verhältnisse in Sachsen-Meiningen, p. 10)

The best effects are achieved by rounding off (consolidation, joining, separation) the parcels belonging to each individual landholder into a compact pattern of ownership. A report from the Eisenach Oberland notes, for example:

Despite the substantial contribution to new communal works, 4-6 per cent, very much more is harvested after a successful consolidation than before, significant areas of previously unused land are made cultivable through improvements; hedges and ridges disappear, the land's value often rises considerably within a short time of the achievement of a planned land pattern, often by a third. A noticeable improvement in the economic circumstances of the separated fields soon makes itself felt. (Heine, op. cit., p. 31)

According to Meitzen, the consolidation of land in the open fields of Grossengottern and Altengottern (near Mühlhausen in Thuringia) totalling 12,934 morgen produced an additional yield of 59,339 Marks each year, 4.58 Marks per morgen. Total costs including irrigation ditches, new roads, bridges and so forth amounted to 139,902 Marks, that is, 10.50 Marks per morgen – unusually high because of the large amount of drainage work involved (Meitzen, Der Boden und die landwirtschaftlichen Verhältnisse des preußischen Staates, p. 438).

Despite such benefits, consolidation is proceeding very slowly. Cost is one reason. Not only is the procedure required a rather expensive one, but the act of consolidation also involves switching from the old three-field
system with shifting pasturage to a higher, more intensive type of farming, requiring more capital. In the absence of the necessary cash, consolidation can become a cause of farmer indebtedness, and where the farmers are already deeply in debt could prove their ruin.

Moreover, consolidation cannot be practised by individuals on their own: it requires the assent of all those with a stake in the open field, since it relies on a mutual exchange of parcels. This is difficult enough to do in such a way that nobody loses, and even more difficult to do such that no one thinks they are losing. Bearing in mind the suspicious and conservative character of the peasant, it is clear that this issue presents us with yet another instance of private property in land placing an insuperable obstacle in the way of progress.

Enlightened absolutism resolved this problem by temporarily suspending private property in land. Much to its regret, liberalism also felt obliged to encroach on the sanctity of private property. Wherever a certain proportion of those with strips demanded consolidation, the others were obliged in law to participate and swap their property with someone else.

Despite this, the Gemenglage is by no means a thing of the past, and the improvement of agriculture requires that a good deal must still be done in this area.

Social Democracy has every reason to welcome such an advance from fragmented, irrational, and medieval cultivation to larger, more intensive and more modern farming: and where this can take place legally through further limitations on the rights of private property, it will not fail to support it with all the influence at its disposal.

But Social Democracy will have to be very cautious when it comes to the issue of a state subsidy for consolidation, something frequently demanded by the agrarians. The whole procedure implies an increase in ground-rents - as we saw, land-values can increase by up to a third. State subsidies have to be paid for by the taxpayers as a whole, including hard-pressed proletarians and petty bourgeois. Is it really their job to sacrifice part of their meagre income so that a number of landowners can rake in higher ground-rents? One could imagine circumstances in which such a subsidy would be appropriate, even from a proletarian standpoint. But there is no place for such largesse to landed property in the programme of a proletarian party.

Apart from limiting the rights of private property, Social Democracy also has a different task in this sphere: whereas consolidation - once the transitional stage has been overcome - ultimately brings undoubted benefits to the landowner, for the rural proletarian it implies a form of expropriation.
Ridges, stubble fields and so on offered the rural proletarian the opportunity to keep a goat or even a cow. Consolidation eliminates such public grazing places – 637 morgen of cultivable land was won from the open fields of Grossengottern and Altengottern when ridges and boundaries were removed – depriving rural proletarians of anywhere to keep the dairy cow so important to their households.

Dwarf-holders are also frequently damaged by consolidation, which mainly benefits middle and large peasants. But the smallholders have to pay just as much per unit area as the larger towards the cost of consolidation. And they are often cheated: their lack of influence in the village means they are assigned fields on the periphery, the most unfavourably located, involving the greatest losses in time in travelling to and fro.

Regrettable as all this is, Social Democracy cannot adopt a hostile stance towards consolidation. It is one of those instances where the interests of a particular stratum of the proletariat come into contradiction with those of economic development – something which Social Democracy must now allow itself to obstruct. As with the abolition of rough grazing for sheep, the collection of leaves for animal litter and the like, Social Democracy must try to ensure that the abolition of a right does not mean outright confiscation, and that it is compensated for through the guarantee of an allotment of land or some comparable gain, and that as few injustices as possible occur in the execution of the change. This can be partly achieved by giving the smallholder an equal say in the village and in the consolidation procedure, and partly by defraying the costs through a progressive land tax. Although we ought not to, and cannot, stand in the way of economic progress, we must strive to ensure that it takes place as painlessly as possible.

The Improvement of the Land

The same basic principles which guided us on the question of consolidation will also have to serve us when we turn to other tasks arising from the desire to improve agriculture.

Social Democracy already demands the nationalisation of forest and water. But as long as private property remains intact, we will welcome any appropriate limitations on its rights in the interests of the rational management of woodland and water.

The issue of water management is intimately connected with that of large-scale land improvement or so-called 'cultivation of the land' (Landeskultur). In fact, in essence, this is nothing more than those
aspects of the management of water which serve agriculture: drainage and irrigation works, draining of marshes, recovery of land through dyke-building and the like.

Such works cannot be entrusted to individuals. During the earliest period of the capitalist mode of production, such tasks were assumed by the absolutist state, which increased landowners' ground-rents at its own expense, just as its subsidies raised the profits of industrial entrepreneurs. The liberal state introduced other principles into its policies for improvements. Meitzen writes on the Prussian experience:

The main aim of the more recent concept of improvements (which emerged in the 1840s and 1850s) in contrast to the former system of public works, was the mobilisation of the activity of private individuals based on the profitability of such ventures, and the use of all appropriate means to strengthen and maintain private interest and self-help. There was no hesitation in compelling individuals to undertake required improvements if this was seen to be justified in avoiding a major problem. Other useful seeming works were encouraged by suggestion, the execution of preparatory work, technical advice and guarantees of assistance. Delays during the hazardous period of execution were eliminated as much as possible through aid and advances; the cooperative assistance of all those likely to benefit was sought in every possible way, and cooperatives were given every legal and actual encouragement to extend themselves to the fullest of their abilities. (Meitzen, op. cit., I, p. 463)

Social Democracy has introduced a different principle: it seeks the nationalisation of water, but not as practised in the absolutist state, where the state met all the costs and the landowners enjoyed all the benefits. The community must remain lord of the watercourses, and enjoy the returns from them, together with any increased yields which arise from its management of water.

Where this cannot be achieved, where private property is an insurmountable obstacle, there is no choice but to persevere with the liberal perspective: implementation by cooperatives of landowners at their own expense, not implementation by the state. State assistance will then consist not in the handing out of gifts to landowners but in restricting their property rights and overcoming the resistance of reluctant elements, whose collaboration is indispensable in carrying out improvements.

Exceptions would only be made where land ownership is not the beneficiary, or sole beneficiary, and where the public interest is also
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served, as with improvements in climate brought about by draining marshes, or the creation of a waterways by means of canals. Where this is the case, the state management of water can, and must, intervene directly. But landowners should also contribute in proportion to any subsequent increase in their ground rents; and expropriation should be demanded of any who fail to come forward with an appropriate amount. The draining of the Roman Campagna by the Italian government would benefit Rome and Italy as a whole. But it would be going too far were it to transform this desolate area into a blooming tract for the benefit of its rich owners, the Church of Rome and the noble families of Rome, at the expense of the impoverished Italian people.

Regard for the proletariat is not the only basis for objecting to expending public money on improvement works which are not urgently required for the public interest. The profitability of such works has also to be taken into account. Although talk of cultivating moorland or reclaiming land from the sea for agriculture sounds very positive, such works should evidently only be undertaken if they hold out the prospect of winning back a surplus over and above the cost of the works – except for works serving public hygiene and so forth.

The enlightened despotism of the last century, which developed capitalism's enterprising zeal but was inept at making capitalist calculations, occasionally paid very dearly for such attempts at extending the cultivable area bearing a ground-rent. Particular caution is advisable at a time when ground-rents are falling. A period in which capitalist accumulation is opening up immense tracts of fertile virgin soil outside Europe, in which within Europe fertile arable land is being turned back to pasturage, or even forest, is hardly the most expedient in which to expend large sums of money on transforming a few patches of infertile terrain into cultivable land. Roscher cites a work from as early as 1841 (Aufzeichnungen eines nachgeborenen Prinzes) which observes: 'Encountering the ruins of villages, dating from before the Thirty Years War, on marvellous soils in the middle of forests, makes one all the more uneasy at the prospect of the human and capital resources being put into the Danube marshes' (Roscher, Nationalökonomie des Ackerbaus, p. 122). Such improvements cannot alleviate the problems of agriculture, let alone those of the peasantry. What they lack is certainly not land.

However, a large number of potentially profitable improvements still remain unexecuted: they are obstructed not so much by a lack of money as by private property in land, the fragmentation of the land among a large number of owners. Money can always be borrowed if the proposed undertaking is a viable one: but most improvements can only be carried out over a large area, and not by individual landowners for themselves.
Carrying them out requires bringing landowners together. But this is difficult. Inertia, ignorance, and suspicion stand in the way: and the advantages which each obtains from large-scale improvements also vary.

Only limiting property rights, state compulsion, can establish the required uniformity. Once a certain proportion of those involved call for a project, and the project appears suitable, those opposed to it must be liable to give over their land to allow the works to be carried out and to bear a portion of the costs. Social Democracy will always support such methods for promoting the improvement of the land.

Control of Epidemics

Controlling the pests which threaten farm animals and crops, and hence the conditions for civilised human existence, is no less important than effecting improvements.

In Part I we already noted that the modern mode of production generates increasingly serious hazards to the health of animals and crops, and opens the door to animal and plant epidemics.

Recent measures to control the importation of animals and fruit are one consequence of this. However, serious as the real danger of ruin to entire districts and countries caused by the import of diseased specimens might be, restrictions on importation are often simply a disguised form of protectionism. Not only do they make it more difficult to import diseased livestock but block the import of livestock altogether. The demand should be not for a barrier to imports from abroad but to the movement of all diseased herds, whether foreign or domestic in origin. In fact, domestic herds are more dangerous since they are nearer and in more active interaction with the local countryside. Border inspections will be useless if they are not complemented by the vigorous control of epidemics within these same borders.

Once again private property emerges as the greatest impediment. The control of an epidemic, be it plant or animal, is pointless unless undertaken simultaneously, vigorously and thoroughly at all endangered locations. The failure of cattle owners to disinfect their stalls is enough to allow the banished pest to return. If all vineyard owners in a particular district decide to tackle phylloxera, but one declines, the vine pest will constantly return to afflict the others. Property rights have to be suspended in such a situation, at least temporarily: and state compulsion has to have precedence over individual economic freedom.

This is not only advisable in fighting the problem once it has arrived.
Prevention, as always, is the best policy. Not only should the pest's possible predators be protected and bred — those which attack the Colorado beetle for example — but any necessary precautionary measures should also be undertaken in the actual techniques of cultivation or the arrangement of animal stalls. As with human dwellings, hygiene regulations can be decreed for stables and enforced through an inspectorate.

Compulsory inoculation with tuberculin, the isolation of sick from healthy animals, and the feeding of calves with sterilised milk have been proposed as a means of combatting bovine tuberculosis. In France, all imported cattle are subjected to inoculation. We make no judgement as to the effectiveness of the tuberculin inoculation, but if proven we would certainly applaud its compulsory application.

The existence of property rights will never cause Social Democracy to shy away from any compulsory measures necessary to combat pests in agriculture. Of course, it will also ensure that the most appropriate method of implementation is the one adopted.

Necessity, rather than desire, already forces the state to intervene in property rights to combat plant and animal pests. And although such measures are in the interests of agriculture itself, they still encounter stubborn opposition. Inertia and ignorance are not the only causes: peasants are also suspicious about the organs of the state, which usually confront them as an instrument of oppression and exploitation, as police officer or tax-collector. And peasants do not expect the bureaucracy, with its outmoded pedantry, to exhibit any understanding of the needs of agriculture.

The more state enforcement extends into the sphere of pest control, the more urgent the need for the enlightenment of the rural population — not just piecemeal but on a systematic basis. And this needs to be supported by the promulgation and implementation of compulsory measures by theoretically and practically trained specialists — not lawyers, police officers and former subalterns — in as close a degree of agreement as possible with the local organs of self-administration in parishes or administrative districts.

But who should bear the costs of these measures? The state? That would mean imposing part of the production costs of agriculture on the consumers — raising ground-rents at the consumer's expense. On the other hand, it would be unfair to impose the financial burden on farmers whose farms are suffering from a particular pest, since measures to control pests are in the interests of all farmers. Such a policy would also create a strong incentive for the individual to cover up any outbreak on their property.
The costs are often therefore imposed on all the farmers involved, and matters have progressed such that,

for certain epidemic diseases – cattle-pest, pneumonic plague, anthrax – compensation will be paid for prompt notification should slaughtering become necessary, or losses be incurred. This represents an insurance against certain pests as far as the owner is concerned, and where compensation payments are borne by all livestock owners, one can speak of a *compulsory epidemic insurance*. The wish of the rural population for the inclusion of other pest diseases in compulsory pest insurance, in particular tuberculosis in cattle and red murrain in pigs, should be acceded to (Buchenerberger, *Grundzüge der deutschen Agrarpolitik*, p. 188).

