THE CONCEPTS OF DEVALUATION, VALORIZATION AND
DEPRECIATION IN MARX: TOWARD A CLARIFICATION

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I.

The value form is the necessary economic result of the capital—wage labour relation, and Marx devoted most of his life's work to disentangling the processes involved in the constitution, determination and movement of value. By so doing, he provided a theoretical analysis of the capitalist mode of production since the historical uniqueness of capitalism springs precisely from the fact that the surplus product is extracted and realized as surplus value. This result is predicated upon the appearance and development of the capital—wage labour relation. Ever since Marx, there has been a persistent concern in the marxist tradition with Marx's concept of value—its form and substance, structure and development, and its alleged internal inconsistencies. But in all of these discussions, there is a striking omission. In Marx, but even more so in the marxist tradition, a number of different concepts are employed, seemingly interchangeably, to depict the various processes resulting in an accretion or diminution of value. The accretion of value is generally referred to as a process of valorization or appreciation; the diminution of value as devalorization, depreciation, or devaluation. There is little or no distinction made between appreciation and valorization, or between devalorization, depreciation and devaluation in the contemporary marxist literature. This is particularly puzzling given not only the scrutiny which Marx's concept of value has otherwise attracted, but given also that in his economic analyses Marx was extremely

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careful about terminological consistency. In fact, if one examines Marx's work on the dynamics of the accumulation and circulation of capital, it is clear that while contemporary accounts do not distinguish between different concepts for the accretion and diminution of value, Marx himself makes systematic distinctions between a number of different though related processes.

When different processes are referred to with a single concept, and when the same concept can describe different processes, there is an inevitable confusion about the processes involved. The distinctions between these processes have never been made clear, and that is the purpose of this paper. This is not merely a problem in conceptual clarification, however, although such clarification is valuable in its own right and should help to elucidate certain aspects of the constitution, determination and movement of value in Marx. But like Marx's own analysis of value, this clarification is ultimately important for what it tells us about the structure and development of the capitalist mode of production. The confusion between the separate processes considered here has systematically blurred a number of issues that are currently being debated in the marxist tradition. Primary among these is probably the theory of crisis. A better understanding of the different processes involved in the accretion and diminution of value provides a firmer basis for explaining the origins of crisis as inherent in the value form itself; the constitution of value implies crisis. Further, this analysis will shed some light on the concept of fixed capital which in Marx is the least developed of all the major categories of capital. This applies particularly to the functioning of fixed capital in the overall circulation and reproduction. Finally, the disaggregation of different processes contributing to the accretion and to the diminution of value will have the perhaps surprising result of clarifying the status of capital employed by
the capitalist state. The bulk of this paper will be taken up with clarifying the different concepts. The implications of this clarification will be referred to only briefly and in the most summary form.

But before proceeding, it is important to get a sense of where the initial confusion lies. Is it in Marx? Or does it come later? The answer, in fact, is a bit of both. As with so many of his ideas, Marx's understanding of these processes developed over the span of his life. Though very much concerned with the determination of value, the make-up of the commodity, commodity exchange, and the origin of the money-commodity, Marx did not trace systematically the complex processes involved in the fluctuations of value, given the determination of the value form. Only in the Grundrisse did he seriously begin this investigation, and there we find the first discussion of valorization, devaluation, and so forth. Here, he has already begun to distinguish between different processes involved in the addition and subtraction of value from capital. Marx's ideas continue to develop, and the clarification between different concepts develops apace, but as shall be shown below, it seems that he does not completely work out the differences between all of the concepts. This is one source of confusion directly attributable to Marx.

