The active role of 'use value' in Marx's economic analysis

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Introduction: the problem

Marx's economic model has frequently been criticized for ignoring or failing to appreciate sufficiently the role of demand in economic theory. In line with Ricardo and other classicists, Marx's model rests on the labor theory of value. This theory is supply-oriented, with no fundamental role for demand. According to the critics, this defect is manifested in Marx's disregard for utility or 'use value.'

In this article I will attempt to establish three points: (i) demand plays an important role in Marx's theory of value, (ii) Marx's concept of demand is closer to the modern one than to Ricardo's, and (iii) Marx's model includes both a supply side—quantity of labor—and demand side—'use value'—which determine and regulate respectively the value as such. The main body of the article examines Marx's treatment of 'use value' throughout his economic writings. The last section compares my interpretation with other interpretations.

An unfounded argument: Marx's point of departure

Commentators who claim Marx excluded 'use value' from economic theory can point to three passages in his writings:

To be of use value is evidently a necessary prerequisite of the commodity. Use value as such, since it is independent of the determinate economic form, lies outside the sphere of investigation of political economy. It belongs in this sphere only when it is itself a determinate form.²

. . . Value. Purely reduced to quantity of labor time as the measure of labor. Use-value—whether considered subjectively as usefulness of the work, or objectively as utility of the product—appears here simply as the material presupposition of value,

^{1.} Unfortunately, Marx's theory of value has been identified with Ricardo's doctrine of value, despite the essential differences between them on this subject: Marx argued that 'use value' is an important factor in controlling value, whereas Ricardo completely ignored this element and was therefore severely criticized by Marx.

2. Marx, Critique, p. 28.

which for the time being drops completely out of the determination of the economic form.³

The use-value of commodities furnish the material for a special study, that of the commercial knowledge of commodities. Use-values become a reality only by use or consumption: they also constitute the substance of all wealth, whatever may be the social form of that wealth.⁴

The apparently straightforward interpretation of these passages is invalid. The first passage is deliberately unclear. It includes such highly ambiguous phrases as "use value as such" and "when it is itself a determinate form." These phrases suggest that 'use value' has more than one form and, in certain transformations, may belong to the realm of economic theory.

The second passage—Marx's letter to Engels—explicitly states that 'use value' is excluded from economic theory only temporarily, at an early stage of highly abstract analysis. Thus Marx only "for the time being" excludes 'use value' from "the determination of the economic form" and is aware of the fact that at some later stage it would be necessary to turn back and explain 'use value' as a significant economic category in the definition of economic forms.

The first two passages were written in 1858 and the third in 1867 (Capital I). An examination of the context of the passage clearly shows that it refers to 'use value' not in the sense of utility but only in the limited sense of physical-chemical, engineering, and other such properties of the raw materials. This limited aspect of the physical properties of the materials is deemed mere "commercial knowledge," and these properties are excluded from the realm of economics. The same exclusion holds in the non-Marxian theory. Economics does not concern itself with the natural properties of materials.

Ambiguity in the interpretation of Marx

'Use value' and 'socially necessary labor' are two of the most fundamental concepts in Marx's model, and differing opinions on the nature and significance of the interrelationship between them has led to a lengthy controversy⁷ which began in Marx's own lifetime and has yet

^{3.} Marx to Engels, 2 April 1858, Marx-Engels, Selected Correspondence, Letter 38.

^{4.} Capital I: 36.

^{5.} Marx also regarded as important other factors besides 'use value,' among them the technical, value, and organic composition of capital, demand and supply, productivity, the number of firms, etc.

^{6.} Capital I: 36: "But this utility is not a thing of air. Being limited by the physical properties of the commodity it has no existence apart from that commodity."

^{7.} This controversy—mostly in Russian and German—has lain stagnant for a long

to be resolved.8 The core of the controversy is Marx's definition of 'socially necessary labor time.' Contrary to common opinion, Marx has two definitions of 'socially necessary labor time': (i) "The labour time socially necessary is that required to produce an article under normal conditions of production, and with the average degree of skill and intensity prevailing at the time" (Capital I: 39). (ii) "The social need, that is, the 'use-value' on a social scale, appears here as a determining factor for the amount of total social labour-time which is expended in various specific spheres of production. The necessary labour-time assumes a different meaning here. Only just so much of it that is required

time, and is unknown to the English reader. However, with the recent publication of the translation of Rubin's book, it will shortly be made available to the wide circle of economists and will certainly stimulate constructive discussion.

8. A great many scholars participated in the debate, including Marx himself. Following is a list of the major participants:

K. Marx, F. Engels, A. Wagner, C. A. Schramm, Grundzüge der Nationalökonomie (1876) and articles in Vorwärts (1877) and Zukunft (1877-78);

S. Frank, Teoriya tsennosti Marksa i vevo znacheniye (1900):

K. Kautsky, Social Revolution (1903);

L. B. Boudin, The Theoretical System of K. Marx (1907);

N. A. Miklashevskii, Istoriya politicheskoi ekonomii (1909);

T. Grigorovici, Die Wertlehre bei Marx und Lassalle (1910):

A. Bogdanov and I. Stepanov, Kurs politicheskol ekonomil, vol. 2, 4th ed. (1925);

I. I. Rubin, Ocherki po teorii stoimosti (1928), translated as Essays on Marx's Theory of Value (1972);

D. Rosenberg, Kommentary k tret'emu tomu "Kapitala" Karla Marksa (1931).

There was also discussion lasting for years in the journal Pod Znamenem Marksizma:

S. Dvolaitskiĭ, "K teorii tsennosti Marksa," no. 5-6, 1922; A. Mendelson, "'Ponyatiye obshchestvenno-neobkhodimyĭ trud' kak element teorii stoimosti Marksa," no. 7-8, 1922;

"K voprosu o razlichnykh versiyakh v traktovke ponyatiya 'obshchesvennoneobkhodimyĭ trud,' " no. 4-5, 1923;

V. Motylev, "K voprosu ob obshchestvenno-neobkhodimom rabochem vremeni," no. 2-3, 1923;

"Nad mogilojpotrebitelskoj versij." no. 6-7, 1923:

E. Goldenberg, "Yeshche neskol'ko slov ob obshchestvenno-neobkhodimogo trude," no. 4-5, 1923;

N. Kovalevskii, "K probleme obshchestvenno-neobkhodimogo rabochego vremeni." no. 11-12, 1923;

A. Voznesenskii, "K voprosu o ponimanii kategorii abstraktnogo truda," no. 12, 1925:

I. Dashkovskiĭ, "Abstraktnyĭ trud i ekonomicheskiye kategorii Marksa," no. 6, 1926:

I. Rubin, "Abstraktnyĭ trud i stoimost've sisteme Marksa," no. 6, 1927;

V. N. Poznyakov, "Rynochnaya tsennost i yeyo mesto ve ekonomicheskoĭ sisteme Marksa," no. 10-11, 12, 1929;

P. Sweezy, The Theory of Capitalist Development (1946);

H. Denis, Valeur et capitalisme (1957);

A. K. Rosdolsky, "Der Gebrauchswert bei Karl Marx. Eine Kritik der bisherigen Marx-Interpretation," Kyklos, 1959.

for the satisfaction of social needs. The limitation occurring here is due to the use-value" (Capital III: 621; emphasis added).9

The key issue for this article and other contexts as well, is the relation between 'socially necessary labor time' and 'use value,' i.e., whether the two concepts are independent or interrelated. It must be made clear at the outset that if we can prove that Marx regarded 'use value' and 'socially necessary labor' as interrelated, we shall be able to argue, following Marx's own words but in total negation of common opinion, that 'use value' not only belongs to economic theory but can even affect the quantity of value. Such proof could serve to sever the accepted association between the models of Marx and Ricardo, turning Marx from the last of the classicists into the first of the neoclassicists; or, alternatively, Marx could be viewed as the link between the two schools.

The debate started with the publication of *Capital* in 1867. Among the many formulations, two basic and diametrically opposed major lines of interpretation emerge clearly. In the first, the dominant, view, 'use value' is not an economic category at all, and it is in no way related to 'socially necessary labor time.' In the second, the minority, view, Marx used various formulations whereby 'use value' *belongs* to economic theory, *is related* to 'socially necessary labor time,' and *takes part* in the value-determining and -regulating process.

The first view finds its authority in *Capital* I, Chapter 1, and has been best expressed by Sweezy:

Marx excluded use value (or, as it now would be called, 'utility') from the field of investigation of political economy on the ground that it does not directly embody a social relation.

It should be noted that the concept of 'socially necessary labour' is concerned solely with the quantity of labour performed, and has nothing to do with use value or utility.¹¹

The second view can be found in *Capital I*. However, its comprehensive development appears in *Capital III* and *Theories of Surplus Value II*. Engels addressed himself to the matter as early as 1884, ¹² and

- 9. In the above-mentioned discussion, the first approach was defined as the technical version and the second as the economic version.
 - 10. Capital I: 35-38.
- 11. Sweezy, p. 26: "In possessing 'use value' a commodity is in no way peculiar. Objects of human consumption in every age and in every form of society likewise possess 'use value.' 'Use value' is an expression of a certain relation between the consumer and the object consumed. Political economy, on the other hand, is a social science of the relations between people. It follows that 'use value,' as such, lies outside the sphere of investigation of political economy.''
 - 12. Engels, Introduction, p. 18: "One now comprehends why Rodbertus determines

returned to it in his introduction to Capital III in 1894. Note, however, that in this context, Engels stated that Marx's definitions, far from being static and immutable, should be regarded as changeable, in the process of formalization. This fits in with Marx's scientific method. ¹³ Explicit evidence to support this second viewpoint was given by Marx himself in 1879/80 when he in effect rejected the Ricardian approach. Nevertheless, the first viewpoint continues to be regarded as typical and representative of Marx.