No objection can be raised against this type of state insurance. But it does bring us to a further question – the significance of state insurance in agriculture.

**State Insurance**

Insurance is frequently claimed to play a different role in agriculture from that in industry; and although state insurance against every possible misfortune would be regarded as inconceivable for private industrial enterprises, this is held to be necessary for agriculture because of its exposure to the whims of nature, which have been tamed in industry.

However, uninterrupted production for the commodity-producer depends on social, as well as natural factors – and these are more capricious in industry than agriculture. Although agriculture might be more dependent on the moods of nature, it is less dependent on the moods of the market. The raw and auxiliary materials which industrialists have to buy can usually be produced by farmers for themselves: and even given foreign competition, the farmer's market is more secure and less victim to fashion than that of the industrialist. In fact, the markets can quickly turn nature's wrongs into their opposite as far as the farmer is concerned: a poor harvest can increase prices, more than making up for the lower yield.

Moreover, it is not possible to insure against the catastrophic misfortunes which afflict agriculture: insurance is only appropriate for those adversities which strike a few individuals out of a much larger number, so that a small sum paid by each individual is sufficient to provide adequate compensation for those hit. But drought or rainy
summers, harsh winters and floods are afflictions which affect entire localities or even countries, causing such massive misery that insurance would be utterly powerless to help. Only the expenditure of all the resources at the disposal of society can assist, and even then they are not always available in the form required.

As long as Social Democracy does not have good reason to demand the nationalisation of the entire insurance system in both town and country, it could scarcely propose the simple wholesale nationalisation of agricultural insurance.

This is not to say that individual branches of insurance peculiar to agriculture do not merit some degree of intervention by the state: for example, livestock insurance and hail insurance.

Livestock insurance has a dual character: insurance against the threat of epidemics comes under the state as part of state measures against epidemics in general. In addition, there is insurance against livestock deaths not caused by disease.

This type of insurance is confined to small livestock-keeping farms. The death of an individual beast on a larger establishment will not seriously disrupt the farm's operation. The larger the herd, the more frequent the death of an individual head: such events are unavoidable elements in the establishment's costs. Like large shipowners, the owners of large herds of livestock are their own best insurers.

Small peasants are in a different position. The death of a cow could mean considerable damage to them, and frequently a fateful impediment to the whole of their farming operations. Their receipts are too meagre to allow the regular setting aside of a fund to depreciate the cost of their livestock, and individual accidents could remove their stock before they have lived out their useful lives.

Should this happen, the uninsured peasant has no other choice but to accept a loan from the livestock dealer, who then gets the opportunity, both as middleman and usurer, to exploit — and very effectively too — the peasant.

The obvious solution would seem to be for livestock-owning peasants in a village to band together and insure themselves against such accidents so that the costs of any individual accident are borne by all. This type of livestock insurance numbers among those endeavours which seek to confer the advantages of the large farm on the smaller through mutual cooperation. Useful and necessary as such efforts are, they represent only a meagre substitute for the large establishment.

By insuring itself, the large farm sacrifices neither the money for, nor loses interest in, the undertaking of preventive measures to avoid losses. Matters are quite different for the peasants. Lack of money, poor feeding
and poor stabling already expose their stock to more risks from the outset. Paying the livestock premium certainly does nothing to improve their situation in this respect.

Peasants can make up for their lack of means to some extent through the greater care which they bestow on their livestock. However, insurance makes such care seem superfluous: it can often become a temptation to let an unfit animal perish in order to replace it with a better one at the expense of the insurance company.

As a consequence, despite the fact that attempts to organise peasant livestock insurance extend back to the cow guilds of the sixteenth century, and despite capital's eagerness to find new areas to bring under its sway, it has so far taken good care to steer clear of livestock insurance; and where it has become involved, the experience has mostly been a disagreeable one. Where peasants insure amongst themselves they can exercise some mutual control over their tending of livestock. This is completely impossible where livestock insurance is organised through capitalist enterprises. Capitalist livestock insurance is exposed to the permanent danger of fraud by the peasantry. And if the capitalists want to make money, they will attempt to defraud the peasants in turn. Small-scale cattle dealing does not suit big capital. As a result it generously concedes livestock insurance to the state and the communes — also a form of socialism.

Livestock insurance has not as yet extended beyond small local associations lending assistance, in one way or another, to the individual member in the event of a loss. These are associations of people who know each other very well; control is easy and simple, and damage to all through negligence or even deception by an individual is very difficult. However, these advantages have to be set against the disadvantage of the small number of those making up the circle of the insured: they can easily fail in the event of a local accumulation of livestock misfortunes, as a result of a shortage of feed perhaps, rendering illusory the whole idea of insurance.

The state should intervene here, either simply through linking the individual local associations with each other, allowing any short-lived but very heavy burden on one or more of these associations to be borne by the others and hence eased, or by decreeing a compulsory membership for individual livestock owners, thus extending the circle of those insured.

Where it can the proletariat prefers free democratic organisation to one imposed by the state bureaucracy. This also applies to insurance organisations: it does not require state assistance to extend its trade unions and benefit funds throughout the nation. However, if the peasantry feels the need for a national federation of local insurance
associations, but declares its inability to accomplish this itself and calls on the assistance of an otherwise not especially friendly state bureaucracy, the proletariat should not seek to place obstacles in its path. If it can be of help, there is no reason to hold back.

The picture would, of course, change were such a call on the state to be a means whereby a number of farmers could extract subsidies at the expense of the taxpayer; for example, if the state, through endowing insurance funds, were to allow farmers to renew their livestock at the state’s expense. A proletarian party cannot support such largesse.

Hail insurance differs from livestock insurance. The existence of such insurance cannot possibly lead to negligent or fraudulent farming practices. On the other hand, the threat of hail hangs over the large farm just as much as the small – a hailstorm can devastate both. Whilst livestock insurance, under certain circumstances, might become an obstacle to agricultural development and bolster the small irrational farm at the state’s expense, this is quite impossible with hail insurance.

Hail insurance also differs from livestock insurance through the fact that whereas livestock insurance protects against hazards which affect the individual farmer’s inventory, hail insurance covers hazards which totally cripple every farm in a locality, or even a whole district. Hail damage resembles flood damage in this respect, although it is usually confined to smaller districts. Insurance against it is therefore possible without imposing an excessive burden on the participants, as long they are sufficient in number. The impracticality of hail insurance organisation with a small area is revealed in the collapse of the hail insurance associations in Württemberg and Hesse, and the fact that small mutuality societies often have to raise extraordinarily large advances (for example, Ceres in Berlin in the years 1887–90: 175 per cent, 99 per cent, 133.3 per cent, and 100 per cent of the initial premium) (Buchenberger, Grundzüge der deutschen Agrarpolitik, p. 176).

However, where insurance is left to private enterprise the irregularity of hail in most districts is just as much an impediment to generalised insurance as hail’s predilection for specific localities. A feeling of security easily builds up in areas in which no hail has fallen for a long time: this deters individuals from taking out insurance, particularly peasants who do not suffer from a surfeit of cash. And those areas which are especially endangered by hail are not welcomed by the private companies, or only on the payment of prohibitive premiums.

There is, therefore, an evident need for the state organisation of state insurance: this has already been introduced to some extent in Bavaria and Baden. The demand for compulsory state insurance can also be justified by the devastation which a hailstorm can cause and which can
create such distress where no insurance is available that in many instances, as with flood damage, the state is obliged to intervene with assistance. The need for state help where insurance fails also justifies subsidisation by the state as it relieves it of the subsequent costs of emergency measures.

As little as we would otherwise clamour for an extension of the powers and social functions of the police state, state hail insurance seems to be a very useful measure.

One should not underestimate the possible effects of insurance, state or private. As useful as it is for the individual suffering damage, it represents a new tax for those who have to bear the costs, a tax which grows the more numerous the fields of insurance and the greater the extent of the damages insured against.

The possibilities of such damage are steadily increasing with the growth of modern cultivation – not only does it increasingly bring about epidemics to animals and damage to crops, together with flooding, but also, if the theory of the Chief Forester of Aargau, Herr Rinicker, is correct, more hail, which forms most readily in those areas where the high ground has been denuded of trees through the reduction in woodland. Insurance leaves the causes of the damage untouched: it fails, as we noted above, when we turn to the gravest problems which afflict farmers. It can, therefore, only be seen as a poor surrogate for measures designed to render farmers more independent of the moods of nature, and to subject these vicissitudes to their control.

Rational wood and water management, which reduce flood and hail damage; irrigation works, which combat aridity; drainage against waterlogging; rational breeding of strains of plants and animals which not only raises their yields but also their resistance; protection for insect-eating birds; hygienic stalls for animals; appropriate feeding and the like – these are all measures of far greater importance than insurance. But it has to be recognised that even some of these are in too much of a contradiction to the conditions of existence of the small peasant! Can one really be seriously demanding that small peasants ought to practise rational breeding and husbandry in clean, airy stables?

The Cooperatives – the Agricultural Training System

Livestock insurance at a local level is basically an attempt to obtain the advantages of the large-farm through cooperative organisation. We also touched on the question of cooperatives in our discussion of improvements. We conclude our observation on methods for promoting agriculture with a few words on the cooperative system. We can be brief
as we have already dealt with the role of cooperatives in greater detail above.

One could well say that Social Democracy is sympathetic to the cooperative system in general, and to the agricultural cooperatives in particular. We do not overestimate them, however; we do not regard them as a means for saving peasant agriculture, since its benefits can be used equally well by the large as by the small farm. And where it strengthens the latter, it transforms its owner either into a capitalist exploiter, or one of the exploited. Moreover, we do not regard farmer cooperatives as a transitional stage to socialism, except in the sense that any limited liability company, and any large concern in general, represents such a transitional stage. However, cooperatives are – and in agriculture more than in industry – a powerful means for promoting economic development and the transition from the small to the large establishment, and are far preferable to the more typical capitalist means of effecting this development, the expropriation of small property. We cannot prevent the latter method of development in present-day society, but we do not have to support it. We can, however, support the cooperative system.

Nevertheless, our support should not go beyond removing possible legal obstacles to its development. State subsidies would represent nothing more than permission for individual groups of owners to improve their personal position via a grant from proletariat. And by encouraging dubious establishments and reckless financial conduct, such subsidies would not even be in the interests of cooperatives themselves. And this is leaving to one side the fact that control over a fund for subsidising cooperatives can become a means for buying political sympathy, a means of corruption like the Guelf funds.

A good portion of the cooperatives themselves reject state subsidies -(see Dr H. Krüger's article on this subject in Soziale Prazis, VI, p. 338, VII, p. 203). One might term this Manchesterism, but state aid to promote the private interests of private individuals is no part of socialism. A social reform which conserves agricultural commodity-production by leaving the profits to the entrepreneur but the risks to the state – that is, the mass of the population – is no doubt a tempting ideal for agrarians, but such a policy cannot be executed on a large scale, nor is it in the interests of the proletariat.

There is one further method for promoting agriculture which does not hold back economic development – in fact, it markedly speeds it up: the extension of specialist training.

We already commented on the most important aspects of this issue in our discussion of the education system. No further arguments are needed
to prove the readiness of Social Democracy to promote both agricultural and industrial training beyond the level of elementary and secondary schooling in any way possible, and its willingness to spend what is required on the introduction or improvement of agricultural secondary schools and colleges, agricultural laboratories and experimental stations, the establishment of model farms, the arrangement of exhibitions and the like.

This is sufficient to illustrate the essential elements in the development of agriculture within capitalist society and Social Democracy's intervention in this process. After what we have argued here we trust that no one will attempt to claim that our position represents 'Social Manchesterism'. However, the fact that our demands do not go beyond the limits of a bourgeois, democratic-social-reformist agrarian programme on many issues, and that we are exceeded in 'radicalism' by some of the programmes of the agrarians or land reformers is a crime to which we gladly confess our guilt. Our consolation is the hope that our agrarian policy preserves the unity of industrial and agricultural development, and that our standpoint is consistent with both: that we do not demand the opposite for agriculture to that which seems necessary in industry. Agrarians and land-reformers are not burdened with such worries: to them agriculture represents an independent whole. For the Social Democrat, however, agriculture is part of an organism, and can only develop in harmony with it.

Practicians may possibly find some of our demands inexpedient. In assessing whether this is so, what matters is whether they are useful for the promotion of agriculture, not whether they are useful in winning over peasants. We admit that some of our demands – not only those which relate to protective legislation, but also those which seek to limit property rights in land – may well have exactly the opposite effect.

However, should methods which are well-fitted for raising the standards of agriculture prove ill-fitted to winning the applause of the peasantry, this is not an indication of the unfitness of the methods but of the unfitness of present-day small peasant farming.
The Protection of the Rural Population

The Transformation of the Police State into a Cultural State

Although Social Democracy may not be able to compete with the agrarian parties when it comes to saving the peasantry, there is one area in which it has more to offer the rural population than even the most agrarian of the bourgeois parties.

But to make this clear, we must cast our net a little wider.