By the time he wrote Capital, Marx certainly made a distinction between valorization and appreciation and between devaluation and depreciation. At least in the English tradition, this distinction has not been made clear, however. Actually in Marx these were not only different concepts, but he progressively used different language in referring to these different processes. So wherein lies the further confusion? It seems in English language marxism that the major source of confusion outside Marx himself lies in the translation of Marx's work into English. Even where Marx makes clear the differences between different processes and refers to them with systematically
different concepts, the English translations often do not reflect the distinction. The use of "depreciation", for example, is probably the most systematic mistranslation in many English versions of Marx. This is true of Capital in its various English translations, where "depreciation" is used to cover a multitude of different ideas, and where not every instance of depreciation in Marx's original is actually translated as "depreciation". But the confusion is even clearer and more damaging in Grundrisse.Clearer, because none of the systematic distinctions Marx makes survive in the English; more damaging, because it was precisely in Grundrisse with the attempt to clarify these conceptions that Marx on several occasions made explicit the differences between different processes. Martin Nicolaus, who performed a valuable political service by translating the text, seems to have been unaware that when Marx used different even if similar terms, he was indeed referring to systematically different processes. The mistranslation has obscured the systematic differences Marx made.¹

Nicolaus's indifference to the different processes responsible for fluctuations in value is undoubtedly due to the fact that the English language itself does not recognize these differences by attributing to each a different label. In fact, no neat conceptualization of these processes is possible in German either, but despite the resulting terminological awkwardness, Marx did make the necessary distinctions. Nicolaus's indifference most probably also originated in his own broader perspective on Marx's work. In particular, in a critique of his introduction to Grundrisse, Nicolaus has been accused of neglecting the form, structure, and different moments of value. He does in fact place little emphasis on the centrality and inner complexity of value in Marx, and this is remarkable in an introduction to the Grundrisse, where so many of Marx's final ideas about value are worked out. What Nicolaus does
instead is to fall back on an excessive concern with labour as an absolute, ahistorical category. It is not necessarily that labour was anything different for Marx, but that Marx also emphasized far more than the ahistorical character of human labour, the particular historical form it took as wage labour under capitalism and the value form associated with this capitalist relation of production. Of this Nicolaus says little. The eternalization of proletarian labour and consequent neglect of the structure of value can be detected in the writings of the Second International but found its full political expression in Soviet Marxism where, of course, it had the very practical function of justifying the continuation of proletarian labour under "socialism." This is not a tradition we should emulate.

Three sets of processes will be considered here: appreciation/depreciation, valorization/devalorization, and revaluation/devaluation. These constitute three distinct (although certainly related) sets of processes which, because of Marx's apparent conceptual and terminological confusion, and because of complete confusion in the English translations, are not conceived as separate processes. Since the distinction between these sets of processes is not understood, nor are the processes themselves understood, despite the emphasis that has been placed on Marx's value theory; depreciation is not devaluation, and neither is the same as devalorization. These sets of processes are central to Marx but rarely if ever even mentioned in discussions of value theory. This paper attempts an initial clarification to the confusion that attends these concepts.

II.

a) Appreciation/depreciation. The process of appreciation and depreciation is one that takes place purely in the price sphere. In the original Marx
uses the French "Appreziation" and "Depreziation." The price of a commodity expresses its value and its exchange value, in money terms; it is the money-form of value. As such it expresses the relation between commodities, which is exactly what Marx implied when he distinguished between money as standard of price and money as measure of value. Price and value are different expressions though inextricably related: "the two are constantly different and never balance out, or balance only coincidentally or exceptionally. The price of a commodity constantly stands above or below the value of the commodity, and the value of the commodity itself exists only in this up-and-down movement of commodity prices". Thus changes in the supply and demand for commodities constantly changes their price up or down but need have no effect at all on the value of these commodities. This is depreciation and appreciation — depreciation when the price falls, appreciation when it rises. Likewise, in the more extreme case when the value of money either rises or falls, this brings about a general fall or rise (respectively) in the prices of commodities without necessarily at all changing the value of commodities. This too is a case of simple depreciation or appreciation. In Grundrisse, Marx gives the example of the twist manufacturer who puts on the market 40 lbs. twist with a value of 200 thalers, because it contained a labour power equivalent to 200 thalers. But he can only sell the twist at 180 thalers, and so "the depreciation [Depreziation] of the twist manufacturer's 40 lb. twist from 200 to 180 necessarily appears as an appreciation [Appreziation] on the part of silver, a depreciation of twist relative to silver" (p. 446).