The sources of the erroneous interpretation

In Marx's opinion, two conditions must be fulfilled for labor to produce value: (i) it must create 'use value,' be useful, or else it is wasted and can certainly not produce value; (ii) it must be applied only in socially necessary quantities. Excess labor applied in the production of a commodity—i.e., more than is socially necessary—does not produce its full value. In other words, labor produces value only insofar as it produces 'use value' according to the principle of 'socially necessary labor.' How much labor is socially necessary depends on the normal production conditions of the economy—i.e., technology in general use.

Value theory uses condition (i) above to explain what should be produced, and condition (ii) to identify efficient production processes, i.e., how to produce. These conditions are the main points of value theory as presented in Capital I, Chapter 1, and are generally regarded by economists as Marx's entire theory of value. A theory of value which only explains what and how to produce is incomplete. It must also determine how much to produce. In Capital I, however, the only

the value of commodities simply by Labour and, at most, admits different degrees of intensity of labor. If he had investigated by what means labor creates value and, therefore, also determines and measures it, he would have arrived at socially necessary labor, necessary for the single product, both in relation to other products of the same kind and also in relation to society's total demand. He would thereby be confronted with the question of how the adjustment of the product of separate commodity producers to the total social demand takes place, and his whole Utopia would thereby have been made impossible. He preferred, in fact, to 'make an abstraction,' namely of precisely that which mattered.''

13. Capital III: 13-14. "I shall not go into his remarks on other aspects of the Marxian analysis. They rest upon the false assumption that Marx wishes to define where he only investigates, and that in general one might expect fixed, cut-to-measure, once-and-for-all applicable definitions in Marx's works. It is self-evident that where things and their interrelations are conceived, not as fixed, but as changing their mental images, the ideas are likewise subject to change and transformation; and they are not encapsulated in rigid definitions, but are developed in their historical or logical process of formation. This makes clear, of course, why in the beginning of his first book Marx proceeds from the simple production of commodities as the historical premise, ultimately to arrive from this basis to capital—why he proceeds from the simple commodity instead of a logically and historical secondary form—from an already capitalistically modified commodity." (Engels, in his Introduction to Capital III).

reply given is that the entire quantity of goods produced should maintain the principle of socially necessary labor, without any indication of how many units should be produced according to this principle.

Strange as it may seem, a great many advocates of Marx do not regard the quantity issue as a test of the validity or relevance of the theory. This is a direct outcome of viewing the discussion of Chapter 1 of Capital I as Marx's entire value theory.

Correct methodology requires primarily a clear definition of value followed by a listing of the major properties of commodities possessing value. Marx, therefore, limits his initial presentation to these basic elements. All other factors are put aside, assumed to be constant—ceteris paribus—thus leading naturally to the dominant definitions of 'use value' and 'socially necessary labor' based on this initial presentation. The quantity of output is irrelevant to the definition of value, and the basic properties of the representative commodity. At this basic stage of his presentation Marx finds it convenient to assume that goods are produced a priori precisely in the quantity required. Thus he deliberately ignores the quantitative aspect of output, i.e., he assumes that all goods produced are demanded and bought.

Of course, as Marx develops his model, 'use value' is not sufficient to guarantee effective demand for a given quantity of output. The demand becomes a critical issue as Marx moves from the discussion of a single representative commodity to national economies (with many commodities and sectors). He insists¹6 that on this new level of economics, the realization of the two conditions stated at the opening of this section depends on another explicit requirement. Not only must every commodity have 'use value' and be produced only with socially necessary labor time, but also the socially necessary quantity only should be produced.¹¹ The assumptions are weakened and the equilibrium conditions become more complex. The initial definitions of 'use value' and 'socially necessary labor' are not rejected, but dialectically incorporated in wider definitions. Many commentators and critics have ignored that on this new level a significant change was introduced, not only in

^{14.} Capital III: 181 and Marx, "Notes on Wagner," p. 199: "If we have to analyze the 'commodity'—the simplest economic concretum—we have to withhold all relationships which have nothing to do with the present object (Objekt) of analysis."

^{15.} See Marx's notes on Bailey, Capital I: 49, 56, 63, 83.

^{16.} Ibid., p. 181.

^{17.} For Marx it is quite unacceptable to assume—on a macroeconomic level—that all output supplied is met automatically by adequate demand. Such an assumption would be tantamount to Say's identity, which Marx opposed vociferously. Nor is it any longer possible to assume that the economy can produce any quantity needed, indefinitely. This would mean a Utopian approach, or the anarchistic view of an economy, to which Marx was no less opposed.

the assumptions but also in the meaning. The contents and the function of both 'use value' and 'socially necessary labor' are transformed.

Unfortunately, many critics and commentators failed to understand the significance of this transformation, i.e., that it is here *Marx departs from the Ricardian theory*. Böhm-Bawerk regarded it as a contradiction between *Capital* I and *Capital* III, and Samuelson termed it an "unnecessary detour."¹⁸

The transformation of 'use value' and 'socially necessary labor' becomes more and more important the closer Marx approaches real-life situations. Four stages can be discerned in this transformation. Initially, 'use value' has no economic content; Marx seems to ignore all its properties by stating that in no way does it belong to the economic theory. His sole prerequisite is that a commodity, to be produced, should be useful. Chapter 1 of Capital I is a labor-value-theory discussion and explanation of how to produce. The first stage of the transformation turns 'use value' from an element external to economic theory into a part of the economic theory. In the second stage 'use value' is turned from being a part or element in production to an integral part of economic theory for all situations in which 'use value' participates in determining economic forms or derives from them. In the third stage—the transition to macroeconomics—'use value' becomes the determining factor in the quantity of production. Finally, in the fourth stage 'use value' is shown to be one of the factors indirectly regulating the size of value, according to the magnitude of the social need and the available production capacity. However, if this four-stage transformation in the definitions of the two basic concepts 'use value' and 'socially necessary labor' is ignored, the distinction between Marx's and Ricardo's labor theories of value is distorted.

The First Stage of Transformation

In this stage 'use value' is transformed from an external element to an integral part of Marx's theory. 'Use value' becomes a part of economic theory whenever it is produced by specific, 'concrete' labor. The *economic property* of all forms of 'use value' is the ability to satisfy a human need or utility.¹⁹ Thus 'use value' is not excluded from production; it is a necessary condition for production.²⁰ Just as 'abstract labor' is labor's general property of 'concrete labor' and appears

^{18.} Samuelson, p. 421.

^{19.} Capital I: 35.

^{20.} Capital 1: 36, 41, 42–43, 45–47, 58, 64, 85–88, 160, 179–85, 188–89, 195–96, 199–203, 207; Capital III: 631–32; Theories II: 504–5, 507–8; Theories III: 90, 119, 439; Grundrisse, pp. 241–42, 254–56, 267n, 274–75, 311, 320, 646–47, 667, 678, 685, 691–92, 736, 852, 881–82.

as 'use value.' Economic theory can ignore 'use value' only in the study of barter economies. For monetized economies—especially the capitalist economy—'use value' is an integral part of economic analysis. In the relevant section of the *Grundrisse*, as it appeared in its German version. Marx wrote:

Bei der einfachen Zirkulation war der Inhalt des Gebrauchswerts gleichgültig, fiel ausserhalb die ökonomische Formbeziehung. Hier ist er wesentliches ökonomisches Moment derselben. Indem der Tauschwert nur dadurch als an sich im Austausch festhaltender zunächst bestimmt ist, dass er sich austauscht mit dem seiner eignen Formbestimmung nach ihm gegenüberstehenden Gebrauchswert [Marx 1974, p. 944].²¹

Marx's own response

Criticisms of Marx's alleged exclusion of 'use value' from economic theory began in Marx's own lifetime. The most vociferous, which appeared in A. Wagner's book,²² were based on the passages in *Capital* I where 'use value' is related to commercial knowledge. Marx's reply to Wagner is contained in his notes after reading Wagner's book.²³ These notes, written in the years 1879–1880, are Marx's last economic work. They are thus particularly important for the evaluation of Marx's thinking.

Marx's response is valuable on several counts. First, Wagner's criticism was quite explicit, and Marx was obliged to reply in terms no less positive. Secondly, the fourteen years since the appearance of *Capital* I were ample time for any prospective changes in Marx's thinking to emerge. Thirdly, since the arguments, both those raised by Wagner and those presented nowadays, are based on the same material, Marx's response to Wagner serves equally well to refute the contentions of present-day critics. Fourthly, being Marx's direct response, it is authorative, an authentic reply to the 'use value' question, and requires no interpretation.

In his reply to Wagner, Marx discusses four points: (i) his methodology of decreasing degrees of abstraction, (ii) his general approach to

^{21.} Unfortunately the last sections of the *Grundrisse* are not translated in the Nicolaus English translation. I present here a free translation for the non-German reader: "In simple exchange circulation, the use value has no significance and is excluded from the framework of economic relations; whereas in the production process of capital, the use value constitutes a significant economic component of the relationship."

^{22.} Adolph Wagner, Lehrbuch der politischen Ökonomie. Allgemeine oder theoretische Volkswirtschaftslehre (1879).

^{23.} Marx, "Notes on Adolph Wagner" (1879-80).

'use value' in Capital I, (iii) the distinct role of 'use value' in his theory, and (iv) the vital role of 'use value' in his basic concrete labor, surplus value, constant and variable capital, etc.