The entire movement of the modern mode of production tends to enrich the town at the expense of the countryside. We dealt with this above (p. 268) and merely intend to emphasise a few relevant aspects here. This enrichment follows necessarily from the accumulation of capital, which, together with the total surplus-value – including that produced by agricultural labour – becomes increasingly centralised in the towns. This tendency will not disappear until capitalist society itself disappears: the rural population therefore has a much greater interest in the coming of a socialist society than the urban population. The shift of industry into the open countryside and the industrialisation of agriculture do not alter this tendency in any way. Although such a shift might change the methods of exploitation for some sections of the rural population, the surplus-value squeezed out of them will continue to be centralised in the towns.

The subject of the disadvantage suffered by the country at the hands of the town is familiar to our agrarians. However, they are very mistaken if they believe that the way to make up for it is to disadvantage the urban population by raising the prices of food and raw materials. This will merely raise ground rents, and improve the position of the landowners. But these are not identical with the rural population, most of whom do not live from their ownership of land, but from their wage-labour. Even landowning farmers are in the main only apparently landowners; the real owner is the mortgage creditor in the town. And the large landowners also prefer to consume their ground-rent in the town. An increase in the price of food and ground-rents raises the price of estates, raises the mass of mortgage interest (as a result of sale
Protection of Rural Population

and inheritance) and raises the amount which large landowners, or their children, have available to spend in the town. It also raises the exploitation not merely of the urban, but also of the majority of the rural population – and in the final analysis steps up the exploitation of the countryside by the town rather than reducing it.

Inasmuch as this tendency can be resisted within the present-day mode of production, Social Democracy does so through its efforts to improve the living and working conditions of the rural proletariat.

However, it is not the capitalist mode of production alone which exploits the country to the benefit of the town. The modern, centralised state also does so, even where it is completely under agrarian influence and seeks to do the exact opposite.

As with any state before it, the modern state is primarily an institution of domination. The bearers of modern state authority, parliaments and in particular princes, saw their main task as stripping the small more or less sovereign communities of the Middle Ages, out of whose conjunction the modern state arose, of their independence and means of authority. The urban and rural commune, the Mark, and the feudal territory, all lost their independence and the means of enforcement over which they had control. Justice, the police, the army, and tax administration all became tightly centralised.

In contrast, the modern state – again like any other previous state – is only an institution for the service of civilisation to a very limited degree. What it centralises are the means of domination. Cultural tasks are left to the communes and districts, or to private individuals: it shows no great interest in their centralisation. Elementary schools and to some extent even the higher school system remain a local concern. Universities are admittedly run by the state – it could not really burden the communes with them with the best will in the world; but in return they mainly serve the aims of domination, not culture – they are intended to drill usable state officials, not free-thinking scholars.

Welfare matters – in their broadest sense – are also a concern of the communes and, in part, private individuals: sanitation, the health system, care of the poor. The construction and maintenance of roads also remain partly a communal matter and partly a private one; the state only usually intervenes if it involves a military road – if it concerns war. State roads are aptly named military roads, and the railways have also only been nationalised in the militarised states not in Switzerland, England or America. The Kaiser has observed that ours is the century of transport: but the spirit of our Prussian State Railways is not that of transport, but of militarism and profit-making.

The scientific and artistic institutions which the modern state
maintains arose as an appendage to courtly pomp, as court theatres, court galleries, court museums, and east of the Rhine they still retain their courtly character today.

And those agencies of civilisation created or acquired by the state, alongside its means of domination, are also concentrated in the cities, in particular the seats of the princely courts. Both the rural and urban populations have to contribute to their upkeep, but only the latter really has access to their benefits.

The opposing tendency must begin to make itself felt within the state as soon as the proletariat gains any influence over its running. State authority is the most powerful lever for abolishing the capitalist system. The proletariat must, of necessity, strive to conquer it. But one should not imagine that the dictatorship of the proletariat means that one fine morning the city mob will overrun the ministries in a violent coup and use the state's means of enforcement to plunder the rich.

The proletariat cannot struggle for the possession of state power without at the same time raising itself and the state to a higher level. It cannot wield the state for its own purposes before it has succeeded in accomplishing this elevation. It is during this struggle that it first attains the necessary moral and intellectual qualities to enable it to become the ruling class – and abolish class rule. However, the proletariat's struggle for state power is not simply the struggle for the conquest of a means of power: by its nature it also necessarily entails striving for the transformation of absolute monarchy or oligarchy into democracy, together with reducing the state's activities of domination and stressing its cultural tasks – in fact the transformation of a police and militaristic state into a cultural state. This is of course self-evident and needs no further argument.

However, although this transformation will inevitably benefit the population as a whole, it will benefit the rural much more than the urban sector. The former have much more to gain.

A few examples will illustrate this.

**Self-administration**

Social Democracy demands the self-administration of the people at state, province and commune level. The last-named is much more important for the rural than for the urban population. The state official is an urban creature by nature, and has much greater understanding and sympathy for urban than for rural needs. The urban population also has quite different means available for influencing the bureaucracy than the rural, in particular a powerful press. This does not of course stop
land-ownership being given preferential treatment by the government and bureaucracy at the expense of urban industry. But what type of land-ownership enjoys this agreeable position? It is large land-ownership, in fact that fraction of large land-ownership which is an urban class, which consumes its ground-rents in the town, and exercises its personal influence over the government and bureaucracy there. The interests of this land-ownership are also antagonistic to those of the mass of the rural population which it exploits: it is land-owning interests which mean that the rural population is disadvantaged in all local matters over which the state has any influence in any field in which the large landowner stands to gain – such as assessing local taxes, estimating damage by game and so on. As with the politics of the 'protection' of agriculture through tariffs and state largesse, the agrarian inclinations of state administration turn out to be means not for controlling the disadvantages suffered by the rural population, but of giving them added bite.

Self-administration of province, district and commune not only has to put a stop to the tutelage of and violations inflicted on the rural population by ignorant, overbearing and even downright corrupt officials, and check the excessive power of large land-ownership, at least where it rests on political factors: it must also bring economic benefits to the rural population by rendering a part of urban officialdom redundant, sending a portion off to the country where they will in the future consume their salaries – no longer as masters, but as servants of the people.

Militarism

For the rural population, restraining militarism is even more important than restraining the omnipotence of the centralised bureaucracy. Although militarism demands heavy sacrifices of the population as a whole, these fall hardest on the countryside. Industry, which generates an ever-increasing reserve army of unemployed, can more easily tolerate the reduction in labour caused by a standing army than agriculture, which suffers from a steady outflow of workers. Young people leave the country to become soldiers, all too easily lose their desire for a life on the land and are lost to agriculture forever. And those who do return are not always the best elements. The soldier is scrupulously protected from the effects of urban culture; the worst thing imaginable would be for him to absorb some of its spirit! Soldiers' taverns and brothels are the only places 'befitting' the defenders of the fatherland during their free time, the only ones which do not bring them revolutionary ideas. The only
urban attainments they takes back to the countryside are their barrack-square manner and syphilis.

The taxes which the peasant pays for the upkeep of the army – both the obligatory variety and the voluntary ones he pays to keep his son in battle dress – also migrate to the town, where they are spent. Some urban industries, and some urban layers of the population live from militarism. The peasant derives only burdens and disadvantages.

Why then should the peasant turn out to be militarism's sturdiest pillar? No one would claim that peasants have a more developed national consciousness than the urban population, or that they have stronger ideals. Monarchist consciousness and enthusiasm for the 'king's mantle' do not suffice as explanations either.

The most likely explanation seems to us to be that the rural population is conscious of the fact that a hostile invasion would hit them hardest – much harder than the town dwellers, with the obvious exception of citadel towns. The horrors and devastations of war primarily afflict the open countryside. Hence peasants' anxiety that the Reich might be defenceless, and consequently their enthusiasm for the army, which keeps the enemy from their fields.

Winning the peasant for the struggle against militarism means proving that this does not imply leaving the fatherland defenceless.

However, the struggle against militarism has two aspects, often conflated but which ought to be kept strictly separate.

On the one hand, the desire for the establishment of a lasting peace. The war preparations of the big modern nations have now reached such insane dimensions that they make even the best patriots quake. Everyone is convinced that this cannot continue, that it will lead either to bankruptcy or to an annihilating war, the most insane of all wars – a war unleashed because the burden which was supposed to secure peace had become too great to bear.

Only one means seems capable of avoiding this – an entente between the great powers involving the disbandment of all standing armies and the voluntary subordination of the sovereign powers to the binding decisions of a World Court of Arbitration.

This is undoubtedly a very attractive idea, but utopian in a society in which conflicts of interest are so great that even economic struggles within a nation, such as strikes, cannot be resolved by arbitration. A lasting peace requires, at the least, that our great powers can arrive at a definitive resolution of all their points of difference, and make arrangements to prevent the emergence of new ones. We are, however, further from this than ever. National questions created by the development of the bourgeois state still remain unresolved; the division
of Europe is not yet complete, and the most recent struggle for the
division of the world has just begun. The antagonisms between nations
produced by capitalist society are too deep to envisage that capitalist
regimes could achieve a federation. The solution to this problem awaits
the international solidarity of the proletariat, already a more powerful
guarantee of peace than all the peace congresses of the bourgeoisie.

The demand for the replacement of the present standing army by a
people's army, a militia, is quite different in character. It can be imple­
mented in present-day society, even in the midst of the most acute
international conflicts of interest. It does not seek to abolish the army, to
diminish its external readiness, but simply to deprive it of its internal
striking power. The army today is not only a means of external defence,
but also serves to keep down the 'enemy within'; it is the most powerful
of all the means of domination, the most powerful support of the ruling
classes, inasmuch as their rule rests on political factors. It constitutes
the ultima ratio which can be threatened against any attempt at
peaceful emancipation by the exploited classes. The demand for a
militia system is therefore an eminently civilising demand, a demand
which must be important to anyone wishing social development to take
the most peaceful path possible, with the minimum of violence and
brutality.

The idea of a lasting European peace is mainly economic in aim. It
wishes to relieve capitalist society of an increasingly unbearable
burden. It impinges only on mutual relationships between governments;
the relationship between government and people remains untouched.
Laying down arms externally by no means implies internal disarmament.
On the contrary: whilst the great powers constantly seek to outbid each
other in terms of the size of their armies, making them increasingly into
mass popular armies whose use against the population will become more
and more problematic, the idea of disarmament does not rule out
replacing current armies which are composed of soldiers from the people
who will return to the people, by small armies of professional soldiers
recruited from the lumpenproletariat, who – in return for good wages –
will be quite willing to fire on their own mothers and fathers.

The demand, or better the desire, for disarmament is therefore that
form for combatting militarism most likely to appeal to bourgeois
circles, despite the limited prospects of actually realising it within
bourgeois society. In contrast, such circles will work up very little
enthusiasm for the replacement of the standing army by a people's
army, although – or perhaps better expressed – precisely because, it is
one of the prerequisites of those social conditions which will allow
disarmament in the first place.
The idea of a people's army is primarily political, not economic, in purpose. It constitutes the indispensable precondition for a real democracy, in which the government is the servant, not the master of the people. In contrast, it is unlikely to imply a great deal of economic relief for the population. In this respect, the idea of a lasting peace is certainly superior.

The idea of a people's army by no means implies reducing the defence of the population: in fact it tends to strengthen it by drawing on all able-bodied citizens to be available for service. The costs involved are a matter for technical development: this cannot be predicted, but it will continue to celebrate its greatest and most fateful triumphs in the military sphere as long as the antagonisms between the capitalist nations continue.

The actual amount of direct economic benefit which the population as a whole would derive from a popular army will depend on numerous technical and political factors which are constantly changing and impossible to forecast at present. However, irrespective of the degree of benefit which we might estimate, one thing is certain: most of the direct benefits of a militia system will accrue to the rural population.

Regardless of the method of training in a people's army - and it can vary considerably depending on a large number of political, technical, economic and educational circumstances at different times and in different countries - such a system would inevitably lead to the virtual disappearance of the distinction between soldier and citizen. This is the essential hallmark of a popular army. Whilst the citizens remain defenders, even when no longer doing their training as soldiers - in Switzerland every able-bodied citizen keeps a gun at home - every endeavour is made to allow the soldiers to remain citizens. The period of segregation from the rest of the population - that is, training in the barracks - is kept to the indispensable minimum necessary for acquiring the skills of war, and as large a part of training as possible is carried out outside barracks. The systematic training of youth for military readiness plays a large role in any system of popular defence. But only a few months are devoted to training in barracks.

This means that the time taken out from the soldier's occupational life under a system of popular defence is at most an inconvenience, but not a serious burden on production. Although this point is important for all branches of production, it would be of particular relevance in agriculture with its shortage of labour. For agriculture the barracks symbolises the centralisation of the military in the town, and signifies one of the most pernicious forms of absenteeism - that of its best workers, who are not only transformed from workers into exploiters, albeit involuntarily, but
also consume the results of this exploitation far removed from the countryside. Even someone who does not set great store by the direct economic benefits of a militia system would have to admit that it would remove one of the most oppressive forms of the exploitation of agriculture.

Nationalisation of Expenditures on Schools, Poor Relief and Roads

Social Democracy's desire to transform the state from an institution of domination into one of culture and civilisation does not only benefit the rural population in this negative way, through the struggle against the excessive power of the bureaucracy and militarism. The proletariat in struggle must also strive to make the state into a means for disseminating real culture and assume those cultural tasks which are too great for the individual or the commune, but whose fulfilment is indispensable for society as a whole.