Depreciation is implied in appreciation; it is not a process of adjusting some already set price that represents the already determined value of a commodity. Depreciation and appreciation are implied in the very determination of value itself, since value is only realized — made real — through
exchange, and exchange implies the constant setting of price. Affecting
only prices, depreciation and appreciation express purely relative changes;
the moment such changes become absolute, meaning that some change in value
takes place, then depreciation and appreciation are themselves transformed
into something different.

b) Valorization/devalorization. The process of valorization is concerned
with the movement of value inherent in the creation and circulation (that is,
the definition) of capital. In the German, Marx uses "Verwertung" for valor-
ization. In its strictest sense, valorization is the movement involved in
the general formula: M-C...P...C'-M'. This can be disaggregated into three
identifiable but mutually dependent processes: first, the transformation of
social wealth into the value form. Value is the social expression of abstract
human labour — a social abstraction if you will — which is brought about not
simply ideally (in theory) but in reality. It is brought about by the con-
tinual comparison of different quantities of concrete labour power as objec-
tified in commodities exchanged in the market place. The development of the
value-form is clearly an historical process that depends on the development
of the world market, since otherwise commodities could express their value
only locally and there would in fact be myriad local laws of value, all more
or less separate. This is the first aspect of valorization. The second
aspect of valorization is implied in and a continuation of the first. It is
the definition of capital as "value in process." The universal valorization
of social wealth depends on the valorization of that particular use-value
which produces wealth — labour power — and this defines capital in a dual
sense. The sale and purchase of labour power as a commodity removes the
last obstacle to the continuous circulation of value, given that money, pro-
ducts and instruments of production are already exchanged as commodities.
But further, the valorization of labour power is a direct expression of the relations of production defining capitalism: on the one side a class of capitalist who own the means of production yet do no labour, and on the other a class of labourers who own none of society's means of production and are compelled to sell their own labour power in order to reproduce themselves.

The third aspect of valorization is implied in the first two and is, obviously, the expansion of value through the production and capitalization of surplus value. Since it reproduces itself by consuming productively part of the surplus product created by the working class, the capitalist class must constantly valorize a quantity of this surplus product. Since individual capitalists are in competition with each other and since capitalists can cheapen their products and thereby expand their markets at the expense of others by investing larger quantities of capital in more productive instruments of production, capitalists as a class are compelled to valorize continually increasing quantities of surplus product. They are compelled to capitalize increasing quantities of surplus value: valorization implies accumulation, the self-expansion of capital. Thus Marx notes that "the circuit of money-capital expresses ... simply the process of self-expansion and accumulation [Verwertungs- und Akkumulationsprozess]".  

Valorization is clearly basic to the definition and constitution of capital but one would hardly say the same for appreciation. In reality, the three disaggregated aspects of valorization are inseparable, and occur as part of a single process which, throughout Capital, Marx refers to as "Verwertung" even if it is not always translated as "valorization".

Devalorization is an integral part of the movement and circulation of capital that results in its valorization. As capital transforms itself through the circuit M-C...P...C'-M', it adopts a succession of bodily forms.
Specifically, in the M-C transaction, the value represented in M is realized in C through the exchange, and C is thereby valorized. But this takes place only at the expense of M which is simultaneously devalorized. As Marx notes in an important passage in Grundrisse, "capital has made the transition from the form of money into the form of a commodity, of a product, which has a certain price, which is to be realized. In its money form it existed as value. It now exists as product, and only ideally as price; but not as value as such". Thus "devalorization [Entwertung] forms one moment of the valorization process [Verwertungsprozesses]... Therefore, while capital is reproduced as value and new value in the production process, it is at the same time posited as non-value [Nicht-wert], as something which first has to be valorized by means of exchange.... The product is devalorized initially in so far as it must be exchanged for money at all, in order to obtain its form as value again.... Looked at precisely... the valorization process of capital — and money becomes capital only through the valorization process — appears at the same time as its devalorization process, its demonetization."\(^7\)