Firstly, if Wagner had understood Marx's methodology of decreasing degrees of abstraction, he would have realized that 'use value' was excluded only temporarily from the model to emphasize and clarify the basic nature of commodities.²⁴ Secondly, Capital I in general treats 'use value' as a *condition* for the production of value—that "in order to produce the commodities, one must not only produce use-value, but use-value for others, social use-values."25 Thirdly, Marx categorically rejects the charge that 'use value' is not an integral part of his economic theory. In the process, he reiterates the distinction he made in Capital I between 'use value' and 'value.' They are not identical, either in form or content. 'Use value' "naturally does not play the role of its opposite number of 'value,' which has nothing in common with it, other than that value appears in the term 'use-value.' "He caustically suggests that Wagner's criticism makes no more sense than proposing he exclude 'exchange value' from his theory, because in Marx's opinion 'exchange value' is only the form of appearance of value, but not 'value': "The value of a commodity is neither its use-value nor its exchange-value."26 Finally, Marx points out some of the many cases where 'use value' is part of the very definition of his basic economic concepts. The twofold character of labor embodied in a commodity, in which the concrete labor creates the 'use value,' the monetary form of exchange, as a developed form of commodity value, expressing the value of one commodity in terms of the 'use value' of another commodity; surplus value deriving from the 'use value' of the labor force; constant and variable capital; and so forth. He notes, that for himself, 'use value' fills an important economic function, stemming from the development of various forms, although this role is different from that generally accepted by previous economic theory.27

Clearly then, Marx firmly refused to join those who excluded 'use value' from economic theory. Many years after the appearance of the *Critique* and *Capital* I, Marx insisted—in contradiction to the accepted image he eventually was given—that he never excluded 'use value' from economics, that the concept serves a central function in this theory and constitutes a basic economic category. Is his response legitimate? Does it not arrive as a sort of *post factum* defense against critics

^{24.} Ibid., p. 199.

^{25.} Ibid.

^{26.} Ibid., pp. 198-99.

^{27.} Ibid., p. 200.

of Capital I? The answer can be found in an examination of the texts in their proper chronological order.

Marx's firm and consistent opposition to the above criticism is explained and justified in the light of his *old* views that had already been expressed in the *Grundrisse*, where long before the publication of *Capital* I—he assembled the material for his major economic works.²⁸

The subject of 'use value' and its place in economic theory is dealt with in the *Grundrisse* on three separate levels: (i) as a principle, (ii) in a critical evaluation of Ricardo's position on the matter, and (iii) in an explanation of the economic phenomena in which 'use value' participates as an economic factor and determines economic form and significance.

On level (i) Marx began to formulate his position that was later to appear in the *Critique* and *Capital* I: 'Use value': as material of wealth lies beyond economy and 'falls within the realm of economy as it becomes modified by the modern relations of production or as it, in turn, intervenes to modify them.'29 Both these conditions are vital to any form of production and *no productive or economic* activity can exist without them.

The same idea is repeated more explicitly and comprehensively in Marx's description of exchange as the dialectics of utility exchange. The exchange of goods brings together subjects (individuals as exchangers) with objects (commodities as exchange values). In this encounter, separate individuals participate in a process of exchanging goods. Each one is in the same socioeconomic position of mutual equality in

28. Available in English as Karl Marx, Grundrisse: Foundations of the Critique of Political Economy (Penguin Books: Baltimore, 1973).

29. Grundrisse, pp. 852-53: "Political economy has to do with the specific social forms of wealth or rather of the production of wealth. The material of wealth, whether subjective like labour, or objective, like objects for the satisfaction of natural or historical needs, initially appears as common to all epochs of production. This material there appears initially as mere presupposition, lying quite outside the scope of political economy, and falls within its purview only when it is modified by the formal relations or appears as modifying them. What is customary to say about this in general terms is restricted to abstractions which had a historic value in the first tentative steps of political economy, when the forms still had to be laboriously peeled out of the material, and were, at the cost of great effort, fixed upon as a proper object of study. Later, they became leathery commonplaces, the more nauseating, the more they parade their scientific pretensions. This holds for everything which the German economists are in the habit of rattling off under the category 'goods' " (emphasis added). Ibid., p. 881. "This section to be brought forward. The first category in which bourgeois as wealth presents itself is that of the commodity. The commodity itself appears as unity of two aspects. It is use value, i.e., object of the satisfaction of any system whatever of human needs. This is its material side, which the most disparate epochs of production may have in common, and whose examination therefore lies beyond political economy. 'Use value' falls within the realm of political economy as soon as it becomes modified by the modern relations of production, or as it, in turn, intervenes to modify them" (emphasis added).

exchange. The objects must also be equal, in exchange value, to be exchanged. The objects must also be equal values between individuals is an economic transaction and is a legitimate subject of the economic analysis, even though the material or natural properties of the exchangers and the exchanged objects are not part of the economic theory. Thus, 'use value' and 'exchange value' are both distinct and interrelated. Marx reiterates this point whenever he discusses the economic and non-economic aspect of 'use value':

The content of the exchange, which lies altogether outside its economic character, far from endangering the social equality of individuals, rather makes their natural differences into the basis of their social equality... Only the differences between their needs and between their production gives rise to exchange and to their social equation in exchange. These natural differences are therefore the pre-condition of their social equality in the act of exchange, and of this relation in general, in which they relate to one another as productive.³²

The difference between individual and natural properties link them to each other to create a mutual dependence leading to the prerequisite of equality in exchange.³³ This difference between the 'use value' of needs and that of production creates mutual dependence of individuals upon one another and renders exchange conditional. 'Use value' thus becomes a precondition for the existence of 'exchange value.' The fact that a commodity is assumed to have no 'use value' for its producer (owner) while it does have 'social use value' signifies that the economy is willing to use a certain portion of the total available labor in its production.³⁴ If 'social use value' is a condition for production of commodities, 'use value' is transformed from a pre-economic characteris-

^{30.} Ibid., p. 241: "As subjects of exchange, their relation is therefore that of *equality*. . . . Furthermore, the commodities which they exchange are, as exchange values, equivalent."

^{31.} Ibid., p. 242.

^{32.} Ibid.

^{33.} Ibid., pp. 242–43: "Only the difference between their needs and between their production gives rise to exchange and to their social equation in exchange; these natural differences are therefore the precondition of their social equality in the act of exchange, and of this relation in general, in which they relate to one another as productive. Regarded from the standpoint of the natural difference between them, individual A exists as the owner of a use value for B, and B as owner of a use value for A. In this respect, their natural difference again puts them reciprocally into the relation of equality. In this respect, however, they are not indifferent to one another, but integrate with one another, have need of one another, so that individual B, as objectified in the commodity, is a need of individual A, and vice versa; so that they stand not only in an equal, but also in a social, relation to one another."

^{34.} Ibid., p. 882.

tic into a necessary condition for the existence of a commodity. It is a socially and economically required characteristic of commodities. This necessary precondition stems from the process of exchange, which forms the material basis for *an economy-wide system of tastes*. ³⁵ When 'use value' becomes a "system of needs, and use value, as such, enters into the form itself as a determinant of the form," *the social utility* of commodities becomes the general property of commodities. ³⁶ When an exchange society develops a system of needs, 'exchange value' ceases to be the sole determinant of economic form and content. ³⁷ 'Use value' has become an economic category that affects a great many economic components. ³⁸

Given the contents of an early text such as the *Grundrisse*, it is not surprising that Marx is astonished at the criticism leveled against him by Wagner; the latter had been using precisely the arguments leveled by Marx himself against Ricardo, whom Marx had criticized—in his notebooks of the 1850's, which later became known as the *Grundrisse*—for excluding 'use value' from his discussion and ignoring

35. Ibid., pp. 267-68: "Is not value to be conceived as the unity of use value and exchange value? In and for itself, is value, as such, the general form, in opposition to use value and exchange value as particular forms of it? Does this have significance in economics? Use value presupposed even in simple exchange or barter. But here, where exchange takes place only for the reciprocal use of the commodity, the use value, i.e., the content, the natural particularity of the commodity has as such no standing as an economic form. Its form, rather, is exchange value. The content apart from this is irrelevant; is not a content of the relation as a social relation. But does this content as such not develop into a system of needs and production? Does not use value as such enter into the form itself, as a determinant of the form itself, e.g., in the relation of capital and labour? the different forms of labour?—agriculture, industry, etc.—ground rent?—effect of the seasons on raw product prices? etc. If only exchange value as such plays a role in economics, then how could elements later enter which relate purely to use value, such as, right away, in the case of capital as raw material, etc.? How is it that the physical composition of the soil suddenly drops out of the sky in Ricardo? The word ware (commodity) (German Güter, goods) perhaps as denrée (good) as distinct from merchandise (commodity) contains the connection. The price appears as a merely formal aspect in it. This is not in the slightest contradicted by the fact that exchange value is the predominant aspect. But of course use does not come to a halt because it is determined only by exchange; although of course it obtains its direction thereby" (emphasis added).

36. Ibid., p. 646: "As we have already seen in several instances, nothing is therefore more erroneous than to assert that the distinction between use value and exchange value, which falls outside the characteristic economic form in simple circulation, to the extent that it is realized there, falls outside it in general. We found, rather, that in the different stages of the development of economic relations, exchange value and use value were determined in different relations, and that this determination itself appeared as a different determination of value as such. Use Value itself plays a role as an economic category. Where it plays this role is given by the development itself" (emphasis added).

^{37.} Ibid., pp. 267-68 (cf. p. 242).