We referred above (p. 344) to the fact that there are a number of cultural tasks which only towns can currently exercise, as long as such tasks are left to communal administration. These tasks are, however, just as vital for the countryside as they are for the town. Lacking in all other means of education and faced with an agriculture which is becoming an industry demanding far more scientific knowledge than most urban trades, the countryside needs good schools even more than the town. The same applies to provision for the poor. In the towns, where wealth accumulates, there are private individuals who can painlessly divest themselves of a little of their surplus in order to keep the dire poverty of others at a comfortable distance. In the open countryside private charity is virtually powerless in areas with a purely agricultural and small peasant population which does not live in plenty itself. And where large land-ownership does exist, able to intervene to mitigate poverty with its own plenty, the problem of absenteeism often means that the rich landowners never become aware of the poverty around their estates. The large landowners, who mostly live in the towns, would - were they charitable at heart - be more likely to donate to the urban than to the rural poor.

The Catholic monasteries and convents represent an exception to this: they generally own a considerable amount of land, and their inhabitants neither practise absenteeism, nor do they have sons or sons-in-law in the town - at least not legitimate ones - who might be relieving them of some of their ground-rents. The cloisters are highly suited to exercise charity in the country. But as much as one might want to acknowledge
this, one has to admit that, considered as purely charitable institutions, their costs of administration are too high. Cheaper methods exist for producing the thin soup they serve up than the rich trappings enjoyed by the good fathers.

The situation is no better in the case of provision for the sick, and the system of public health generally on the land. Its intellectual desolation drives doctors into the towns: and while large numbers of young doctors fruitlessly scour the towns for a practice, the shortage of doctors on the land increases. Although it is always a bad thing for a proletarian to get sick, it is worse in the country than in the town. Workers in towns can often find a bed as 'subjects' for study in public clinics or obtain cheap medical advice: on the land they can search for a doctor for hours, and often have to content themselves with the drastic cures or 'sympathetic powers' of a shepherd or old wife. There are no hospitals, not even for the isolation of those with infectious diseases.

Roadways in the countryside are also neglected. The dispersal of the population, the long distances between settlements, and the low specific value of agricultural products, which can only be sensibly moved with first-class means of transport, mean that roads are of prime importance on the land. And whilst the population is increasingly herded together in the towns, it is becoming locally even more sparse in the countryside. At the same time, the towns have access to constantly expanding means for extending their communications; and the manufacture of cheap means of transport (omnibuses, trams, urban railways, packet trips etc.) is becoming such a lucrative business that capital is eager to get involved in it. In the countryside no one would consider using, and the poor communes are not able to use, their financial means to create the elements of transportation which are needed.

The antithesis between town and country therefore becomes even more glaring.

Social Democracy intervenes here by assigning to the state what the communes cannot afford. The state should assume responsibility for the costs of education, provision for the poor, health care and transport.

This does not of course mean that all these areas should be put under the administration of routinised bureaucrats. It should not mean any reduction in self-administration by communes, districts and provinces. In fact in most countries of continental Europe such self-administration will have to be extended. The commune is much less of an institution of domination than the state, and much less fitted for turning the school into a tool of government or for using poor relief or transport to corrupt electors in the government's own interests – or at least not where universal suffrage prevails.
There are also more progressive elements in a town council than in the state administration, which is much more subject to the influence of reactionary forces – backward rural areas, backward ruling classes, soldiers, priests and aristocrats – than the town. The nationalisation of rural schools could be beneficial under certain circumstances, but that of urban schools would definitely represent a step backwards.

Marx commented on the Gotha Programme of Social Democracy, which demanded 'universal and equal elementary education by the state':

'Elementary education by the state' is altogether objectionable. Defining by a general law the expenditures on the elementary schools, the qualifications of the teaching staff, the branches of instruction etc., and, as is done in the United States, supervising the fulfilment of these legal specifications by state inspectors, is a very different thing from appointing the state as the educator of the people! Government and Church should rather be equally excluded from any influence on the school. Particularly, indeed, in the Prusso-German Empire the state has need, on the contrary, of a very stern education by the people. (Marx, *Critique of the Gotha Programme*, p. 329)

There is no more reason to subject poor relief, care of the sick, transport and so on to a sclerotic state bureaucracy. In Russia, where the necessity of bringing the possibility of medical help to the rural population required the establishment of a system of public health care, the people only attained any importance in those provinces where the organs of self-administration, the *zemstva*, took the organisation into their hands. The indispensability of a precise knowledge of local needs and resources in providing poor relief, or establishing means of transport, needs no further argument.

Providing the state with new means of domination, without dire necessity, would be irreconcilable with the aim of transforming the state from an institution of domination into one of civilisation. Church poor relief was one of the foundations of its power: and every election bears witness to the effects of government control over the major national means of transport: constituencies loyal to the government have better prospects of seeing their wishes for railways, either main or branch lines, roads, bridges, etc., being fulfilled than areas loyal to the opposition, and this enables some followers of the government to get elected. Imagine the power the government would obtain if it controlled the entire system of local transport!

The role of state authority in this sphere should merely consist in
collecting the resources raised by taxation and distributing them, according to agreed principles, for administration by individual provinces, districts and communes.

**Free Administration of Justice**

The demand for the free administration of justice and free legal assistance can be added to those demands raised by Social Democracy for replacing the state's functions of domination by those of civilisation which benefit the rural population more than the urban. This demand does not mean that all legal matters should be free of charge, that all legal proceedings should be contested at the state's expense – that is, at the expense of the proletariat – regardless of their nature. If two rich individuals inherit millions and argue over the spoils or if two companies tussle over a patent, Social Democracy could not countenance the demand that the proletariat should contribute to the costs of such litigation.

It would also be unreasonable to demand that anyone should have the right to seek legal redress at the state's expense simply at their own instigation, and for a wrong that perhaps only exists in their imagination. If the state pays the bill then the state must be allowed to decide which legal disputes are without foundation from the outset, and which not. However, this would lead to the institutions of the civil law taking on a fateful similarity to the current monopoly of prosecuting authority held by the state prosecutor. The state would acquire a new means of power. And the performance of our state prosecutors and judges is by no means such that we would want to see state officials take the place of independent advocates.

In our opinion the demand for the free administration of justice has to be understood as meaning that institutions should be created to enable those lacking in means to obtain justice, something frequently beyond them at present. These would include those arrangements already won or created by the proletariat here and there in order to facilitate proletarian access to justice. Such institutions would have to be generalised and their costs transferred from the individual corporations or communes which bear them at present to the state, but without any curtailment of the principle of self-administration. We are thinking here of the Trade Courts [Gewerbegerichte – predecessors of the Labour Courts], and the Labour Secretariats.

The most pressing needs for free justice may well be met firstly by the establishment of courts composed of trustees of the people, dealing with all small matters swiftly and free of charge and without excessive
formality, under the guidance of stipendiary judges, and secondly through setting up information bureaux, in which specialist trustees provide free and impartial advice to those seeking justice as to their rights, the prospects for success in pursuing the case and the best way to redress the wrong.

The main advantage of such information bureaux is not that they provide individuals with the means for organising their own litigation, but that they will prevent many cases coming to court. This would prove a blessing, especially for the rural population.

The advocate lives from trials in the same way that the doctor lives from illness. And as the latter thrives on the maximum of illness rather than generalised good health, so the former hopes for as much discontent as possible. Although there may be many honourable members of these professions who would never let themselves be guided by such considerations, there are also quite a few who cannot resist them - more in the case of advocates than doctors. For doctors the issue is one of life and death, for the lawyer it is merely money, and whilst nature does not let itself be duped, this does not apply to the formalism of a somewhat limited judge faced with the wiles of the barrister. This is already a bad and unpropitious situation. Hardly surprising, therefore, that there are lawyers who, when confronted with a dispute which lends itself to settlement, albeit a modest one, will recommend a lucrative court case - lucrative for the lawyer that is, but ruinous for the client.

And more such cases exist on the land than anywhere else. This is not somehow the consequence of some mysterious 'addiction' to litigation on the part of the peasant, but rather of rural property relations. Most court cases turn on the subject of property. And nowhere is there more property than in the countryside, where even a large part of the proletariat owns land - frequently an absurdly small amount, but nevertheless a property sufficiently great to exercise a forceful sway over its owner's soul.

And if nowhere else has more property than the countryside, then the type of property peculiar to the countryside, landed property, is unique in its ability to create opportunities for property disputes. The land is simply something very special. In comparison, other things over which one can acquire property rights are transient, or - as with precious metals - where this is not the case, they can easily change their form and location. The land is rooted to one spot, and retains its essential form over hundreds of years. It represents the enduring conservative element in the economy, amidst the flood of the ephemeral.

This conservative character is also a characteristic of property rights in land; unlike property in other objects it preserves rights and obliga-
tions which are much more easily added to than shed over the course of the centuries. Property in a particular piece of land not only confers usage over a given area of land, but many other rights and obligations too. Things that would be quite inconceivable with any other type of property are nothing unusual as far as land is concerned: legal disputes continued from the seventeenth century, rights and obligations from the feudal period, stretching back into hoary antiquity, rights and obligations frequently not set down in writing and impossible, or at least difficult, to reconcile with modern notions of law. What a fertile source of litigation! And what a marvellous method for those with the necessary money and influence to acquire land by out-litigating the inconvenient current owner! The 'arm of the law' has certainly been of as much assistance in the expropriation of the peasantry by the aristocracy as the fists of its mercenaries. Open breaches of the law by large landowners are no longer to be feared. But the superior strength of their purses, which allows them to pursue a legal matter until the adversary succumbs exhausted, still persists. And it is doubtful whether this advantage enjoyed by private wealth can be abolished in a rational way under current social conditions.

Information bureaux staffed by people's lawyers could mitigate the worst effects, but scarcely do away with them totally. Their most beneficial role would be in preventing legal disputes between small landowners which are of little benefit in raising the level of peasant farming. The less money the peasants take to town to pay courts and lawyers, the more they have available for improving their living and farming standards.

All these measures will benefit the rural population much more than the urban, but they do not represent a privilege for country-dwellers and even less for landed property. In fact, they are eminently democratic and egalitarian in their effects. And neither do they signify protection for backward farming methods and the obstruction of economic progress: in fact, they represent a notable encouragement to the development of forces for new, higher social forms. And finally, they are not mere pious hopes, but lie on the path which social development must, of necessity, take.

The nationalisation of expenditures on schools and so forth is already a universal need, and all civilised states contribute to the costs of elementary schools: in France over 100 million francs annually (1893), double this in Great Britain (in 1893 over 160 million Marks), and in Prussia 53 million Marks (1896).

Very promising first steps have been taken towards the nationalisation of the care of the sick, at least in Russia, as we noted
above. And as far as state responsibility for rural transport is concerned, increasing attention is now being given to the construction of local railways. But so far, this has been very scrappy: although pointing in the right direction it falls far short of meeting the demand.

The Costs of the Modern Cultural State

Governments are not lacking in goodwill; and no layer of the population is closer to their hearts than the rural population. What they lack is the means: money.

A general, and thorough, implementation of the programme sketched out here would undoubtedly require enormous sums of money.

Consider the nationalisation of school costs, for example. It is impossible of course to calculate exactly how much it would cost to bring about a general raising of the level of elementary education throughout the country up to the requirements of modern civilisation. But some idea can be obtained by looking at the costs of an elementary school in a large modern city and the costs of secondary schools. Simply raising Prussian rural schools to the level of the municipal schools of Berlin would cost the following:

<table>
<thead>
<tr>
<th></th>
<th>In the towns</th>
<th>In the countryside</th>
<th>In the Berlin area</th>
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<tbody>
<tr>
<td><strong>Elementary school costs per pupil in Prussia (1896)</strong></td>
<td>35.50 Marks</td>
<td>29.67 Marks</td>
<td>67.24 Marks</td>
</tr>
</tbody>
</table>

Attaining the level prevailing in Berlin would double the costs of the elementary school system. In 1896 186 million Marks were spent on elementary schools of which 53 million came from the state. There were 5,237,000 pupils in elementary schools and 5,520,000 in all lower schools taken together. By Berlin standards, educating them would require 376 million Marks. And Berlin schools are by no means ideal. Average classes were as follows:
If one wished to arrive at 30 children per class, the resulting additional costs alone would increase the elementary school budget to around half a billion Marks.

But even this would not reach the minimum required of a rational elementary school system. It does not cover the free provision of materials, or food and uniforms for at least the poorer pupils; it does not cover equipping the schools with workshops and gardens, with industrial and agricultural teachers, with teachers and resources for organising and training the youth military service, or for providing general secondary education until 17 or 18 years of age. The latter would both bring about a significant increase in the number of those of obligatory school age and raise the costs of each individual pupil.

At present a secondary school student in Prussia costs 200 Marks, but a university student over 800 Marks. The costs of an ideal elementary school pupil could reasonably be put at 150 Marks. Even if the school leaving age were kept at 14, that is, with no increase to 17 years, this would bring the Prussian elementary school budget to around 800 million Marks: any extension of obligatory school age could easily round the figure up to a billion. Calculated for the Reich as a whole, this would add up to an elementary school budget of 1.5 billion marks. Even the military budget would pale in comparison.