The concept of devalorization is not quite as unproblematic as this presentation would suggest however. While he clearly develops the concept of valorization, the same cannot be said for Marx's concept of devalorization. Although in the above quotation from Grundrisse, Marx clearly distinguishes the process of devalorization, he is not consistent in the use and derivation of this concept and never used a separate term for this apparently separate process. Thus as late as the Chapter on Money in Grundrisse, he seems not yet to have developed the concept, but by the later Chapter on Capital, the concept is clearly developed in the manner presented above. At this point, he was even explicit about distinguishing the process I have labeled devalorization from other apparently similar processes. Thus he prefaces the analysis
of devalorization with a clear delimitation of the concept saying that the "devalorization being dealt with here" (devalorization as a moment of the valorization process) was quite different from the "constant devaluation of the existing capital" which "does not belong here, since it already presupposes capital as completed." The latter process — devaluation — will be examined below. But while he clearly distinguishes two separate processes here — devalorization and devaluation — he continues to employ the same term for both (Entwertung). As we shall see below. "Entwertung" is best translated as devaluation, and, indeed, is so employed by Marx in *Capital*. The problem with devalorization in Marx is therefore not a problem of translation but a problem of conceptual elaboration.

A convincing argument could be made that the process referred to in *Grundrisse*, is wrongly conceptualized as devalorization and that it should be seen more in the manner of *Capital* where Marx speaks not of a devalorization but merely of a change in the form of value — a metamorphosis from M to C, for example. In *Grundrisse*, it could be argued, Marx has yet to complete his derivation of the money function as just a specialized function of commodity exchange endowed in one particular commodity. In contradistinction to *Capital*, therefore, he begins the analysis with money and not the commodity form, and is constantly fighting to critique and discard the fetishism of money in particular, and in general the Ricardian search for an invariable standard of value. It is this struggle, indeed, that leads to his realization that the commodity form and not money must be the starting point for his analysis. This critique progresses gradually, and so particularly in the early pages of *Grundrisse*, he remained himself prone to some aspects of the fetishism of money. In particular, he emphasized that money is "pure exchange value," and while this need not in itself be wrong, without a prior
analysis of the commodity, and especially of the relation between use value and exchange value, it may well lead to the retention of a bourgeois overidentification of value with money. The description of the M-C metamorphosis as a process of devalorization could be seen as a product of this overidentification of money and value; indeed, in at least one place in the Grundrisse (quoted above), he does explicitly equate "devalorization" with "demonetization."

By Capital, Marx is no longer ambiguous about the relation between money and value; in so far as it is capital, money is only one form of value albeit the form which expresses all social value relations. Money is the social distillate of value. And in Capital, when he returns to the theme of devalorization, he now talks not of devalorization but of an interruption in the valorization process. This is particularly true of volume 2 where, in the first four chapters, he discusses the overall circulation of capital and addresses the same issues that led him in Grundrisse to conceptualize the process of devalorization. Hence, for example: "The circuit-describing process of capital means constant interruption, the leaving of one stage and the entering into the next, the discarding of one form and the assuming of another. Each one of these stages not only presupposes the next but also excludes it."9 What is emphasized in this and other discussions of the circulation process in Capital, is not the gain or loss of value per se but the change of form experienced by capital in the process of circulation. There is in Capital no clear conception of devalorization such as appears as Grundrisse.

If we view in this way the development of Marx's thought on valorization, it is an easy next step to argue that devalorization as an historically intermediate concept in Marx, and that its value was merely in helping Marx to work through to the final, correct conceptualization that appears in Capital; the term and concept of devalorization should therefore be discarded. But I
want to suggest that this conclusion is premature. In the first place, the discussion in *Capital* is not inconsistent with that in *Grundrisse*. In defining the devalorization process there, Marx referred to the positing of capital as "not-value" rather than as "no-value," indicating quite clearly that a change of form was taking place, not necessarily any quantitative loss of value. In fact, the main difference between the two treatments is a difference of perspective; in *Grundrisse*, where he discusses this issue, Marx is concerned with the different processes contributing to the constitution of value, whereas in *Capital* volume 2, he is concerned with the way in which already constituted value circulates as capital. It would be logical, then, to speak of a devalorization process as part of the constitution of value, but when the perspective changes, to see the same process as an interruption in the circulation of capital. Indeed this is precisely the kind of dual perspective that Marx sets up for resolution in volume 3 of *Capital* but which, like so many other apparent contradictions, is not resolved due to the fact that volume 3 is unfinished.