^{38.} Ibid.

the concept's effect in economics. 39 Obviously, Wagner could not have known about these texts. Marx was surprised by this kind of criticism probably because he considered his exposition in Capital I as sufficiently clear and unequivocally reflecting his ideas. The prominence of 'exchange values' in capitalistic economies does not eliminate the economic role of 'use value.' Marx rejected Ricardo's approach and emphasized the mutual relations between the two concepts.⁴⁰ For instance, Marx wrote: "One and the same relation appears sometimes in the form of use-value and sometimes in that of exchange value, but at different stages and with a different meaning."41 This statement from the Grundrisse expresses Marx's consistent approach, over the years, to the relation between 'use value' and value. The criticism voiced by Marx against the Ricardian approach to 'use value' shows that Marx's views, formulated during the preparation of the Grundrisse, were expressed somewhat later in his Critique, and more forcefully in Capital I. The final and most complete formulation appears in Capital III. Marx remained steadfast in his approach as presented in the Grundrisse, and in his later works, including his reply to Wagner, did not depart from his ideas. There is no contradiction between the statements made in the Grundrisse and in all the volumes of Capital and those in his reply to Wagner, despite the time that elapsed between these works.

The Second Stage of Transformation

Marx tends to emphasize his ideas in connection with 'use value' by using sentences such as "This is yet another example of how important is the analysis of use-value for the determination of economic phenom-

39. Ibid.: "In any case, this is to be examined with exactitude in the examination of value, and not, as Ricardo does, to be entirely abstracted from, nor like the dull Say, who puffs himself up with the mere presupposition of the word 'utility.' Above all, it will and must become clear in the development of the individual sections to what extent use value exists not only as presupposed matter, outside economics and its forms, but to what extent it enters into it" (emphasis added). And ibid., p. 646: "Ricardo, e.g., who believes that the bourgeois economy deals only with exchange value, and is concerned with exchange value, and is concerned with use value only exoterically, derives the most important determinations of exchange value precisely from use value, from the relation between the two of them, for instance: ground rent, wage minimum, distinction between fixed capital and circulating capital, to which he imputes precisely the most significant influence on the determination of prices (through the different reaction produced upon them by a rise or fall in the rate of wages); likewise in the relation of demand and supply, etc." (emphasis added).

40. Ibid., p. 647: "From the standpoint of capital (in circulation), exchange appears as the positing of its use value, while on the other side its use (in the act of production) appears as positing for exchange, as positing its exchange value. Likewise with production and consumption. In the bourgeois economy (as in every economy), they are posited in specific distinctions and specific unities."

41. Ibid.

ena," or "Here is another example of how use-value as such acquires economic significance." When does 'use value' become a determinant factor of economic forms? We shall describe only a few of many cases. Marx devoted special attention to money, in itself a commodity, but one whose 'use value' form and properties belong to the realm of economics. 43

In exchanging a commodity for money, the material remains unchanged as the form changes, because in money the content itself is part of the economic form.⁴⁴

A similar process occurs in labor-capital relations. The consumption of a labor factor is part of the labor process itself. But in this case, the consumption of the 'use value' falls within the economic process, because the 'use value' is itself determined by 'exchange value.' 45

'Use value' affects economic form by determining the economic lifetime of fixed capital, production process, and its cycles. All of these participate in determining the velocity of reproduction. 46 'Use value'

- 42. Theories II: 489, III: 252.
- 43. Grundrisse, p. 174: "The study of the precious metals as subjects of the money relations, as incarnations of the latter, is therefore by no means a matter lying outside the realm of political economy, as Proudhon believes, any more than the physical composition of paint, and of marble, lies outside the realm of painting and sculpture."
 - 44. Ibid., p. 667.
- 45. Ibid., p. 274. "The use value which confronts capital as posited exchange value is labour. Capital exchanges itself, or exists in this role, only in connection with not-capital, the real not-capital is labour.
- "If we consider the exchange between capital and labour, then we find that it splits the two processes which are not only formally but also qualitatively different, and even contradictory:
- "(1) The worker sells his commodity, labour, which has a use value like all other commodities, for a specific sum of exchange values.
- "(2) The capitalist obtains labour itself, labour as value-positive activity, as productive labour.

"The separation of these two processes is so obvious that they can take place at different times, and need by no means coincide. . . . In simple exchange, circulation, this double process does not take place. If commodity A is exchanged for money B, and the latter then for the commodity C, which is designed to be consumed, the original object of the exchange, for A—then the using-up of commodity C, its consumption, falls entirely outside circulation; is irrelevant to the form of the relation; lies beyond circulation itself. What he does with commodity C is a question which belongs outside the economic relation. Here, by contrast, the use value of that which is exchanged for money appears as a particular economic relation, and the specific utilization of that which is exchanged for money, forms the ultimate aim of processes." And ibid., p. 311: "Capital has consumed its material with labour and its labour with material; it has consumed itself as use value, but only as use value for itself, as capital. Its consumption as use value, therefore, in this case falls within circulation itself, or rather, it itself posits the beginning of circulation of its end, as one prefers. The consumption of the use value itself here falls within the economic process, because the use value is itself determined by exchange value."

46. Ibid., p. 685: "Fixed capital, circulates as value only to the degree that it is used up or consumed as use value in the production process. But the time in which it is

also helps to determine the distinction between fixed capital and circulating capital.⁴⁷

The theory of simple or expanded reproduction rests heavily on the distinction between means of production and means of consumption, according to the 'use value' of the commodities. To be more specific, the effect of 'use value' on the content and significance of the theory of reproduction can be observed in discussing the conditions required for equilibrium. For equilibrium to exist, two conditions must be met:

(i) Quantitative equality, i.e., equality in exchange value given in simple reproduction as

$$v_1 + s_1 = c_2$$

and in expanded reproduction as

$$v_1 + av_1 + k_1 = c_2 + ac_2$$

where subscript 1 indicates means of production, and subscript 2 indicates means of consumption; v, variable capital; c, constant capital; s, surplus value; k, capitalist consumption; av, accumulation of variable capital; ac, accumulation of constant capital.

(ii) The presence of subscripts 1 and 2 in the required 'use value' form, i.e., as means of production or of consumption, is vital for the continued reproduction in the economy.⁴⁸

The same idea also appears elsewhere in Marx's works:

In considering surplus value as such, the *original form of the product*, hence of the surplus product, is of no consequence. It *becomes important* when considering the actual process of reproduction, partly in order to understand its form and partly in order to grasp the influence of luxury production, etc., on production. Here is another example of how *use-value* as such acquires economic significance.⁴⁹

It thus emerges that the exclusion of 'use value,' noted at the beginning of the analysis, is now replaced with a growing measure of incor-

consumed and in which it must be reproduced in its form as use value, depends on its relative durability. Hence its durability—the greater or smaller amount of time during which it can continue to perform its function within the repeated production processes of capital—this aspect of its use value here becomes a form-determining moment, i.e., a determinant for capital as regards its form, not as regards its matter."

47. Ibid., p. 692: "Now, however, with the distinction between circulating capital (raw materials and product) and fixed capital (means of labour), the distinctness of the elements as use values is posited simultaneously as a distinction within capital as capital, or its formal side. The relation between the factors which had been merely quantitative, now appears as a qualitative division within capital itself, and as determinant of its total movement (turnover)."

48. Capital II: 394.

49. Theories III: 251-52, II: 488-89; emphasis added.

poration of 'use values' as a necessary condition for production. Abstract labor produces value, but this value is stored, transposed, and accumulated as capital for growth—only if it takes material form, i.e., 'use value.' This is the basis for Marx's well-known distinction between productive and useful labor. Labor is productive not only because it produces value, but also for the reason that it produces means of production or capital stock to allow the accumulation of past labor for economic growth and development.

The Third Stage of Transformation

In the third stage 'use value' becomes the determinant of the quantity produced. Initially,⁵⁰ Capital I ignores 'use value.' However, as Marx develops the concept in Capital I 'use value' as such for others and finally 'use value' for society's needs, becomes a necessary condition for the production of value. Labor must satisfy social needs to produce value. This condition is so strong that Marx argues that any human labor failing to meet it produces no value at all.⁵¹

The above-cited passages show that—contrary to the usual interpretation—'use value' plays a central role in Marx's model. However, in the first two stages of transformation, nothing precise is said about the quantity that should be produced and supplied. Up to that point Marx merely assumed a given quantity adequate to meet needs. As long as Marx dealt with a single commodity only, he could accept the above-mentioned assumption without inquiring further into the definite quantity demanded. However, when Marx moves from a single commodity microanalysis to macroanalysis of whole sectors, the quantity required and demanded becomes a central concern of the theory. ⁵²

It is in the third stage of the transformation, that Marx explains explicitly the determinants of needed output. The reconsideration of this

^{50.} Marx, "Notes on Wagner": "The method of political economy," pp. 71-82 and 14a.

^{51.} Capital I: 37: "Whoever . . . produce . . . commodities . . . must not produce use-values, but use-values for others, social use-values"; and p. 107: ". . . suppose that every piece of linen in the market contains no more labour-time than is socially necessary. In spite of this, all these pieces taken as a whole may have had superfluous labour-time spent upon them . . . the effect is the same as if each individual weaver had expended more labour-time upon his particular product than is socially necessary"; and ibid. pp. 186, 202-3; Theories II: 507-9.

^{52.} Capital III: 181: "... to say that a commodity has a use-value is merely to say that it satisfies some social want. So long as we dealt with individual commodities only, we could assume that there was a need for a particular commodity—its quantity already implied by its price without inquiring further into the quantity required to satisfy this want. This quantity is, however, of essential importance, as soon as the product of an active branch of production is placed on one side, and the social need for it on the other. It then becomes necessary to consider the extent, i.e., the amount of this social want."

quantitative problem—only generally treated in Capital I—adds a new dimension to value theory. In other words, the previous condition, which referred to the single commodity ('nothing can have value, without being an object of utility'), is now transformed when related to total product of a particular sector of social production (Capital III: 620). It is now required that the product of the sector should be produced only in such quantity as to fulfill the social need; i.e., only the quantity necessary to meet social needs has value. As long as the allocation of labor and other production factors accords with the needs of the economy, commodities will be sold according to their value. This is the law of value as adjusted to aggregate supply in the economy; it refers to the entire supply rather than to particular commodities.