We do not attempt to calculate the costs of the nationalisation of the other expenditures – poor relief, health care, transport, legal aid and so on. We lack the necessary background information. But they would certainly not be insignificant.

Set against these enormous demands, which would double or even triple the outgoings of our present-day state, the savings which such a reform programme would allow are minor in nature.

The supplanting of centralised bureaucratic rule by self-administration at state, province or municipality level will not mean the abolition of administration of public affairs by paid officials. Such matters are currently far too complex, diverse and extensive to be carried out as a secondary occupation, as a dilettante after-hours activity. They
require trained specialists, paid officials, for whom such matters are their sole concern. The idea of government of the people by the people, meaning that public affairs should be attended to by representatives of the people, unpaid, in their free time instead of by paid officials is a utopia, and a reactionary, undemocratic utopia at that, irrespective of how democratic and revolutionary its representatives might feel themselves to be. Such a type of self-administration presupposes, in any communal system which has advanced beyond most primitive forms, an aristocracy – large peasants, feudal lords, rentiers of all types – who have the inclination and resources to dedicate themselves exclusively to public affairs since they live off the labour of others. Even the much-vaunted English self-administration was simply an aristocratic privilege. The more democratic modern large states become, the more they must – where they have self-administration – transform their officials from unpaid posts of honour into salaried positions. Compared with centralised bureaucratic rule, modern self-administration, modern democracy, does not mean a reduction in the number of officials, but rather their more even distribution throughout the country, their subordination to the will of the people and, linked with that, some change in the nature of their recruitment and promotion.

Whilst the advance of democracy does not lead to any great reduction in the number of salaried officials, it does lead to a progressive equalisation of their incomes. In monarchistic, aristocratic states, the highest offices are the privilege of the aristocracy and are correspondingly often extravagantly remunerated. In fact, the more such posts represent mere sinecures for greedy or hard-up, but lazy and ignorant, aristocrats, the higher the remuneration tends to be. The real work is attended to by workers from the bourgeois intelligentsia and proletariat, and is paid accordingly. The advance of democracy will lead to a reduction in the salaries of the highest officers, but an increase in the miserable salaries of the lower ranks, whose pay is often below that of proletarians working in private service; their compensation is a supposedly carefree old age, but also embraces the titillation of their vanity and arrogance, and often an unhealthy secondary occupation which arises from their office, namely corruption. A democratic state in which the official is not the master but rather the servant of the people, in which laws are not there only for the population, but rather, and primarily, for public officials, in which the uniform does not signify any particular right, but rather a particular obligation, will always find it difficult to find diligent officials if it does not pay them a salary corresponding to the class from which it recruits them. This alone will require a substantial increase in the salaries of lower officials the more
the state becomes democratised – alongside other reasons too involved to go into here.

However, since the number of officials in poverty is large, and those overpaid is small, any advance towards equalising salaries will lead to a steady increase in expenditure on the salaries of public officials rather than a reduction. No savings can be made here.

The picture is more promising when we turn to the military sphere. General disarmament would release enormous sums, which although not sufficient to implement the reform programme outlined here, would permit a substantial raising of the general level of civilisation when compared with present standards. The seven to eight hundred million Marks which the German Reich annually spends for its army and fleet are no small matter. Such a sum could pay for an elementary school system which would command the admiration of the world, and place the Germany people at the head of the civilised nations. However, the prospects for general disarmament are, unfortunately, very poor. And no one would want to postpone serious reforms requiring large amounts of money until after successful disarmament – which may not be possible until we have a socialist system. The transition from a standing army to a people's army can, but will not necessarily, lead to a substantial absolute reduction in military expenditure. But such a reduction will never be sufficient to release enough funds to meet even a substantial fraction of the costs of a modern civilised state. And haven't we already observed that the lower strata of the population are already overburdened? Would we not want to use any savings from military reform to lighten their load?

Where should the money be found to transform the current state into a cultural state? Such a question poses bourgeois taxation policy a problem which it is utterly unable to solve. A glance at the principles of this taxation policy will show why.

**Bourgeois and Proletarian Taxation Policy**

Any taxation policy which aspires to be more than a mere plundering of the population must proceed from the question: what are the sources of social wealth from which taxes do and ought to flow? The question of how *individuals* should be induced to pay their taxes and how much they should pay is a secondary question which can only be satisfactorily tackled once we have answered the first.

If we consider the aggregate product produced by any given society from year to year, we can divide it into two portions. One portion serves to maintain and reproduce the labour-power engaged in production: it
must accrue to the workers in production if society is to continue to exist. The excess over and above this constitutes the surplus-product from which the non-productive classes maintain themselves. In a capitalist society the surplus-product takes the form of surplus-value which accrues to the capitalist.

Looking at economic relationships in this simplified way clearly reveals that state taxes should and may only come from one source – the surplus-product, or surplus-value. This was very evident in the feudal period. The functions of the state were exercised by the king, the Church, the feudal lords; all drew their income, not from taxes in our sense of the term, but from their property in land, that is from the labour of the farmers. They drew on the surplus-product of these farmers, either wholly or partly, in the form of tribute in kind or as services, and in exchange they took on the functions currently exercised by the state – justice, police, national defence, relationships with the outside world.

Such tributes and services did not usually exceed the surplus-product; on the one hand, as Marx noted, because the unbounded greed of the money economy is not inherent to the natural economy, and additionally, because given the low level of weapons technology, the peasantry was not completely defenceless against the feudal lords; and finally, a peasant pressed too hard could flee, and given the shortage of labour-power, could always find work elsewhere, either with another landlord, or in the town.

It was in the towns that commodity production, the money economy, first arose. The product became a commodity with a specific value and price, and the surplus-product also took on the value-form. And that part of the surplus-product that had to serve to sustain the state became a part of the commodity-value realised in money. Money taxes replaced feudal tributes and services.

We have already described what this development led on to. The new state authority based on money taxes, which arose with bourgeois society, first had to crush the former masters of the commonweal, the Church and the feudal aristocracy. This struggle ended not with their destruction, however, but with a compromise which established their existence on a new foundation. From being masters of the state they became its servants; and in return the state protected their material interests. The new state taxes did not replace feudal services and tributes, but were added to them. With its new weapons technology, the flints and cannons of the professional army, and the boundless greed of the money economy, the centralised state was able to outdo the feudal lords in extracting money from the peasants, who could not hide themselves as easily from the state police as they could from the lord of
a small feudal estate.

Feudal services and tributes were increased rather than decreased under the protection of the new state and this resulted in an enormous increase in money taxes. The princes scavenged money wherever they found it without the slightest regard to the continuation of production and the well-being of the population. And state protection of economically bankrupt feudal landed property led not to an increase, but to a fall in production.

Under these circumstances the surplus-product became increasingly incapable of satisfying the demands of the state: a part, in fact, a growing part, of the product needed to maintain and reproduce the working classes, had to be sacrificed to the greed of the state and its tax collectors, at least on the land. The prosperous peasantry of the fourteenth and fifteenth centuries became increasingly impoverished in the seventeenth and eighteenth; farming regressed and the peasantry slowly began to starve. Although this was partly attributable to feudal pressures which did not allow rational agriculture, and partly attributable to the demands of the rapidly growing money economy in relation to which the peasant natural economy was only slowly assuming the character of commodity-production, it was also in no small measure directly attributable to the insane extortion represented by taxes.

This was most starkly revealed in France, whose great revolution also represented the starkest reaction against such appalling conditions. The theoreticians of the aspiring French bourgeoisie were also the first to turn to thoughts of a rational taxation policy.

The Physiocrats were the first to state clearly and openly that taxation policy should be dependent on the economy: taxation policy had to serve the economy. The natural conclusion of this was the axiom: *tax should only be paid from the surplus-product*. However, the only labour that in their view created a surplus-product was agricultural labour. They therefore demanded the abolition of all other taxes and their replacement by a single tax (the *impôt unique*) on the agricultural surplus (*produit net*). However, such a tax, which would in essence have been a tax on large landowners, was not envisaged as being too onerous since the functions of the state were to be reduced to a minimum. The state associated with the feudal aristocracy had become a useless vampire, blocking economic activity in every direction: eliminating *this* state was the first precondition for economic prosperity. It was the Physiocrats who launched the expression "laisser faire, laisser aller!"

What the Physiocrats began was later continued by the radical free traders, who led the struggle of the bourgeoisie against the remnants of
the feudal state in our own [nineteenth] century. Admittedly their theoretical basis was quite different, that of classical English political economy. But like the Physiocrats they also clung to the axiom of *laisser aller, laisser faire*, and demanded the reduction of state functions to a minimum. And like the Physiocrats they also aspired to a taxation policy in harmony with the requirements of production: in these respects it closely resembled the policy of their predecessors. Of course it never occurred to them to propose that taxes should be limited to a single tax on surplus-value. The question of surplus-value simply did not exist for them. However, they did reject indirect taxes, at least on necessary food, and demanded an income tax with exemption for low incomes; although such a tax does not fully coincide with the taxation of surplus-value, it does approach it very closely.

However, Manchesterism never achieved a complete breakthrough. The bourgeois state proved to be just as belligerent as the feudal. The French revolution, borne upon the ideas of the Physiocrats, unleashed a series of gruesome world wars which devastated Europe for over two decades and imposed terrible burdens on both the life and property of the people. The revolution of 1848 threatened to unleash a second era of wars – the same revolution which cleared the way for the rule of the radical free traders. Its defeat postponed these wars which were then later fought out by the executors of the revolution, the three autocrats, Louis Napoleon, Bismarck and Alexander II. The 20-year era of wars which began with a war in the East and ended with a war in the East was followed by the era of armed peace no less onerous to the population than war. As a result, all the civilised nations have experienced a steady increase in the burden of taxation and state indebtedness, interest on which requires additional taxes. At the same time, there has been an increase in the demands on the state as an agent of civilisation, despite governments' attempts to exercise strict 'economy' in this area. More schooling, transport and other provisions have imposed growing, and unavoidable, demands.

Instead of the peaceful state dreamt of by Manchesterism, the reality has proved to be a permanent armed camp; in place of *laisser faire* we see a constant expansion of the scope of state intervention in social life.

How should the growing demands of the state be met? From surplus-value, i.e. taxes on income, property or estates, or by taxing the necessities of the population – i.e. indirect taxes? This was the question. However, the bourgeoisie is the ruling class, and as such has always known how to shift the main burdens of the state off its own shoulders. There are states, such as France, which have no income tax at all, thanks to the autocracy of the bourgeoisie, which successfully overcame
the aristocracy a hundred years ago and which has always appreciated
the value of the petty bourgeoisie and peasants as a bulwark against the
proletariat. This explains why food is so highly taxed in France; the
bulk of the state's revenues come from grain duties, indirect taxes,
including taxes on salt, sugar and drinks, and a tobacco monopoly.
According to the 1897 budget revenues were as follows:

<table>
<thead>
<tr>
<th>Taxes</th>
<th>Francs (million)</th>
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<tr>
<td>Duties</td>
<td>410</td>
</tr>
<tr>
<td>Indirect taxes</td>
<td>559</td>
</tr>
<tr>
<td>Tobacco, match and gunpowder monopoly</td>
<td>421</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,430</strong></td>
</tr>
</tbody>
</table>

Total state revenues came to 3,386 million francs. Stock-exchange
duties yielded 8,700,000, property income tax 65,800,000. The other taxes
(stamp duty, etc.) are far from serving as a substitute for income tax.

Of all the modern states, the bourgeoisie enjoys least hegemony in
England, a country where ironically the capitalist mode of production
developed earliest and in its purest form, but where, as a direct
consequence, the bourgeoisie encountered a strong proletariat,
unconstrained by a petty bourgeoisie and peasantry at a time when it
was still faced with a strong aristocracy.

As a result we find virtually no indirect taxes on necessaries. But
surplus-value is also spared as much as possible. English taxation policy
rests on a compromise; it introduced an income tax (incomes below £160
are exempted), but not a progressive one (in fact there is a slight
regression for incomes between £160–500 according to the 1894 Act), and
hence large incomes are not more highly taxed than moderate incomes.
Estate duties work in the same way as income tax. In addition there are
high indirect taxes and revenue tariffs on mass luxury articles such as
spirits and tobacco. In 1896 these indirect taxes yielded £48,714,000,
while income tax and stamp duty, the lion's share of which is made up
of estate duty, yielded £34,830,000. Total receipts were more than £100
million.

The other civilised states tread a path midway between that of
England and France. On the Continent, with the exception of
Switzerland, surplus-value is much less burdened with tax than the
people's necessaries. And in general, indirect taxes are tending to rise,
not only absolutely but also relatively. This is highly irrational, since,
as with salt tax for example, it not only affects poor, larger families relatively more than more affluent families, but also absolutely. They are also irrational because their collection swallows up a large part of the revenue. But they are more comfortable: the people feel their effects less than direct taxes and – and this is what is crucial – the mass of the population does not resist them as the bourgeoisie resists direct taxes, which were a considerable burden on their incomes. And the bourgeoisie is still the class whose interests are decisive. The declining classes, handicraft workers and peasants, also encourage the spread of indirect taxes via their tariff policies. Export industry is almost exclusively big industry. Handicrafts and peasant farming merely supply the domestic market. They want to secure this market. They therefore favour protective tariffs which, far from protecting them, simply become new indirect taxes which they themselves largely have to bear.