But it is more than just a case of "devalorization" being not inconsistent with the remainder of Marx's work. Although he rarely makes the relationship explicit, the concept of devalorization is central to the derivation of crisis from the very structure of value. If devalorization is a necessary moment of valorization, then any interruption of the circulation of capital, any halt in the movement of value, can be expected to cause a dramatic polarization between elements of capital caught in a devalorized form and those in a valorized form—between money capital on the one side and commodity and productive capital on the other. In so far as it cannot move—cannot enter into exchange or into the production process—devalorized
capital in the form of inventory, stockpiled raw materials, hoards and unemployed labour power loses its value entirely and ceases to be capital. The importance of this, and of the recognition that this loss of value originates in the very determination of value itself cannot be overstated. The change of form captured in the concept of devalorization opens up the possibility of an actual change in quantitative value, and this is precisely the origin of the possibility of crisis in Marx. "Devalorization" expresses precisely the dialectic between change of form and quantitative loss of value, and as such, is very different from either depreciation or devaluation. Further, one might speculate that in order to elaborate more completely his theory of crisis, in volume 3 of Capital, Marx would have had to make more explicit this concept of devalorization, first derived in the Grundrisse. Thus it seems not just reasonable but necessary to retain the concept of devalorization, while acknowledging the ambiguity of its origins.10

   c) Revaluation/devaluation. Unlike appreciation and depreciation, revaluation and devaluation occur solely in the value sphere. They represent not merely an increase or decrease in price but an absolute quantitative augmentation or destruction of value. And unlike devalorization and valorization, revaluation and devaluation are not moments of the normal self-expansion process. They are necessary products of this self-expansion and presuppose it, but involve not a momentary change in the form of value but rather an absolute quantitative augmentation or destruction of value. Marx is clear about these twin processes: "Revaluation [Wertsteigerung] and devaluation [Entwertung] are self-explanatory", he says in the third volume of Capital. "All they mean is that a given capital increases or decreases in value as a result of certain general economic conditions .... All they mean, therefore,
is that the value of a capital invested in production rises or falls irrespective of its self-expansion by virtue of the surplus labour employed in it."

In *Capital* Marx consistently refers to revaluation and devaluation as "Wertsteigerung" and "Entwertung," and he treats these as opposites. As we saw above, he also used "Entwertung" in *Grundriße* to refer to the process we have called devalorization — a process which Marx himself clearly distinguished from devaluation. By *Capital* however, "Entwertung" always means devaluation. Unfortunately, Marx's consistency is not replicated in the translations of his work into English. Where Entwertung and Wertsteigerung appear together, they are generally translated as depreciation and appreciation, although on its own, Entwertung is often translated accurately as devaluation. Leaving aside the fundamental confusion between the price sphere and the value sphere implied in this mistranslation, it seems that one of the problems facing translators has been that there is no single word in English that is a general equivalent of "Wertsteigerung," meaning the increase or augmentation of value. To solve this problem, I employ "revaluation" as a strict translation of Wertsteigerung.

It is no accident that Marx introduces the distinction between capital in general and particular individual capitals at precisely the point where he begins to talk about the revaluation and devaluation of capital. For the same economic forces can lead to quite different results depending on whether the object of concern is a specific capital or capital in general. Let us start with what might be thought of as devaluation in the weak sense. If, in its exchange on the market, a single capital experiences a depreciation for whatever reason, i.e., if it is sold at a price below its value
where its value is determined by the quantity of socially necessary labour
time the given commodity embodies, then this individual capital has been de-
valued. It has been devalued because this specific capital has not realized
the entire value it embodies and a depreciation of capital has led directly
to a devaluation, at least in this narrow sense. However, in so far as this
depreciation is matched by an appreciation of some other capital with which
this original capital was exchanged, then no devaluation of the general
capital has taken place. Devaluation in this sense is not only relative but
isolated to a single capital, and in itself it is of little importance. It
will not be considered further.