'Use value' and 'socially necessary labor' take on new meanings in Capital III. Relating to the 'use value,' Marx finds:

- (i) The economic significance of the 'use value' of the social product depends on the *definite social demand or need* (Capital III: 178) for each particular commodity. The 'use value' of a single commodity that is dependent on whether it satisfies a human need is economically different from the 'use value' of the mass of products, which depends on whether it satisfies the definite and adequate quantity of the existing social need for it.⁵³
- (ii) The 'use value' becomes the factor which determines and fixes the quantity which ought to be produced: "The social need, that is, the use-value on a social scale, appears here as a determining factor for the amount of total social labour-time which is expended in various specific spheres of production" (Capital III: 621; emphasis added).⁵⁴
- (iii) The adequate satisfaction of social needs, i.e., the social 'use value,' dictates what part of the total labor time is required to produce the needed quantity of commodities. For one unit of a single commodity, 'socially necessary labor time' is the hours of labor essential for producing it under normal conditions and with the average degree of skill and intensity prevalent at the time. For the product of a sector (or whole economy) 'socially necessary labor time' is the hours of labor re-
- 53. Capital III: 620-21: "... not only is no more than the necessary labour-time used up for each specific commodity, but only the necessary proportional quantity of the total social labour-time is used up in the various groups. For the condition remains that the commodity represents use-value. But, if the use value of individual commodities depends on whether they satisfy a particular need, then the use value of the mass of the social product depends on whether it satisfies the quantitatively definite social need for each particular kind of product in an adequate manner, and whether the labour is therefore proportionately distributed among different spheres in keeping with these social needs which are quantitatively circumscribed"; cf. Capital III: 193, 194, 189 (emphasis added).

54. Capital III: 620-21: "For the condition remains that the commodity represents use-values"; "The limitation . . . is due to the use-value." Also Theories II: 209-10.

quired to produce the socially needed portion of output of the sector (or economy) under the normal conditions. If more of this time is used and more goods are produced than required by the 'use value,' then, despite the quantity of the labor time invested, the total quantity produced represents less value. This happens even if each individual commodity contains only the normal and necessary labor time; like idleness and unskilled labor in Capital I. Thus labor time can be wasted—applied beyond socially necessary labor time—even if each unit of each commodity is produced with normal efficiency, if the total output of the sector (economy) exceeds the social need. The opposite occurs when less is produced than is required by the social need.⁵⁵ In this case the total value will be higher than the labor time invested (like diligence in Capital I). There is no doubt but that the function which Marx assigns here to 'use value' verifies not only its importance but also its active role in the operation and make-up of the economy. The emphasis on the determinant role of 'use value' and its new meaning as a definite quantity of commodity required to satisfy the social need for it, calls for a change in the definition of socially necessary labor time:

... quantitative limit to the quota of social labour-time available for the various particular spheres of production is but a more developed expression of the law of value in general, although the necessary labour-time assumes a different meaning here. Only just so much of it is required for the satisfaction of social needs. The limitation occurring here is due to the use-value [Capital III: 621; emphasis added]⁵⁶

55. Capital III: 620-21: "... let us assume that proportionally too much goods have been produced, although only the labour-time necessary under the prevailing conditions is incorporated. ... But in general, too much social labour has been expended in this particular line; in other words, a portion of this product is useless, it is therefore sold solely as if it had been produced in the necessary proportions"; and ibid., pp. 183-84: "... if commodity has been produced in excess of the social [need], labour-time is squandered and the mass of the commodity comes to represent a much smaller quantity of social labour." And Theories II: 521: [This same idea] "just as it is a condition for the sale of commodities at their value, that they contain only the socially necessary labour-time, so it is for an entire sphere of production of capital, that only the necessary part of the total labour-time of society is used in the particular sphere, only labour-time which is required for the satisfaction of social need (demand)."

56. This new meaning of the socially necessary labor time does not appear only in the manuscript of Capital III, dated 1864-65. It is already contained in the manuscript of the Theories of Surplus Value in 1862-63. Theories I: 225-26: "The total quantity of labour-time used in a particular branch of production may be under or over the correct proportion to the total available social labour, although each aliquot part of the product contains only the labour-time necessary for its production, or although each aliquot part of the labour-time used was necessary to make the corresponding aliquot part of the total product. From this standpoint, the necessary labour-time acquires another meaning. The question is: in what quantities the necessary labour-time itself is distributed among the various spheres of production? Competition constantly regulates this

This definition is quite different from the one given in *Capital* I, where the socially necessary labor time is the labor required to produce a commodity under normal conditions of production and with the average degree of skill and intensity prevalent at the time.⁵⁷ The meaning, "given the socially necessary labor," expresses an economic principle, a criterion, guaranteeing an adequate distribution of the society's labor amongst the various production branches, which assures a production of only so much of the output as is required to satisfy the particular social needs, i.e., social 'use value.' According to what has been said, the 'socially necessary labor time,' on the level of the economy as a whole, should be understood as the time that is required under normal technological conditions and labor intensity (*Capital* I) to produce the commodity, i.e., 'use value' in the amount determined by the size of the social need (*Capital* III).

The Fourth State of Transformation

From what we have seen so far concerning the three stages of transformation of 'use value' (i) Marx has not withdrawn 'use value' from the economic theory; on the contrary, he applied it intensively to his analysis. (ii) In abandoning the high level of abstraction and on approaching economic reality, he expands and develops the meaning of 'socially necessary labor time' and 'use value.' (iii) He assigns 'use value' an active role; this can be seen in his assertion that the 'use value,' on a social scale, appears as an allocation factor of the amount of total social labor time expended in various specific spheres of production. As long as the 'use value' has been conceived as the ability to satisfy a definite need, it cannot fulfill any active role in the economic process. It constitutes only a part of the economic process, but not an active part. However, in the realm of the whole economy, the problem is much more complex; this, because a change in 'use value' in Marx's model is equal to the change in the social need. This social need, as stated in the third stage, brings about a change in the quantity of labor

distribution, just as it equally constantly disorganizes it. If too large a quantity of social labour-time is used in one branch, the equivalent can be paid only as if the correct quantity had been used. The total product—that is to say, the value of the total product—is in this case, therefore, not equal to the labour-time contained in it, but is equal to the proportionate labour-time which would have been used, had the total product been in proportion to production in the other spheres. But inasmuch as the price of the total product falls below its value, the price of each aliquot part of it falls. . . . Assuming that the commodity has 'use value,' the fall of its price below its value shows, therefore, that, although each part of the product has cost only the socially necessary labour-time (here it is assumed that the conditions of production remain unchanged), a superfluous—more than necessary—total quantity of social labour has been employed in this one branch."

required by an economy to pass on to production in the "social scale," thereby causing a change in the 'necessary labor time,' expanded in its new significance.

This approach to 'use value' appears to contradict what is generally accepted and known as Marx's opinion. But, as I have attempted to show, it is Marx himself who leads us to the above conclusion.

Attention must be paid to what the 'use value' determines: given the techno-productive conditions, the satisfaction of x amount of 'social need' of product A requires y hours of labor. However, 'use value' cannot determine the opposite, i.e., why the existing production conditions necessitate y hours of labor. This is determined solely by the 'socially necessary labor time,' since only this 'socially necessary labor time' reflects the techno-productive conditions—the production function. 58

In the third stage of transformation, we learn how 'use value' specifies the proper output, but there is no explanation of the *mechanism* which determines output. The fourth stage deals with this issue.

Each of the volumes of *Capital* focuses on a central issue or set of related issues. Volume I deals with value and surplus value, Volume II with simple and expanded reproduction, and Volume III with profit theory (rate of profit, average rate of profit, falling tendency of profit rate), and the transformation of values into prices. Chapter 10, which deals with market prices and market values (and the related passages in *Theories of Surplus Value*)⁵⁹ are generally ignored because they contradict the prevalent Ricardian image of Marx.

The ideas expressed by Marx in Capital III, Chapter 10, are particularly vital to the 'use value' problem and its place in the Marxian theory. Unfortunately, this section is one of the worst organized and most incomplete of all of Marx's manuscripts. Chapter 10 is difficult to understand; a multitude of topics is raised and the analysis is unclear. While it is the subject of many debates, we can reconstruct Marx's main ideas by combining passages from it with parallel ideas in Theories, since there is continuity in Marx's thought from the earlier work to Chapter 10.

In general, Capital III, Chapter 10, completes the analysis in Chapters 8 and 9. In Chapter 8, Marx explains how a difference in the composition of capital creates a variety of levels between sectors in the rate of profit. Chapter 9, in contrast, stresses the importance of a single general rate of profit as a condition for equilibrium in the whole

59. Theories II: 203-10, 254-75, 507-10.

^{58.} Marx, "Notes on Wagner," p. 199. "Naturally it does not play the role of its opposite number, of 'value."

economy. The apparent contradiction is resolved through the 'price of production,' as a converted form of value.⁶⁰ 'Price of production' equals production costs plus average profit rate. The production costs vary between the branches; therefore, 'price of production' is not an absolute price. It is a relative price which distributes labor and the other factors of production among the various industries in the economy.⁶¹ This is the general equilibrium price. However, the products are sold at an absolute price, the market price (they do not have two prices: production price and market price). Only those market prices which clear all markets and make possible average profit rates are reflected in the 'price of production.'