The bourgeois parties, both Manchesterist and Protectionist, have not advanced beyond the two types of taxation policy sketched out above – not even bourgeois democracy, which is not a capitalist party, and not an anticapitalist party, but rather a party for the reconciliation of class interests, the party of those interests which capitalists and proletarians, petty bourgeois and peasants, all have in common. It lacks resoluteness towards the capitalists. It dare not burden them with the whole of the tax burden. At the same time it wants to bring relief to the lower classes. Its entire taxation policy therefore culminates in the aspiration: as low a level of taxation as possible – an ideal irreconcilable with the growing tasks of the modern state. Irrespective of goodwill and good intentions, it is impossible to transform the state into a cultural state on the basis of bourgeois democracy.

The tax policy of proletarian democracy – Social Democracy – is quite different in character. Its rallying cry is not the reduction of taxes, but their transfer to the shoulders of those able to bear them. It takes up the old Physiocratic demand, that taxes should only be paid out of surplus-value. Admittedly, surplus-value in the developed capitalist mode of production is not as easy to pin down as the Physiocrat's produit net, which, in the mainly self-sufficient natural economy of the peasant, appeared as the material surplus of products produced above and beyond their needs and delivered to the feudal lord. Surplus-value only comes into view after a number of apportionments and transformations which obscure its actual magnitude – and therefore render taxing it fully virtually impossible. The taxation of individual sources or portions of surplus-value can easily lead to anomalies, including the passing on of tax liabilities. Thus urban landowners use their monopoly position to shift the taxation of their ground-rents on to their tenants.
We do not propose to delve any deeper into the question of what is the most rational form for taxing surplus-value – this goes beyond our brief. It is sufficient to refer to the programme of German Social Democracy: it demands that those state expenditures which are to be covered by taxation should be met by a progressively rising income and wealth tax and an inheritance tax rising with the size of the estate and the closeness of the family relationship. This combination seems to be the most certain to bite into surplus-value.

Bourgeois democracy also demands this type of taxation, and to some extent has obtained it; but it lacks the resolution to squeeze large sums out of capital. Only Social Democracy can muster the required ruthlessness. And only Social Democracy can demand social reforms which require significant state expenditure, and simultaneously aim to replace all other taxes by income, wealth and inheritance taxes.

Given the growing demands on its finances even bourgeois democracy is sometimes compelled to make exceptional demands on surplus-value in order to meet the state's requirements: but in doing so it does not choose the form of taxation, but rather public borrowing. Although this is sometimes for economic purposes, such as the construction of railways or canals, it is usually intended for utterly unproductive spending – the acquisition of cannons and battleships, paying for wars and the like.

It is a curious fact that in monarchist states, everything in the state is Imperial or Royal – with the exception of the debts. The soldier's uniform is the king's mantle, but the king would protest mightily if it was proposed to name the debts raised to pay for this royal uniform the 'royal debts'. These are graciously donated to the nation. In this respect even Russian absolutism turns out to be highly republican.

Such loans can be compared to the voluntary contributions which the ruling classes, aristocracy and clergy were called upon to make in feudal times whenever the fatherland was in danger. There is, however, one difference: the feudal lords did not demand interest on what they laid at the altar of the fatherland – whereas for the capitalists, interest is the main consideration. Perhaps one could equate the privileges in perpetuity which rich lords, bishops, monasteries and towns obtained in return for their contributions with the never-ending interest payments payable on our current national debt.

After military spending, interest payments on public debt are the largest item of expenditure in all modern states. In England, out of a total budget of 2,000 million Marks, the fleet and army take c.800 million and interest on the national debt 500 million. In France the army and the fleet take c.700 million, and interest payments 1,000 million!

In the German Reich, interest on state debt is only 74 million Marks,
compared with spending on the army and the fleet of 700 million. But the German Reich is still young; it obtained billions of Marks from France in the war which gave birth to it and since then has not had to fight another. In the same period in which the German Reich succeeded in raising its overall indebtedness to 2,261 million Marks – after beginning with reparations of 4,000 million Marks – the English national debt fell from 15,600 million Marks to 12,400 million – without grain, meat, petrol or similar tariffs! And for a real comparison, one would also have to add in the debt of all the member states of the Confederation. The Prussian state debt alone is 6,500 million Marks, and interest 229 million (1898); the debts of Bavaria, Saxony, Württemberg add up to 2,500 million. Taking all German state debts together we arrive at figures comparable with England, with the difference that in Germany the direction of movement is rapidly upwards, and with the English, down.

Alongside military spending, the elimination of interest payments from a modern state's budget would release the most resources, either for lightening the load on the population, or carrying out major social reforms. General disarmament and a general cessation of interest payments on government stock would release well over a billion Marks annually for such purposes in large modern state. And a lot could be accomplished with such an amount!

State bankruptcy is nothing unusual; nevertheless, we would not want to assert that a regime such as the one assumed here, under proletarian influence but not yet able to overcome the capitalist mode of production, would cancel interest payments unless under great pressure to do so. Selecting only a few capitalists and confiscating their property would represent a gross violation of the principle of equality before the law: the fact that quite a substantial proportion of state bonds are held by the smallest capitalists would make this even less justifiable. Confiscating the small savings of small people cannot be claimed to be in conformity with the intentions of a democratic government.

What is certain is that such a regime would have to make a definitive break with the raising of new loans, and attempt to pay back existing loans as quickly as possible. Fresh loans would be tantamount to renewing the subordination of state authority to the yoke of capital. Public borrowing is one means by which the bourgeois state can use the surplus-value appropriated by capital for state purposes. The only means recognised by proletarian democracy for achieving such purposes is taxation.

However, although proletarian democracy might choose to show little consideration for capital, it cannot tax away surplus-value just as
it wishes. Raising taxes so as to confiscate surplus-value is totally inconceivable: the state under discussion here is not a socialist commonwealth, in which such considerations would have no meaning since a society which is mistress of its means of production does not need taxes to gain access to its surplus-product. Rather, we are talking about a state in which, although the proletariat has sufficient political power to influence taxation policy, the capitalist mode of production still prevails. And as long as this is the case, as long as society for one or other reason is not able completely to take over the functions of the capitalist, surplus-value will continue to play an important economic role. Like the feudal lords or Roman aristocrats before them, the capitalists cannot consume the entire surplus-product provided by their workers. They must 'forgo', must 'save'. Only a part of surplus-value is consumed, the rest is accumulated – that is, turned into fresh capital.

And alongside the advances of the natural sciences, this accumulation of capital constitutes the major force for economic progress in our century. If economic progress has advanced faster in this century than in any other previous century, if it has created enormous productive forces dwarfing all previous wonders of the world, if – for the first time in world history – it has created the possibility of a socialist society on the basis of a higher civilisation, then – together with the natural sciences – this is due to the accumulation of capital. And as long as the productive forces are not the property of society, and are not regulated by society, rendering the accumulation of capital impossible would mean obstructing progress and stunting the preconditions for socialism.

Fortunately for progress, capital's urge to accumulate is so strong that it can be treated 'fairly roughly without great upset. Labour legislation and workers' organisations have so far turned out to foster rather than obstruct economic progress, and have not inflicted the slightest harm on the accumulation of capital. It has now reached such a scale that it is beginning to pose a dilemma for the capitalists. The mass of surplus-value accruing to them year in, year out, is so enormous that, despite their incredible luxury, they still manage to set aside as much money as can easily be induced to breed yet more surplus-value. A number of national bankruptcies – Argentina, Portugal, Greece etc. – and bankruptcies of giant concerns, principally the Panama affair, have occurred over the last years without causing excessive disruption to economic life, without encroaching on the capacity of capital to invest yet more hundreds of millions in completely unproductive state loans, and still promote the development of new industries and means of transport with even greater energy than before.
Surplus-value can be tapped considerably more than at present, without fear of jeopardising economic development.

It would be utterly futile to attempt to calculate, even approximately, how far one could in fact go.

But irrespective of how high one estimates the sums which can be raised for the state in this way, the possibility must also be accepted that they might prove insufficient to cover all those costs required to allow a cultural state to raise the entire population to the level of modern civilisation. A second method of obtaining surplus-value will have to be added: the state — or the commune, for which the following also applies mutatis mutandis — must set about producing surplus-value for itself.

Economic and political development is pushing in this direction anyway. There are a number of natural private monopolies — mines, the major means of transport, lighting plants and so on — the exploitation of which, in the absence of competition, not only leads to the exploitation of their workers, but also to the exploitation of the consumers. In addition, the concentration of capital also creates artificial private monopolies via cartels, and so forth, which have a similar effect. The entire population, not merely the proletariat, are up in arms against these monopolies. But legislative control over them never goes further than mere half measures: there is only one way to put a stop to the exploitation of the community which they practise — their acquisition and operation by the community. As long as the big capitalists have the state in their pockets — as is the case today — this is neither an easy nor a desirable thing, however. The proletariat cannot demand that a hostile state power be granted a further domain. And the capitalists are powerful enough to frustrate any nationalisation inconvenient to them, and impose conditions on any nationalisation which does succeed such that they gain from it. The nationalisation of the Austrian and Prussian railways was certainly not carried out at the expense of the shareholders.

These objections lose their relevance in a state in which the proletariat is able to endow the state with the required ruthlessness towards capital, and where the mass of the population has enough control over the state to have no cause to fear a multiplication of its spheres of power. The nationalisation of private monopolies can speed ahead — and other things being equal, this will take place all the more rapidly, the greater the needs of the state and the more limited its capacity to tax surplus-value. And such a nationalisation would also be effected under conditions which, although not a confiscation, will guarantee a plentiful income to the state, part of which it can use to
improve the position of its own workers, part in the interests of the consumers, and part to promote its civilising work on a truly grand scale.

The operation of such state monopolies would still not be socialist: under the prevailing conditions it would in fact serve commodity-production, not immediate production for society’s needs. But it would nonetheless differ fundamentally from the administration of monopolies under the bourgeois state. Under a proletarian taxation policy, monopolies would be a means of conveying surplus-value to the state; under bourgeois taxation policy, they are a powerful means of indirect taxation, raising the price of necessaries to the state’s advantage.

The criterion for placing a branch of production under proletarian state monopoly is the level of its form of production: most suitable are establishments which are organised bureaucratically, and which have passed from being individual property into the anonymous ownership of a joint stock company or a syndicate, and are already outside the sphere of competition.

In contrast, the criterion for placing a branch under bourgeois state monopoly is the importance of its products as either necessities or luxuries for the mass of consumers (tobacco, spirits, salt). The level of the development of production is of no concern – such monopolies embrace backward branches of production carried out in mainly small establishments (tobacco). The monopoly has to exclude competition artificially and obtains its income by exploiting consumers, and often its workers more than would have been the case under free competition between private concerns.

Just as state monopoly should not be confused with socialism, so proletarian state monopoly should not be confused with bourgeois state monopoly.

The nationalisation and municipalisation of private monopolies under the state and communes; the replacement of indirect taxes by progressive income, wealth and inheritance taxes; the end of state borrowing – these constitute the heart of proletarian taxation policy. No proof is needed to see that such a policy would not only provide enormous relief to the proletariat, but to the working population in general. In fact, it could prove to be more important for small handicraft workers, retailers, and small peasants than for the wage-proletariat. Whilst many strata of the latter are moving upwards, the former are facing ruin. For the rising strata of the proletariat, current bourgeois taxation policy represents an impediment to their rise; but for the declining classes it means an acceleration of their ruin. The tax burden falls heavier on small peasants and the petty bourgeoisie than on wage-labourers, and the former have a much greater interest in a proletarian tax policy than the
The taxation policy outlined here would not only provide relief to the working population, but also enable the state to pursue an energetic welfare and culture policy, quite unlike that facilitated by the bourgeois tax system, wherever capitalist production was highly developed and the mass of surplus-value large.

Taxing the people's needs has to be kept within limits if the ruin of the mass of the people and hence the community as a whole is to be avoided. And taxing surplus-value under a bourgeois taxation policy will never be adequate.

Only a proletarian taxation policy can really squeeze it, can tax away all those sums which the capitalist class currently invests in foreign and domestic loans to governments, and more, without impairing the development of industry, or even the bourgeoisie's purchasing power. And producing surplus-value by nationalising the major monopolies places the most important productive forces of the nation in the service of the community and allows the state to use the countless, presently unutilised workers for the work of civilisation. This will increase the material resources of the state and local authorities enormously. The growing concentration of capital is bringing more and more areas towards state exploitation: opening up new sources of income for the state, without burdening the population by multiplying its enterprises, therefore has limits.

Whether the proletariat will ever really come to expound its own taxation policy is doubtful. This would require a situation which our discussion has simply presumed: considerable political power on the part of the proletariat together with the uninterrupted continuation of the capitalist mode of production. Both are virtually mutually exclusive, or at any event could only coexist for a short time.

Nevertheless, we consider it necessary to examine what kind of taxation policy the proletariat would pursue were it to come to political power today. The significance of a social objective consists less in whether it will be achieved than in whether it provides a faithful pointer of the direction in which a social movement is travelling. The significance of the objective lies in the significance of the movement and the accuracy with which it shows the direction required. One can only have a clear perception of a movement if one has recognised its goal.