Devaluation in the strong sense, devaluation proper, occurs when the
general capital either of a branch, or of a region of the world economy experi-
ences a general and absolute destruction or loss of value. As such it affects
not just individual capitals randomly, but all or most of the capitals in a
given branch. This general devaluation occurs when capital is unable to rea-
lize the socially necessary labour embodied in it for a given value equiva-
lent. Marx makes very clear what he means by devaluation, and in particular
how he distinguishes devaluation from depreciation, but unfortunately, the
one place where he spells out this definition and distinction is the place
where Nicolaus's translation is least consistent. The following section
from the original is worth quoting at length. Referring again to his twist
manufacturer who this time sells 40 lbs. (with a value of 200 thalers) for only
180 thalers in silver because no more can be realized on the market, Marx
writes:

Thus a general devaluation [allgemeine Entwertung] of 20 thalers
has taken place, or a destruction of capital [Vernichtung von Kapital]
to the amount of 20 thalers. A general devaluation thus takes place
despite the fact that the *depreciation* [Depreziation] of the
twist manufacturer's 40 lbs. from 200 to 180 necessarily appears
as an appreciation [Appreziation] on the part of silver, a depre-
ciation of twist relative to silver; and a general depreciation
[allgemeine Depreziation] of prices as such always comprises an
appreciation of money, i.e., of the commodity in which all the
others are appraised. Thus, in a crisis—a general depre-
ciation of prices—there occurs up to a certain moment a general
devaluation or destruction of capital. The devaluation, unlike
the *depreciation*, can be general, absolute, not merely relative
[Die Entwertung kann allgemein sein, absolut, nicht nur relativ,
wie die Depreziation] because value expresses not merely a rela-
tion between one commodity and another, as does price, but rather
the relation between the price of the commodity and the labour
objectified in it... If these amounts are both equal, then *de-
valuation* occurs, a devaluation which is not outweighed by an
appreciation on the other side, for the other side expresses a
fixed amount of objectified labour which remains unchanged in
exchange.12

There is no clearer statement in Marx about the obvious difference between de-
preciation and devaluation.

The crucial argument here is that because value expresses the relation
between the price of a commodity and the socially necessary labour embodied
in it, and not just the relationship between commodities, devaluation is
systematically different from depreciation. Logically, revaluation is to de-
valuation what appreciation is to depreciation. The difference is that the
first two processes occur in the value sphere while the latter occur in the
price sphere. There is certainly a relationship between them, just as there
is a relationship between price and value. But for now, the question is,
how do devaluation and revaluation take place?

While they are logically symmetrical, revaluation and devaluation are
certainly not historically symmetrical. Revaluation certainly occurs but
devaluation is the historically dominant process, and results from two major
sources. In the first place, there is the necessary tendency under capitalism
toward a perpetual increase in the productiveness of labour. By constantly
innovating the machinery and other fixed capital employed in the labour process, the capitalist manages to produce a larger quantity of commodities with the same or a lower expenditure of labour. That is, he reduces the socially necessary labour time required for each commodity and thereby increases the rate of surplus value. The value of commodities is reduced by reducing the value of raw materials, instruments of labour, and especially labour power itself. In so far as the search for relative surplus value, through the increase in the productiveness of labour, becomes the "most powerful lever of accumulation," and thus the essence of the capitalist mode of production, the devaluation of labour power is a central historical necessity. Machinery devalues the labourer's labour power; "his valuelessness and devaluation [Wertlosigkeit und Entwertung] is the presupposition of capital and the precondition of free labour in general."¹³ This devaluation occurs through a series of revolutions in value, some large, some small. Such revolutions in value clearly have a direct tendency to devalue already existing instruments of production, as well as the labour employed in production: "The continual improvements.... lower the use value, and therefore the value, of existing machinery, factory buildings, etc. This process has a particularly dire effect during the first period of newly introduced machinery, before it attains a certain stage of maturity, when it continually becomes antiquated before it has time to reproduce its own value."¹⁴ This first type of devaluation I shall call progressive.