This raises the question: What is the relation of the market price to value? Marx's answer, in the form of market value, is given in Chapter 10. The importance of Chapter 10 stems also from the fact that here, for the first time in Capital, the theory of 'market value' is introduced. The principle of 'market value' is not new to Marx's work. In Theories he had already used it intensively in his analysis of rent and profit and in his critique of Ricardo's views on these issues. He also applied it afterwards in Chapters 37-47 of Capital III to analyze problems of rent. However, these are only applications of the concept of 'market value' to specific problems. Chapter 10 formalizes the theoretical principle and gives it an essential role in Marx's economic theory. Marx relates the market price to market value, and not to value. This, in essence, is the meaning of necessary labor time, which we discussed in the third stage. This multisided process of price production, general profit rate, market price, and market value occurs simultaneously in the form of emigration of capital and production factors activated by competition. Competition has two forms-within an industry, and between industries. 62 Within an industry, the content of competition is the formation of market value and price; its role is the elimination of inefficient firms; and its outcome is the concentration of capital. Between industries the content is to set the general rate of profit and 'price of production';63 the role is to ensure the social division of labor: 64 and the outcome is a

^{60.} Capital III: 161, 194.

^{61.} Ibid., p. 191.

^{62.} Ibid., p. 177: "What competition, first in a single sphere, achieves is a single market-value and market-price derived from the various individual values of commodities. And it is competition of capitals in different spheres, which first brings out the price of production equalizing the rates of profit in the different spheres"; also *Theories* II: 126-27, 205-6, 208.

^{63.} Capital III: 192.

^{64.} Dispossession of one industry by the other is impossible since it destroys the division of labor essential to the economy. *Capital III*: 191: "... one sphere of production is, in fact, just as good or just as bad as another. Every one of them yields the

general equilibrium of the economy.

In Capital III, Chapter 10 is a continuation of Chapters 8 and 9. Together they analyze the conversion of profit into 'average profit.' They use assumptions different from those contained in earlier parts of Capital. The most important change is that from homogeneity to heterogeneity of input ratios. ⁶⁵ Capital I assumes only one single level of productivity. Capital III, Chapters 8 to 10, together with those on the tendency for the rate of profit to fall, and the relevant parts of Theories, assume the existence of several levels of productivity. ⁶⁶ In Capital I, Marx explained how the productivity level is determined by various factors: skilled labor, technology of the means of production, the organization of the production process, and natural conditions. ⁶⁷ (By 'natural conditions' Marx means the differential fertility of agricultural land and mines, forests, etc.) All these factors, except the 'natural conditions,' are included in the Marxian term 'the technical or organic composition of capital': ⁶⁸

If the same labour sets more constant capital in motion, it has become more productive. If the reverse, then less productive. Thus, there has been a change in the productivity of labour, and there must have occurred a change in the value of . . . commodities [Capital III, p. 201].

... where the change in the productivity of labour does not arise from a change in the method of production, but from the natural fertility [Theories II: 251]... this would not alter the organic composition of the capital employed [p. 252]... then the value... would fall... [p. 251].

The 'composition of capital' and the 'natural conditions' determine productivity. The essential point is that the value of identical commodities is *not equal* if they are produced with different levels of productivity. It is of no importance if these different values are caused by the 'composition of capital' or by the 'natural conditions.'

Marx desires the analysis in *Capital* III, Chapter 10, to be general and relevant to all circumstances. He therefore uses the term 'social productivity' and ignores specific causes of differences in productivity.

same profit, and every one of them would be useless if the commodities it produced did not satisfy some social need."

^{65.} First appeared in *Capital II*, in the discussion on expanded reproduction, and in *Theories I* and II.

^{66.} Theories II: 204-5, 206-7; Capital III: 173.

^{67.} Capital 1: 40.

^{68.} Capital III: 255, 208, 212, 217, 218, 221-22; chs. 37-47; Theories II: 262-63; chs. 11, 12.

For example, when he writes: "suppose that the bulk of commodities is produced under approximately similar normal social conditions" (Capital III: 179), 'normal social conditions' has a wider meaning than the natural or technical conditions alone. The wide definition of 'normal social conditions' is also reflected in Marx's distinction between less favorable, average, and more favorable conditions.

Marx divides each industry into three techno-productive processes: 69 "the particular conditions under which the individual capitalists produce . . . fall into three categories" (Theories II: 204); one category produces under average conditions (II), another produces under less favorable conditions (I), and finally a third group produces under more favorable than average conditions (III). Correspondingly, productivity is low in (I), average in (II), and high in (III). The value of commodities produced in each group will be: (I)—high; (II)—average; (III)—low. The outputs of all three groups combined compose the industry's total output.

How can we define the 'normal production conditions' that determine socially necessary labor time when different groups of firms use different production functions? As long as the proportions of inputs or natural conditions are kept uniform, 'normal production conditions' are clearly defined and the principle of socially necessary labor is easily derived. A deviation from a given value level can occur only as a result of individual changes for better or for worse: diligence or idleness. 70 These, as we know, do not affect the existing level of value. When there are several productivity levels and the production functions are not uniform, and the normal production conditions in the sector are not uniform, either, then they can no longer be clearly defined. The definition of normal production conditions and the determination of which particular combination of inputs represents socially necessary labor, become the critical issue in defining value. In industries where firms are producing the same commodity but differ in their production function the identical commodities will have different values.

The theory of value and the principle of socially necessary labor require a uniform level of value for a given commodity. It is, therefore, necessary that the different individual firms produce the same kind of commodity, at one social value, the market value. Marx defines market value a few times and in various contexts:

^{69.} The division into three techno-productive groups is merely methodological. It is equally possible to assume the existence of more (or even an infinite number of) groups of processes, which would permit discussing the issue as a continuum rather than as separate discrete events.

^{70.} Capital I: 39.

On the one hand, market value is to be viewed as the average value of commodities produced by different producers in a single sphere and, on the other hand, as the individual value of the commodities produced under average conditions of their respective sphere and forming the bulk of the products of that sphere [Capital III: 1751.⁷¹

The market value is formed since the techno-productive conditions of the sector are not uniform:

The general value of the products of this group is *the same* for all, whatever may be its relation to the particular value of each individual commodity. This *common* value is the *market-value* . . ." [*Theories* II: 205].⁷²

In Capital III, Chapter 10, Marx discusses three aspects of the problem of defining and determining market value: (i) the determination of market value when techno-productive composition varies, but total social need equals exactly the total industry product (Capital III: 177–81); (ii) the determination, with varying techno-productive composition, of market value when total product is fixed, but social need varies (ibid., p. 181); and (iii) the various influences on supply and demand and the

71. Theories II: 204-6: "The value of the commodity—which is the product of a particular sphere of production—is determined by the labour which is required in order to produce the whole amount, the total sum of the commodities appertaining to this sphere of production and not by the particular labour-time that each individual capitalist or employer within this sphere of production requires. The general conditions of production and the general productivity of labour in this particular sphere of production . . . are the average conditions of production and the average productivity in this sphere.... The general result is that: the general value of the products of this group is the same for all, whatever may be its relation to the particular value of each individual commodity. This common value is the market-value of these commodities, the value at which they appear on the market. Thus competition, partly among the capitalists themselves, partly between them and the buyers of the commodity and partly among the latter themselves, brings it about here that the value of production is determined by the total mass of social labour-time required by the total mass of the commodities of this particular sphere of social production and not by the individual values of the separate commodities or the labour-time the individual commodity has cost its particular producer and seller.'

72. Capital III: 179-81; Theories II: 204: "Now the particular conditions under which the individual capitalists produce, necessarily fall into three categories. Some produce under medium conditions, i.e., the individual conditions of production under which they produce coincide with the general conditions of production in the sphere. The average conditions are their actual conditions. The productivity of their labour is at the average level. The individual value of their commodities coincides with the general value of these commodities. Another category produces under better than average conditions. The individual value of their commodities is below their general value. If they sell their commodities at the general value, they sell them above their individual value. Finally, a third category produces under conditions of production that are below the average." Cf. also Theories II: 270-72, 289 ff.

market price (ibid., pp. 182-91). Only the first two topics are relevant to our discussion here, and in any case the third is actually a subtopic of the second. It should be noted that the difference between the first two cases is that of two different assumptions. When both are taken simultaneously together, the supply-oriented and demand-oriented (classical and neoclassical) approaches combine into a completely unified economic conception. This, in particular, is what distinguished Marx from Ricardo.

The two conditions of market value: the first condition

Market value depends on two conditions: first, the proportional size of the techno-productive groups, and second, the equality of commodities produced and the social need for those commodities. The first condition determines the way in which normal production conditions are set, when the social need is assumed to be exactly equal to the total output. According to Marx, normal productive conditions, values, and socially necessary labor will differ according to the relative share of each group in the total output: "Which of the categories has a decisive effect on the average value will, in particular, depend on the numerical ratio or proportional size of the categories" (Theories II: 204–5). Three possible situations can exist: 74

- (a) If most output is produced in the group (II) plants and that part of output not produced by the group (II) plants is equally divided between groups (I) and (III), the *market value* of the industry's commodities is fixed by group (II). This despite the fact that the individual value of (I) > (III), and the commodities of (I) and (III) are sold below or above their individual values, respectively.⁷⁵
- (b) The total output does not change, and neither does the social need. If more output is produced in group (I) than in group (III) so that "the part of the mass produced under less favourable conditions forms a relatively weighty quantity as compared with the average mass (II) and with the other extreme," then the market value is regulated by group (I). Market value, in this case, will exceed the values of (II) and (III).
- (c) The total quantity, as well as the social need, remains unchanged, but most of the output is now produced by group (III). This quantity exceeds that produced by (I) and (II) combined: "Suppose that the mass of commodities produced under better than average conditions considerably exceeds that produced under worse conditions,

^{73.} Capital III: 182, 178, 620-21.