Should social circumstances be such that a specific taxation policy of the type indicated here is superfluous when the proletariat comes to political power, then at least such a policy provides a goal for proletarian democracy today; and the extent to which the proletariat acquires political influence will be indicated, amongst other things, by
the degree to which its taxation policy is realised. The stronger Social Democracy becomes, the lower the levels of indirect taxation, and the greater the importance of income, wealth and inheritance taxes: the national debt and interest payments will be reduced, and the large capitalist monopolies will be nationalised and municipalised both sooner and more cheaply.

The Neutralisation of the Peasantry

If we collect together the demands which have emerged from our studies, we find the following:

I. Measures which Benefit the Rural Proletariat
a) Abolition of the Servants Ordinance; combination on the land; establishment of the right of free movement.
b) The prohibition of wage labour by children under 14; the prohibition of agricultural work between 7 pm and 7 am for all children and young persons without exception; the prohibition of migrant labour by young persons up to 18; compulsory education for elementary and secondary schools.
c) Protection of migrant workers; the prohibition of migrant labour by women and girls under 21; prohibition of the gang system, and replacement of recruiting agents by public labour offices.
d) The introduction of a normal working day averaging eight hours for fieldwork, with permission for overtime during harvests and urgent work necessitated by natural circumstances; establishment of Sunday rest for house-servants.
e) Establishment of minimum necessary standards for rural worker housing in the interests of health and morality; vigorous enforcement of housing standards on the land;
f) Reduction of excessive rents through special courts.

II. Measures for the Protection of Agriculture
a) Abolition of the Fideikommiss.
b) Abolition of manorial districts and their integration into the rural communes.
c) Abolition of hunting districts belonging to large land-ownership, and their incorporation into the rural communes.
d) Limitation on the rights of private property in land in order to promote:
   1. Consolidation, the abolition of scattered strip holdings.
   2. 'Cultivation of the land' – improvements.
  e) Nationalisation of hail insurance, and possibly stock insurance – but the latter without any contribution from the state.
  f) Legislative facilitation of cooperative mergers.
  g) State promotion of the agricultural training system.
  h) Nationalisation of forests and water.

III. Measures in the Interests of the Agricultural Population
Efforts to overcome the exploitation of the countryside by the town and the abolition of the cultural antagonism between town and country through:
  a) Implementation of maximum self-administration at parish and province level.
  b) Replacement of the standing army by a popular militia.
  c) Nationalisation of expenditures on schools, poor relief and roads.
  d) Nationalisation of the health system.
  e) Free administration of justice.
  f) Replacement of the existing taxation system by progressive income, property and inheritance taxes, and the equitable nationalisation or municipalisation of profitable private monopolies and cartels.

These could be characterised as the demands of a Social Democratic agrarian programme should one wish. But, in our view, this would not be an appropriate characterisation. The points listed under I are already, in essence, contained in Social Democracy's current demands for labour protection; the same applies to the points under III which comprise our immediate political demands. And of the points under II, the only demand of crucial importance, the nationalisation of forests and water, is similarly not purely agrarian in character, not merely in the interests of agriculture, but also of industry, general hygiene and so forth. The remaining demands, despite their importance, are relatively speaking too minor to be able to constitute the basis for a major party programme. These 'small measures' have also already been implemented in many progressive countries: Social Democracy's only distinction from other parties in their regard is its degree of ruthlessness towards the rights of private property wherever they conflict with the general interest of rational cultivation. And this itself must demonstrate that, essential as these 'small measures' are in the interests of the development of agriculture, they are inadequate when set against the great burdens which private property in land and capitalist commodity-production is increasingly imposing on agriculture.

As we have already noted, our intention has not been to present an
exhaustive programme. We would regard agrarian action programmes for specific issues and localities as entirely appropriate: but these cannot be worked out by theoreticians alone – practitioners must help too.

Our sole concern was to use a number of concrete examples to indicate the general direction which Social Democratic agrarian policy ought to follow, assuming the correctness of the developmental path of agriculture which we sketched out. It is then an easy matter to decide how to proceed in individual instances.

Hopefully we have succeeded in showing that the belief that nothing can be done to save the peasant economy, and that such a policy contradicts the basic principles of Social Democracy, does not necessitate nihilism on these questions of social policy. Social Democracy can adopt the same position as it does with the handicrafts and domestic industry, a position which allows a rich and fertile activity not only in the interests of the rural proletariat but in the interests of agriculture and the rural population in general too.

Of course doubts might be raised as to whether the presentation of this agrarian policy will succeed in binding the peasantry to Social Democracy. At heart Social Democracy will always be a proletarian and an urban party, a party of economic progress. And it will always have to struggle with the deeply rooted prejudices found in a conservative peasantry, ill-disposed to the urban system and rooted in the patriarchal family, with its complete subjection of maids and servants, wife and children. It will never be able to offer the peasant as much as the agrarian parties, who are not only closer to them in character but who can also promise much more since they do not believe in the necessity and inevitability of economic progress: they see nothing wrong in inverting the previous situation, and letting the rural population feed off the urban, and agriculture off industry and commerce.

Social Democracy is unlikely to win over peasants who cling to their old farming practices. But it may be possible to put such peasants into a neutral position. And even this would be a significant gain. Economic development will of course continue to sweep over them, and Social Democracy will also have to deal with the peasants should they stand in its way. But they still nevertheless frequently constitute a force whose power should not be underestimated; if it is at all possible to remove its obstructive effects, it would be foolish to ignore the opportunity.

But what makes the peasant into the enemy of Social Democracy is not the latter's practical politics. Of course the peasants cannot work up any enthusiasm for it – after all it refuses to sacrifice the consumer to
their interests, it opposes attempts to increase ground-rents through artificial increases in food prices, it rejects entails, the Servants Ordinance, and limitations on free movement. But Social Democracy also struggles against the high tax burden imposed on the peasant, against the excesses of the bureaucrats and large landowners – and the peasant is quite happy about that. What outrages peasants is the idea of the expropriation of land-ownership which the victory of Social Democracy supposedly implies. In their eyes this means being chased out of house, home and farm, chased off their property, which will then be shared out amongst the have-nots. A study of Social Democratic agrarian policy would be incomplete if it did not clarify this issue. Our concluding chapter is therefore dedicated to this task.
The Social Revolution and the Expropriation of Landowners

Socialism and the Small Enterprise

At the end of Part I we made reference to the fact that the transition from capitalist to socialist agriculture can be accomplished without expropriating peasant landowners. What was said there should suffice to dissipate any fears which the peasantry might have in this respect.

However, we still have a number of other arguments on this issue.

Not only do small peasants have nothing to fear from a victory of the proletariat: neither do the owners of small enterprises in general, including the handicrafts. Just the opposite in fact.

As we have shown, they will be the prime beneficiaries of the transformation of the state from an institution of domination into one of civilisation, and of the shifting of the burdens of public spending onto surplus-value or surplus-product.

However, their response to the early stages of a socialist society will vary according to whether their establishments are parasitic or not. Small establishments can be termed parasitic if they have long since become technically obsolete and economically superfluous, and if their owners only cling on to them either because a purely proletarian existence seems even more uncertain and miserable than their present life, or they are denied any opportunity for existence within the wage proletariat. Consider the number of small enterprises, especially of the retail sort, which are established by wage labourers who have been disciplined or become unemployed for one reason or another, and who raise a loan in order to establish an independent dwarf-enterprise as a means of avoiding sinking down completely into the lumpenproletariat.

For statisticians the unemployed are only those lacking any occupation at all. At the last count this was only a few hundred thousand. But were the moment ever to arrive when the state offered to guarantee all the unemployed a decent living, the increase in those requiring work and money from the state would be astounding. And the number of dwarf-enterprises would diminish considerably.

The better the position of workers in the large enterprise, the shorter their working hours, the higher their wages, and the more secure their
income, the more willing the owners of parasitic small enterprises will be to abandon the reactionary experiments through which they seek to prolong their wretched existences at the expense of the community in general. And the sooner they will decide to abandon their outmoded and superfluous enterprises and become workers in modern factories. This would be bound to increase significantly the volume of productive forces available to the nation, at the same time eliminating a prolific source of poverty and distress.

However, there are also essential as well as parasitic small enterprises in those spheres not yet conquered by the machine, which do not serve mass production. There is of course scope for disagreement as to which enterprises belong in these categories, and the technical conditions also change from day to day. The machine has now penetrated into the arts and crafts, once regarded as a safe bastion for the small enterprise, as much as it has into baking or shoe-making. Nevertheless, some of the handicraft industries would in all probability survive into the early stages of socialist society, and the increase in popular welfare could even enable some branches of the handicrafts to experience a renaissance inasmuch as the demand for cheap mass articles will fall and that for more expensive and more individualised craft products will rise. At the same time, proletarian taxation policy (if one could still speak of taxes) will ease the burdens currently imposed on handicraft workers. Their general education will improve and the opportunities for greater technical and artistic education will multiply. One could even say that socialist society is not only not based on the complete demise of the handicrafts, but it could lead to a fresh blossoming of some of its branches. However, the social character of these newly flourishing handicrafts will be quite different to the present. It will simply constitute one exception to the general type of production.

The vast bulk of the means of production and the economically crucial part will be social property; production will be social. The small handicraft workers, even if they remain independent in their own workshops, will be completely dependent on society: and society will be the sole provider of their raw materials and tools, and usually the sole purchaser of their products. They will have to adapt themselves to the organism of social production, accommodate themselves to it and, despite their isolation in their own workshops, they will become social workers.

The development of the peasantry will also proceed in the same direction. The innumerable owners of parasitic dwarf-holdings will be glad to shed the semblance of their independence and their property if
the large-scale socialist enterprise offers them palpable advantages.

But non-parasitic small peasant holdings, those which still fulfil important functions in economic life, will also become limbs of social production, like the handicraft enterprises, even if they remain fixed in their apparent isolation. The nationalisation of mortgages and the agricultural industries, on which farmers depend, will mean that society will have more power over them than over handicraft establishments.

However, the peasantry need not fear that it will suffer under this dependency. To be dependent on the state is certainly more agreeable than being exploited by a few sugar barons. But the state will give to, rather than take from, the peasantry. Peasants and agricultural workers would be especially valued workers in the transition from capitalist to socialist society.

The enormous extension of industry for the world market and the simultaneous flooding of the world market with foreign grain – two phenomena which are intimately connected – drive the rural population and specifically its most able elements into the towns. Once the domestic market regains its primacy in the domestic economy, one of its main expressions will be a growth in the importance of agriculture. The greater purchasing power of the masses will call for more food; and a reduction in exports will reduce the supply from abroad. An all-round rational policy for agriculture with the aim of the highest possible yields will become indispensable.

Agriculture will require the best means of production and the best labour-power. This latter aspect is not so simple, however. All agricultural workers are fit for some type of industrial labour, but few industrial workers could currently work in agriculture. Although suitable training should enable youth to carry out agricultural work as well as industrial intellectual work, this prospect will not be of much help during the initial problems of socialism.

The agricultural worker and the small peasant, who are the most poorly provided for in the present-day society, will inevitably become highly-prized, and will achieve a very favourable social position. How could anyone think that a socialist government will drive peasants from their fields? This would be insanity, beyond even what our most unscrupulous and stupidest opponents have declared us capable of.

A socialist regime would have to attempt to structure agriculture as advantageously as possible simply in order to feed the population. The displacement of commodity-production by the production of use-values also offers the possibility of transforming the peasants' money payments – the mortgage interests and other tributes still demanded of them – into
payments in kind; this would represent an enormous relief for them. A proletarian regime would also have every interest in making sure that the peasants could work as productively as possible, equipping them with the best technical aids. Far from expropriating the country-dweller, Social Democracy will place the best means of production, completely inaccessible during the capitalist era, at their disposal.

Of course the most technically advanced means of production can only be used on a large-scale establishment, and a socialist regime would have to work to extend these as fast as possible. Expropriation will not be necessary to induce peasants to consolidate their fields and go over to cooperative, or communal large-scale farming. Should the cooperative large-scale enterprise prove to be advantageous for the cooperative worker, then the example of nationalised large-scale enterprises will suffice to move the peasants to follow suit. The major obstacles presently standing in the way of the development of cooperative agriculture – the lack of examples, the risk, the shortage of capital – will no longer exist and the enormous obstacle represented by unconstrained private property in land will have been reduced to the minimum by the nationalisation of mortgages, the growing dependency of the peasant on the nationalised agricultural industries, and the right of the state to administer and intervene on matters of improvements, and human and animal hygiene.

In view of all this, in view of the interest which a socialist regime will have in the uninterrupted continuation of agricultural production, in view of the high social importance which the peasant population will attain, it is inconceivable that forcible expropriation would be chosen as the means for educating the peasantry into the advantages of more advanced farming.

And should some branches of agriculture or regions exist in which the small establishment remains more advantageous than the large, there will be not the slightest reason to force them to conform to the model set by the large farm. These will be neither branches of industry, nor districts of any great significance for national production since the large enterprise has already established itself as superior in most of the crucial branches of agriculture. The shift of the economic centre of gravity from the world market to the domestic market will inevitably bring these branches, especially grain production, into even greater prominence.