Unlike this first form of devaluation which is ongoing in character, the second form of devaluation is periodic, occurring only at particular moments of the accumulation process. This is the particularly violent and sudden devaluation of capital that takes place in connection with crises, and
although clearly related to the first form of devaluation, is equally clearly distinct from it. Devaluation in crises affects all forms of capital—M, C, and P—but given that for Marx the origin of crisis is the tendency toward a falling rate of profit, hastened by a rapidly increasing organic composition of capital \((c/v)\), the devaluation of productive capital is particularly crucial. Devaluation occurs either through a direct cheapening of productive capital, through the non-use of capital (over-accumulation being an integral part of the falling rate of profit), or through its physical deterioration because of non-use.

III

It is in the discussion of crisis that the relationship between the different sets of concepts becomes clear. They are historically clarified in the course of crisis. First, it is important to stress as Marx did that crisis is simply an expression of the internal contradictions of the concept of capital; the definition of crisis is contained in the concept of capital. But in his different treatments of crisis, Marx did not make clear the systematic historical translation from the positing of value to the outbreak of crisis. With the above clarification of concepts, it is now possible to embark upon this task. The following is a tentative and brief summary of this translation from the positing of value to the necessity of crisis.

From the outset it should be clear that since depreciation and appreciation are price sphere phenomena, they are generally peripheral for the understanding of the origin of crisis. The above clarification of concepts began on the surface with depreciation and appreciation, and burrowed progressively deeper through devalorization and devaluation to crisis. But this is a case
where the method of logical presentation does not at all express the actual historical process. In fact, the logical sequence from depreciation to devalorization to devaluation of capital is the appearance that crisis often takes if one examines only isolated capitals, and from the point of view of exchange. Nonetheless, this is the very sequence accepted in under consumptionist theory as the true explanation for crisis: underconsumption/overproduction leads to a lowering of prices, which leads in turn to an interruption of the production process, and eventually to crisis. While this sequence does in part take place, it does so only after the onset of crisis, which is the expression of far deeper forces.

The starting place for a discussion of the origins of crisis is devalorization. Marx's first mention of crisis in *Capital* coincided with his first discussion of devalorization. There, while discussing the M-C transformation, Marx chose to emphasize that the inability to effect the entire circulation of value implied the direct "possibility, and no more than the possibility, of crisis."\(^{15}\) Devalorization expresses the possibility of crises; there is no guarantee that the devalorization phase of the circulation of value (M-C) will be succeeded by the second part of the valorization process (C-M). The valorization process itself, in so far as it is simultaneously a devalorization process, contains the seeds of crisis.

But if the valorization and devalorization of capital express the possibility of crisis, the reality of crisis emerges from elsewhere. It in fact emerges from the progressive devaluation of capital. Crisis for the capitalist class is a low rate of profit, and Marx demonstrated the necessity of this tendency toward a low rate of profit by showing that capital could expand only if at the same time the organic composition of capital (c/v) was
also increased at such a rate that the very basis upon which profit is produced (the employment of labour power with v) was systematically diminished. The increase in the organic composition of capital is simultaneously an expression of the progressive devaluation of capital. This is so because both result from the continuous increase in the productive forces made necessary by the relations of production under capitalism. Given these relations of production, you cannot have a systematic increase in the organic composition of capital and a resulting tendency toward a falling rate of profit without a progressive devaluation of capital. Each expresses the other.

A movement of capital takes place away from those sectors and regions where a falling rate of profit first manifests itself. But this capital which switches from its original source can only valorize itself at the expense of capitals in other sectors where, in all likelihood, the rate of profit is also diminishing. Even if it is not, the influx of new capitals and the heightening of competition would hasten such a fall. This generalization of the falling rate of profit, and the consequent intensification of competition, crowds out some capitals, forcing them to lie completely or partially idle. Thus, the progressive devaluation of capital has led to the more serious periodic devaluation of capital and to the devalorization of capital (interruption of the valorization process). This is simultaneously the process of over-production, or more accurately, over-accumulation: "the fallen rate of profit and over-production of capital originate from the same conditions."¹⁶ The over-production of capital leads to the depreciation of commodities on the market, both directly, and as an expression of the devalorization process.