^{74.} Capital III: 179-81; Theories II: 204-5.

^{75.} Capital III: 179; Theories II: 204.

^{76.} Capital III: 179; Theories II: 204.

and is larger even compared with that produced under average conditions. In that case, the part produced under the most favourable conditions determines the market value." In this case normal production conditions will be those of group (III), or rather, whereas in case (b) market value approaches the value of group (I), but can equal it only in extreme instances, so the market value in this case (c) approaches the values of group (III) but can equal it only in extreme instances.

As noted, the analyses in Capital I and Capital III, and Theories II are not identical. Firstly, Marx replaces a homogeneous technology level by a heterogeneous one. Secondly, reference is no longer to the ordinary average socially necessary labor, but to a weighted quantity. Thirdly, in Capital I, extreme production processes (of particularly skillful or particularly idle workers) are not taken into account in determining normal production conditions. In Capital III, both extremes play a role in determining these conditions. "Idlers" work is represented as economically significant in group (I) and "diligence" in group (III). Both extreme groups participate in the determination of values, according to the relative share of each group's output in the branch total. Fourthly, had Marx analyzed a continuous series of an infinite number of processes, the two extremes would have emphasized even more the role of marginal firms in determining normal production conditions and market values.

Conditions of market value: the second condition

In Capital III: 181–82, Marx examines the effect of *changes in social needs* on the normal production conditions, market value, and socially necessary labor, ⁷⁹ and again distinguishes between three situations:

- (a) Total output produced equals total need for the commodity. Here, normal production conditions, market value, and socially necessary labor are determined according to the first condition, i.e., according to the relative sizes of the three techno-productive groups, regardless of which particular group determines value. This conclusion emerges from Marx's fundamental premise, "This mass of commodities does not merely satisfy a need, but satisfies it to its full social extent." ⁸⁰
- (b) Total need for the output of an industry exceeds its output. In this case, market value is determined according to the value of the commodities produced under the worst conditions—group (I). This

^{77.} Capital III: 180; Theories II: 204.

^{78.} Capital III: 180-81; Theories II: 205.

^{79.} Capital III: 181-82.

^{80.} Ibid., p. 182.

holds even if groups (II) and (III) of higher productivity produce most of the output and therefore, according to Marx's first criterion, they should determine value.⁸¹

(c) Total need for the output of an industry is less than its output. In this case, market value, socially necessary labor, and value will always be determined by the value of the commodities produced under the best conditions—group (III). This holds even if by the first criterion group (I) or (II) determines value: "That therefore is one of extremes which determines the market value, in spite of the fact that in accordance with the mere proportion of the commodity masses produced under different conditions a different result should obtain." We see here emphatically the key role of 'use value'; it influences the choice of techno-productive group and normal productive conditions. Thus, 'use value' has an active—but indirect—role in determining value.

It is important to distinguish between the conditions which determine the range in which value could vary—the different productivity levels—and the market size which determines the actual value, i.e., the specific point within this range. This is equivalent to the usual economist's distinction between a curve and specific points on the curve. The techno-productive conditions of an economy, its level of productivity, and normal productive conditions, all determine the range in which value and market value are set. Marx's distinction between three techno-productive groups sets the framework, the range in which value can be determined. This range is defined by the technoproductive conditions and productivity level only, and does not depend at all on 'use value.' It does, however, include all possible magnitudes of value given by the groups (I), (II), and (III). Thus, technoproductive conditions cover the entire range of possibilities, but do not determine the precise value. This function is left to 'use value,' which determines the particular techno-productive segment (in the case of a discontinuous curve) that will satisfy the given social need. 'Use value' does not determine the proportion of inputs to the output; therefore, it does not determine the quantity of socially necessary labor, nor does it set the number of techno-productive groups. But since 'use value' determines the quantity to be produced, it also determines as an external non-technical factor which of the techno-productive groups are necessary and can best satisfy a given level of social need or social 'use value.'

Assuming three technical groups with different productivity levels, by adding them together we can construct the industry's supply curve.

^{81.} Ibid., pp. 182, 185-87.

^{82.} Ibid., p. 182.

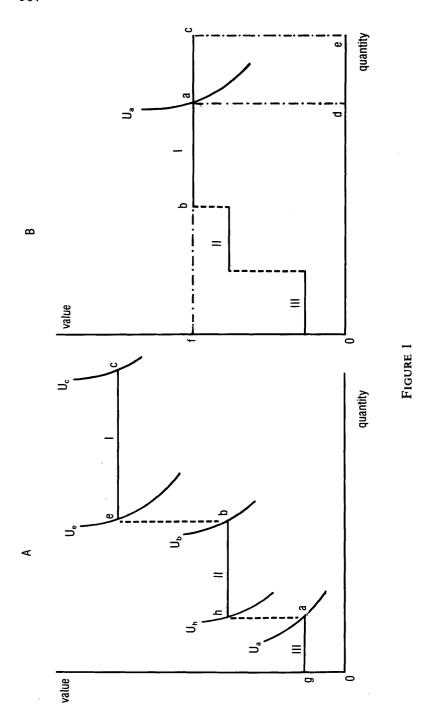
The curve will have discontinuous segments, I, II, III, ranked by level of costs in producing a unit of output. (A continuous supply curve would not change the results.) Differences in value can be represented by shifts in the demand curve—'use value' (see Figure 1). In panel A of the figure the supply curve is ga-hb-ec, with a substantial difference in costs between I and II. The value range is given by the segments ga, hb, and ec. The market value is determined in the value range, fixed by the groups' productivity, respectively. However, this does not determine the precise market value. This is given by the relevant 'use value' curve, $(U_a,\,U_h,\,U_b,\,U_e,\,U_c)$. For the gaps between segments of the 'supply curve' ag and ce, the 'use value' curves, U_a to U_c , in Figure 1, determine which segment of the supply curve fixes normal production conditions. The value is determined in ah by III; in be by II, and in c by I. Thus, the 'use value' curves enter the value determination process along with three techno-productive groups and by making the selection, fix the relevant points within the value range. Along ec, hb and ga the size of value is respectively constant. The selective role of 'use value' is clearest for market equilibrium. But what about a disequilibrium? In panel B of Figure 1 the difference in productivity between (I) and (II) is assumed to be small. At point a the market is in disequilibrium. The quantity demanded od is smaller than the quantity supplied, oe. This occurs because with a price of, all firms in the segment bc are producing, and any one of them is less favorable than the others in this segment—Marx's assumption. The market value, selected by the 'use value,' U_a will still be regulated by (I). The divergence between supply and demand does not hurt this selective role of the 'use value.'

Some points for clarification

Marx himself indicates that the analysis in *Capital III*, Chapter 10, relates to market value but not market price.⁸³ However, he also shows that the active role of 'use value,' when it works through the market disequilibrium, brings about changes in the *market value* itself.⁸⁴ The

84. Ibid., p. 182.

^{83.} Ibid., p. 180: "We are not dealing here with the market price, insofar as it differs from the market-value, but with the various determinations of the market-value itself" (emphasis added). Ibid., p. 187: "... if the demand and consequently the market-price, fall... the market-value itself shrinks and balances with the market-price as result of inventions which reduce the necessary labour-time... if demand increases... market-price rises above the market value, this may lead to too much capital flowing into this line... market-price will fall below the market-value... In some lines of production it may also bring about a rise in the market value itself, for a shorter or longer period with a portion of the desired products having to be produced under worse conditions... (emphasis added).



'use value' is an active factor in the market value process, functioning through the size of market and social needs: "This social need, that is, the use value on the social scale, appears here as a determining factor for the amount of total labour-time which is expended in various specific spheres of production" (emphasis added). My analysis of the 'use value' issue compels me to disagree with the conclusion of Ronald Meek in his excellent contribution and fundamental book. Meek firmly opposes the conventional opinion that "Marx ignored demand." He is certainly in the right when he says: "demand was the main force determining the proportion of social labour force allocated to any given productive sector at any given time" (p. 178). Some critics suggested "that Marx... is in effect admitting that the quantity of socially necessary labour required to produce... is partly dependent upon demand conditions" (p. 178). Meek disputes this claim, arguing that

Marx does not say that the change in demand will cause a change in the quantity of socially necessary labour. . . . Demand certainly determines the total quantity of labour to be allocated to the industry producing any commodity under given conditions of labour productivity, but it is this productivity and not the demand, which determines the value of a unit of the commodity.

I take issue with Meek's distinction between the allocation of social labor to the various sectors and the determination of the quantity of socially necessary labor time required to produce a unit of output. My understanding of the texts is that Marx conceived these two concepts as one, the same law, but relevant to different levels of analysis:

Just as it is a condition for the sale of commodities at their value, that they contain only the socially necessary labour-time, so it is for an entire sphere of production of capital, that only the necessary part of the total labour-time of society is used in the particular sphere, only the labour-time which is required for the satisfaction of social need (demand) [Theories II: 521; emphasis added].

It is indeed the effect of the law of value, not with reference to individual commodities . . . but to each total product of the particular social spheres of production . . . so that not only is no more than necessary labour-time used-up for each specific commodity, but only the necessary proportional quantity of the total social labour-time is used up in various groups [Capital III: 620; emphasis added].87

^{85.} Ibid., p. 621.

^{86.} R. L. Meek, Studies in the Labour Theory of Value (London, 1973).

^{87.} Theories II: 521: "If more is used, then, even if each individual commodity only

Marx's attitude seems clear: (i) labor productivity determines the value, i.e., the socially necessary labor time required to produce a unit of the commodity; (ii) the productivity is a function of the technology only, i.e., the quality of the factors of production; (iii) the technology, through the productivity, defines the normal conditions of production; (iv) the 'use value' cannot determine or influence the technical aspects of productivity's ability, capacity and efficiency. The latter is completely insensitive to 'use value.' The productivity, the normal conditions of production and the quantity of socially necessary labor, are a technical element and are, therefore, not constructed or created by the 'use value.'