Individual small establishments in agriculture are just as compatible with socialist society as those in the handicrafts; and what is true for the latter also applies to the former. It does not matter a great deal whether the land they cultivate is private or state-owned. What is important is not the name, not the juridical categories, but the economic
This is of course merely a hypothesis not a prophecy. It does not say what will happen but what could happen. What will in fact happen is no more known to our opponents than it is to us; like ourselves they can only base themselves on those factors about which adequate knowledge currently exists. But if we project the path which these factors are presently tracing into the future, then we shall, in fact, arrive at the development indicated here.

The wishes and intentions expressed by Social Democracy in its official demonstrations and in the writings of its most prominent representatives nowhere contradict the conclusions presented here. Nowhere do we find the demand for the expropriation of the peasantry.

Just before the 1848 March revolution, the Central Committee of the Communist League, of which Marx and Engels were members, formulated the 'Demands of the Communist Party in Germany'. The three points which related to agriculture were as follows:

7) Princely and other feudal estates, together with mines, pits, and so forth, shall become the property of the state. The estates shall be cultivated on a large scale and with the most up-to-date scientific devices in the interests of the whole of society.
8) Mortgages on peasant lands shall be declared the property of the state. Interest on such mortgages shall be paid by the peasants to the state.
9) In localities where the tenant system is developed, the land-rent or the quit-rent shall be paid to the state as a tax. (Communist League, 1848, pp. 3-8)

Not a word about encroaching on the property rights of the peasants. The only thing to be nationalised are the mortgages on the peasant lands, not the land itself.

Once the wounds of the defeat of 1848 were healed and the workers' movement regained its momentum and began to stir itself, the land issue reappeared on the agenda. It was dealt with at a number of congresses of the International. The most well known and most important were the discussions at the Basle Congress in 1869 which decided: (1) The Congress declares that society has the right to abolish private property in land and transform it into communal property; (2) Congress declares that it is necessary in the interests of society to accomplish this transformation.

Congress did not state how this transformation was to be accomplished. It declared: 'Whilst Congress acknowledges the principle
of communal property and land it recommends that all sections should investigate practical means for its implementation.'

Liebknecht made a number of speeches on these resolutions in Saxony in March 1870, the most extensive of which were later reworked into a brochure published in 1873 under the title *Zur Grund und Bodenfrage* (republished in a second edition in 1876). He writes:

In France, and in particular in Germany, this question is by no means as straightforward as in England. Agricultural workers are naturally either already in favour of a rational restructuring of land and property relations or can be won over easily. For the most part, it is only the *small peasants* who, despite already being proletarians or rapidly heading towards the proletariat, still cling to their 'property', even though in the most instances this is only nominal, purely imaginary property. An order for expropriation would undoubtedly stir most peasants into serious resistance, perhaps even open rebellion.

The state was therefore to avoid anything which might actually or apparently damage the interests of the peasantry. Enlightenment as to the advantages of socialism had to be accompanied by practical measures to relieve the heavily burdened peasant population. This would principally involve the nationalising of mortgage debts, reducing the rate of interest, and linking additional loans to a commitment on the part of the peasant to undertake rational cultivation. With state support, the individual farms would gradually pass over to cooperative large-scale farming (see pp. 176–9).

Liebknecht characterised the expropriation of the rural population by a revolutionary government as patent folly.

The rapid growth of industry and the proletarian movement in the industrial centres has pushed the rural question into the background in the years since 1870. It has been put back on the agenda – not only for the bourgeois parties, but also for the proletarian parties – by the onset of agricultural distress. Engels has set the tone for the current discussion. What he stated in 1848 he repeated in 1894, asking: 'What, then, is our attitude towards the small peasantry? How shall we deal with it on the day of our accession to power?' And he answers:

To begin with, the French programme is absolutely correct in stating: 'that we foresee the inevitable doom of the small peasant, but that it is not our mission to hasten it by any interference on our part.' Secondly, it is just as evident that when we are in possession of state
power we shall not even think of forcibly expropriating the small peasants (regardless of whether with or without compensation) as we shall have to do in the case of the big landowners. Our task relative to the small peasant consists in the first place in effecting a transition of his private enterprise and private possession into cooperative ones, not forcibly, but by dint of example and the proffer of social assistance for this purpose. And then, of course, we shall have ample means of showing to the small peasant prospective advantages that must be obvious to him even today.

Even as far as bigger peasants were concerned Engels thought:

Most likely we shall be able to abstain here as well from resorting to forcible expropriation, and as for the rest to count on future economic developments, making also these harder pates amenable to reason. (Engels, 'The Peasant Question in France and Germany', pp. 634-5, 638)

These comments accord fully with our own sentiments. Not only do they show that expropriation of the peasantry is not in the interests of socialism: they also show that socialists have no intention of doing this.

The peasantry has nothing to fear from Social Democracy; in fact they have everything to gain from it. The fact that they cannot fulfil all their wishes in present-day society is not due to any lack of goodwill towards them, but because many of these wishes must remain pious hopes, beyond fulfilment by any party. Social Democracy cannot compete with the agrarian parties when it comes to promises. But Social Democracy is actually doing what needs to be done for the rural population in present-day society: and it alone can do it in full measure because it has less respect for capital than any of the bourgeois parties.

Peasants can expect much more from the transition to a socialist society than from any social reforms carried out within the confines of present-day society. Expropriation is the capitalist method for moving from a lower to a higher form of production. In present-day society a peasant is constantly faced with the dilemma either of resisting progress, which means general decline, or being swept away by the expropriating force of capital. Only socialism offers the possibility of participating in social progress without falling victim to expropriation. Socialism will not only not mean expropriation, but also offers the most certain protection from the threat of expropriation presently constantly hanging over the peasant.
The Future of the Independent Household

And although we expect the large enterprise to prove superior to the smaller in most branches of agriculture, although the cooperative or communal form will supplant the smaller once the proletariat, having won power, sweeps away all the obstacles to its advance, and although arable land will be consolidated, this does not mean the abandonment of the independent household. Despite the fact that the unique link between farm and household will be severed, there is no reason for the peasant's home to become communal property. Modern socialism rests on common property in the means of production, not in the means of consumption. Private property is still possible in the latter. And of all the means for enjoying human life and bringing some happiness into it, one of the most important, if not the most important, is possession of a home. Communal property in land is by no means irreconcilable with this.

We would be venturing into very treacherous territory were we to discuss the housing system of the future here. Whether the individual of the future prefers living in a palatial Phalanstère à la Fourier, or in separate cottages à la Bellamy, whether one individual prefers the one, and another the other, both can develop alongside each other: what is certain is that if they feel that it is important for every family to own their own home, the fundamentals on which a socialist society is based would not prevent this.

Technical development is of course already leading to a reduction in the work required in the individual household and to an extension of paid employment by women. The reason why the former is taking place so slowly is a consequence of the cheapness of female labour-power. Women's labour in the household is not paid with money and, therefore, apparently costs nothing; and the woman is the most willing and unremitting beast of burden. The proletarian can therefore cling to the technically backward individual household. For the affluent classes, the maintenance of an independent household means comfort, having their own slaves, maidservants, always on hand for the exclusive service of their own dear selves.

The stronger the proletariat becomes, the more difficult servants will be to find: their demands will increase, and the affluent will find it increasingly difficult to maintain their households. Those conscientious housewives who most assiduously defend the sanctity of their own hearth – as long as they have a servant to clean it – will be amongst the most energetic in demanding measures to reduce the work of the private
household or allocate it to particular trades once they have been forced to do the work themselves; to cook, to wash, to raise children, and - horror of horrors - to polish boots.

Another push in this direction must inevitably come from the victory, or even the mere strengthening, of the proletariat among working women. The reasons why they are currently forced to carry out the most unproductive tasks, inadequately, at home, rather than have them taken care of by well-equipped establishments outside the home are poverty and necessity. The increasing affluence of worker families will not express itself in the burdening of yet another domestic slave but rather in the unburdening of the housewife. The reduction in housework, currently proceeding much more slowly than technical progress could allow, will then speed up. This will mean the disappearance of the economic foundation of the family. But not the family itself. For in the meantime, another, higher basis for the family has emerged individuality.

People are by nature social beings, 'gregarious creatures', and it takes some time before they begin to perceive and experience their individuality as something distinct from society. As long as individuals caught up in the struggle for existence could only survive through their bond with society, and as long as social development proceeded so slowly that tradition, that is the sum of inherited views of the community as a whole, completely dominated the intellectual life of the individual, no form existed within which the individual could develop. The foundation for the free development of the individual, at least for the aristocracy, had to await the growth of the productivity of labour and the division of society into classes, which released some members of society from the need to spend all their time in the struggle for existence, physical labour and war; they acquired the time to develop a specific intellectual life, and because of their wealth and slaves, were able to live independently of society, and even in contradiction to it: and this was true in particular whenever major catastrophes suddenly placed society on a new basis and interrupted the dead hand of tradition. Consider, for example, Greece after the Persian wars, Italy after the Crusades, and Western Europe after the great discoveries and the Reformation. The individual personality was born; individual art appeared alongside impersonal folk art, individual philosophy alongside impersonal religion.

It was, however, the capitalist mode of production which first succeeded in stripping this herd character from wider and wider spheres of the population, transforming the individual, the 'superman' from an aristocratic phenomenon into a more democratic one. This feat was
accomplished by dissolving all the traditional organisations which had previously held the mass of the population together in the struggle for existence, and by declaring permanent economic revolution - toppling tradition from its leading role and forcing everyone to develop their own perspective based on their own observations: and finally, through the fact that the modern mode of production has created an unprecedented number of 'workers by brain', not least due to the mass of surplus-products produced by this mode of production – at the same time giving them a much less secure and satisfactory status than before.

Individualism the desire for the free development of the personality – will inevitably become stronger and more generalised in a socialist than in capitalist society, the more widespread welfare, education and leisure become within it.

The possibility of the individual's free activity will admittedly be reduced in quite a number of ways under socialism in one very important sphere, that of economic life: on the other hand, the present meagre opportunities for individual activity outside economic life will be greatly expanded through the reduction in working time.

This will increase the importance of the family and the home. Nowhere else offers the same opportunity for the individual personality to live itself out so fully, without the obstruction of the hostile or at least confining will of others: a place which it can adorn and shape as it wishes, constrained only by material, not personal considerations, in which it can live freely with its loves, friends, books, ideas and dreams, its scientific and artistic creations.

The growth of individualism also means the growth of individual sexual love, which finds satisfaction only in the joining and living together of one individual with another particular individual of the opposite sex. Such marriage, based on individual sexual love, also requires that individuals should have their own home.

The more the economic element disappears from marriage and the individual element enters into the foreground, the greater the change in the relationship between parents, especially fathers, and their children. As an economic institution marriage has the task, on the one hand, of creating the necessary economic foundation for the household through the dowry or labour-power of the housewife and the earnings of the husband; and on the other hand, of supplying heirs for the patriarchal property, which includes the father's occupation. Individualistic marriage not only replaces the economic motive for matrimony by personal attraction between the partners, but the relationship between the parents and children also becomes an individual one. Children are cherished by their parents, not as heirs,
but as individuals, not forced to become successors within a caste irrespective of their aptitudes and abilities, but allowed to develop as free individuals.

The germs of individual marriage and the family are already very strong; but they are constantly frustrated by the fact that poverty and distress on the one hand, and wealth on the other, still allow economic considerations to take precedence over personal ones. A socialist society free of these extremes, in which the importance of the individual household grows even smaller, will inevitably allow the individual character of marriage and the family to come to the fore. This personal character already constitutes the common standard for judging the moral worth of a family and marriage. A decent marriage is held to be one in which the personalities, not the economic circumstances of the partners, are of importance; the morally worthwhile bonds within the family are the personal bonds between its members, not material links. According to the modern viewpoint the son who sees his father merely as a future source of an inheritance or the father who forces his son into an occupation or marriage in order to expand or conserve the family wealth are not considered to be acting morally. The disappearance of the private household does not mean the abolition of marriage and the family. The home does not have to disappear along with the stove. Modern civilisation can offer familial bonds other than the cooking stove and the sink. The disappearance of the individual household simply means the transformation of the family from an economic into a purely ethical unit: it signifies the realisation of a moral demand already brought to maturity by the development of individualism made possible by the modern productive forces.

Socialism will not therefore suppress the demand of fully developed individuals for their own home; rather it will generalise it, at the same time creating the means through which its satisfaction can also be generalised.

Peasants should not fear for their homes. A socialist regime will not pass by without leaving a trace, but the changes which it will bring – the hygienic and the aesthetic – will not be to the detriment of the peasant home.

The decline of the peasantry is possibly revealed nowhere more clearly than in their houses. We have already referred to the hovels inhabited by agricultural workers: but peasant dwellings are often no better than miserable and filthy stalls. Yet the peasant does have a feeling for cleanliness and for beauty – a fact apparent wherever they live in a state of well-being. The peasant houses of the past, such as those of the Swiss or Russian peasants, are the delight of architects;
now peasant art lives on only in urban villas. The originals are falling into dilapidation and there are no successors on peasant farms. However, with well-being and leisure, the peasant can be an artist once more. And these benefits will be restored to the peasant by the victorious proletariat. It will not simply emancipate the wage slaves of industry. The countryside too, whose wonderful natural beauties now stand in such stark and tragic contrast to the ignorance, poverty and squalor of its inhabitants, will be transformed into a blooming garden, lived in by a free, happy and proud people.
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