But the question still arises: Is it because the socially necessary labor time is a technical factor that it is completely liberated and independent from the demand and 'use value'?88 If the technical factors alone determine the normal production conditions and socially necessary labor time, then in what form will it be decided what types of the technology I, II, or III participate and belong to the normal conditions of production? All the technological factors which exist in a given time? Always? Marx did not argue that since there exist various types of technology with different levels of productivity, then ipso facto, they automatically belong to the normal conditions of production. On the contrary, he emphasized the disappearance of different economic forms due to the backwardness of their technology. The technology does not exist in a vacuum, as itself, with itself, and for itself. It is strongly related to the general economic conditions of production, according to the requirements of the economy. The constraint here is the size of the social needs, the size the market, i.e., the 'use value.' In other words, insofar as the level of technology determines at a given time the productivity and the 'socially necessary labor time,' 'use value' by imposing the size of social need selects the kind of technology which is acceptable and belongs to the normal production conditions.

When various plants operate at differing levels of productivity, their aggregate determines the available technology and the possible levels of labor time. However, it is 'use value' that finally determines which level of productivity actually fixes socially necessary labor time.

contains the necessary labour-time, the total contains more than the socially necessary labour-time; in the same way, although the individual commodity has use-value, the total sum of commodities loses some of its use-value under the conditions assumed." And Capital III: 621: "This quantitative limit to the quota of social labour-time available for the various particular spheres of production is but a more developed expression of the law of value in general. . . ."

^{88.} Grigorovici, pp. 37, 43, 46-47.

More precisely, it is the productivity which directly determines the range of the socially necessary labor time; while 'use value'—serving as a regulator of the allocation of the social labor—chooses the relevant level of the productivity and so indirectly influences the value outcome. 'Use value' never defines the technical factors of the range and quantity of the socially necessary labor time required to produce a unit of the commodity; however, 'use value' is an active factor, but always an external factor in the determination process, which acts from the outside, as a limitation or an imposed constraint.

The idea that in the multisector economy and in an economy with many levels of productivity the value is determined only by the socially necessary labor time, in terms of *Capital* I, does not correspond to the production price and the condition that the total *sum* of value equals the total *sum* of prices. For multisector variable productivity economies, ⁸⁹ the theorem that the value is determined only by the socially necessary labor time, in terms of *Capital* I, must be revised; otherwise, we will violate the equilibrium condition that the sum of value equals the sum of prices.

Another point needing clarification is the nature of returns to scale. Needless to say, this issue is very important for the classical labor theory of value, with which Marx is usually identified. Demand is irrelevant for the determination of the value, when the entire industry produces under conditions of constant costs, i.e., constant return to scale. In this case (i) the long-run industry supply curve is horizontal and determines value, and (ii) the demand fixes quantity supplied, but it does not affect the value of the commodity produced.

Because Marx's long-run equilibrium is characterized by 'average profit rate' and 'price of production,' the 'market value' oscillates around the 'price of production' and not around the value. This modification of the value principle is necessary because of Marx's two assumptions: (i) the production functions of the firms in an industry are not identical; (ii) the 'value composition of capital' varies inside and between various sectors of the economy. Lacking these two assumptions, the profit received by each firm would be equal to the surplus value produced by each firm. In this case, there is no need for the 'price of production' as a regulator of the 'average profit rate.' Because of these two reasons, we can conclude that Marx's long-run equilibrium does not invalidate the differences between the levels of individual value produced by the different techno-productive groups. In other words, the equilibrium is achieved neither by an identical production function, nor by an assumption that the firms in an industry are similar.

Rather, the competitive mechanism distributes the surplus value between the firms differently than that produced. The differences in production functions between firms in an industry imply the existence of a unique 'market value.' This permits us to state that the 'market value' becomes a necessary result of different levels of productivity—i.e., natural conditions and technical composition of capital.

It should be borne in mind that Marx's theories of 'concentration and centralization of capital,' 'two forms of competition,' 'average profit rate,' etc., are based on the differences between the productivity levels of the individual firms in the industry plus the existence of a unique 'market value.' Competition in an industry destroys the weak and inefficient firms (the centralization process). Technological changes, changing composition of capital, and accumulation of capital (the concentration process) create the strong and advanced firms. In Marx's picture of capitalism, these two processes are permanent and endless. Of course, different productivity levels are also a permanent phenomenon in Marx's model.

Thus, if there are three discrete techno-productive groups, the disappearance of low productivity (high cost) group (I), and appearance of a new high productivity (low cost) group (IV), constitutes a permanent process in Marx's model (see Figure 2).

In Figure 2 the isoquants are given by 1, 2, and 3; and each of the techno-productive groups I, II, III, and IV has its own constant return to scale. The productivity—as measured by output/labor ratio—will be different as we move from (I) towards (IV). The value of an identical commodity differs between groups. The equal 'market value' does not cancel out the differences between A, B, C, and D respectively. Returns to scale are constant inside productivity groups (I) and (III), but returns to scale are irrelevant for the movement between productivity groups (from A to B to C) in Figure 2. If the output of the entire industry is the sum of outputs of discrete techno-productive groups, then the long-run aggregate supply curve takes the form shown in Figure 1. In this case the demand—'use value'—will be the only factor which selects the group representing the normal conditions of production, i.e., the 'market value.' This is the way 'use value' participates in the determination of value, despite the fact that it does not determine the productivity level of any of the specific groups.90

90. The value of products—direct and indirect labor—on every isoquant is related oppositely to the productivity, i.e., the value of III, II, I. This is derived according to Marx's idea that "The use of machinery... is limited in this way, that less labour must be expended in producing the machinery than is displaced by the employment of that machinery. For the capitalist, however, this use is still more limited. Instead of paying for the labour, he pays the value of the labour-power. Therefore, the limit to his using a machine is fixed by the difference between the value of the machine and the value of the labour power replaced by it' (Capital I: 392, The value of D < A and so on).

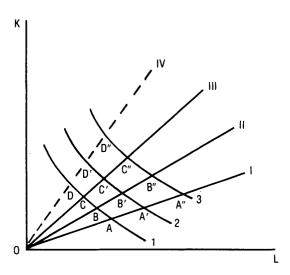


FIGURE 2

Note that if Marx had aggregated an entire industry exhibiting constant returns to scale and having one and only one productive process, then the plants could have differed only in their scale, and not in their cost functions. In this case, when the quantity supplied exceeds the quantity demanded, the falling price would equally hurt every one of the firms. The centralization process would cease to be effective. In fact, constant returns to scale appear several times in Marx's writings. The most outstanding example is the scheme of extended reproduction. Nevertheless, in other examples, Marx's production functions do not exhibit constant return to scale: the differential rent II, the intensification of labor—as opposed to the productivity of labor, the absolute and relative surplus value, etc.

Marx's model is dynamic in its very nature; thus constant returns to scale pose several acute problems of consistency. The constant-returns-to-scale notion, on an aggregative level for an entire industry or economy, is based on a unique capital-labor ratio, neutral technological change (e.g., like Hicks's) and constant relative shares of income. If the relevant production function is a homogeneous function of degree 1 and Euler's theorem is applied, then payments to the inputs, as return to their labor or capital contributed to the firm, would just suffice to exhaust the total product (the adding-up theorem). In contrast to this, Marx's analysis rests heavily on permanently increasing capitallabor ratios in most industries, labor-saving technological change, and increasingly unequal income distribution. Though Marx frequently, but only for methodological reasons, assumes a constant rate of surplus

value, his model essentially implies an increasing rate of surplus value.91

Conclusion

Marx saw the labor theory of value as a central axis of economic theory. He praised and esteemed Ricardo for using it. However, in this article we have tried to prove that the identification of Marx's labor theory of value with Ricardo's is erroneous. Marx both criticized and developed Ricardo's theory. Marx's critique included the basic problem of surplus value and its implications, profit theory, rent theory, production and the role of the factors of production. These issues encompass collectively the 'use value' problem raised in this article. Marx severely criticized Ricardo's neglect of the active role of 'use value' as a participant in the determination of the normal production conditions.

Marx's general model does not fit in with the classical and the Ricardian models. Marx cannot be incorporated in the classical system. though he used it as his point of departure. Marx's model is, of course, also different from the neoclassical approach. In the history of economic thought, in general, Marx occupied a unique position. However, when we narrow the comparison down to value theory only, the classical value theory in general and Ricardo's in particular are supplyoriented, while neoclassical value theory is demand-oriented. Each of these approaches emphasizes one side of the problem. The activization of 'use value' in the theory of value proves that Marx rejected both one-sided approaches. His efforts were directed towards formulating an aggregative and more general value theory which incorporates both sides—supply and demand, socially necessary labor time, and 'use value.' While he synthesized the two forces, Marx kept in view their different roles in determining value. Marx's activization of 'use value' places him closer to the neoclassical approach than to Ricardo. However, his use of a labor theory of value connects him to classical economics and Ricardo. Thus, Marx's value theory should be considered as a connecting link between the two basic schools of economic thought. One might even say that he succeeded where both of them failed. In any case, the Ricardian image ascribed to the Marxian value theory, though historically rooted, is essentially unjustified.

^{91.} R. L. Meek in his *Economics and Ideology and Other Essays*, pp. 129-42, emphasized the importance of the objective constraints on the increase of the rate of surplus value given by Marx in *Capital* I and II. However, this does not constitute a contradiction of what has been said above about constant returns to scale.

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