Thus it is not depreciation leading to devalorization and eventually
devaluation which is responsible for crises, but exactly the opposite. The progressive devaluation of capital leads equally to the periodic devaluation of capital and to the devalorization and depreciation of capital, and these in turn, certainly, exacerbate the initial devaluation of capital. Existing capital loses its value on the market, it is left idle or underemployed, and it decays physically despite or even because of its non-use. These processes of devaluation obviously occur unevenly according to many things: the form of capital, its physical properties, conditions of production in the sector or region in which it is employed. Although the focus here has been purely on productive capital, it would also be possible to follow capital out of the productive sphere and into the speculative financial and money markets as well as the commodity markets and to trace the depreciation and appreciation of commodities and money during crises, and further to discuss the reverse effect of these processes on the underlying sphere of production, and ultimately on the constitution of value. But this is a more detailed discussion of crisis that does not belong here. The important conclusion from this analysis is that through a consistent use of the concepts of depreciation, devalorization, and devaluation, the origin and development of crisis, as well as its roots in the constitution of value, become clearer.

IV

There are three further sets of concepts in Marx that are closely related to the ones already considered. Clarification of these will not only complete the conceptual analysis, for sake of neatness, but will also allow us to clarify the value transformations involved in the circulation of fixed capital.

Marx talked about the realization [realisieren] of value, and particularly
in Nicolaus's translation of the *Grundrisse*, this has been confused for the entire valorization process. In fact, realization is very narrowly defined by Marx as just one transaction in the entire valorization process. Realization is the process by which a commodity is exchanged on the market for money — the C-M transformation. It carries none of the implications about self-expansion of value contained in valorization. Alongside realization, is a second duality of concepts which Marx uses to describe not the fruition of value but the fruition of the physical process, the physical realization of concrete labour in the produced use-value. Here he talks about "Verwirklichung" (the physical realization) and Entwirklichung, which Nicolaus translates as de-realization. Put simply, de-realization is the process by which the labourer, in realizing the commodity, also objectifies his or her own activity and abilities in the form of the commodity, thereby bringing about the worker's alienation. Thus the physical "realization process [Verwirklichungs progress] is at the same time the de-realization [Entwirklichungs progress] process of labour."^{18}

The second set of concepts concerns the working of fixed capital. When referring to the steady loss of value by an instrument of production, Marx talks about wear and tear ("Verschliess"). By "wear and tear" Marx means two things. "Wear and tear is first of all a result of use," and it "is furthermore caused by the action of natural forces." This is the first meaning: wear and tear is a physical process affecting the use value of fixed capital, and it results either from the degradation of an instrument of production through use or else its degradation through non-use at the hands of natural processes. But second, by wear and tear, Marx also means an economic process: "by wear and tear ... is meant that part of value which the fixed
capital, on being used, gradually transmits to the product, in proportion to its average loss of use-value... (b)y the wear and tear of the instruments of labour, a part of their value passes on to the product, while the other remains fixed in the instruments of labour and thus in process of production. The value fixed in this way decreases steadily, until the instrument of labour is worn out, its value having been distributed during a shorter or longer period over a mass of products."\textsuperscript{19}

It is strange that Marx did not make a real distinction here between the physical and economic aspects of wear and tear. The one implies the other, certainly, but this is equally true for the realization (realisieren) of value and the physical realization (Verwirklichung) of a commodity, which Marx was careful to distinguish. The importance of the distinction between physical and economic wear and tear is clear if one considers the case where an instrument of production has reproduced its own value, over a period determined by a social averaging process, but where the instrument remains physically capable of production and therefore continues in the production process, in so far as these old instruments of production can still produce competitively. The reason for Marx's apparent confusion of these two processes seems to be twofold. First, volume 2 of Capital where the concept of wear and tear is introduced is unfinished, and it is entirely possible that Marx would have refined this analysis. But more important, it seems that Marx did not sufficiently distinguish the process of the routine transfer of value (from fixed capital to the commodity) from what he himself referred to as "moral wear and tear" (Moralische Verschliess - generally but erroneously translated as "moral depreciation"). In labelling this process, Marx was typically tongue in cheek. "Moral wear and tear" is in fact, for Marx,
the process of *devaluation* of fixed capital (both progressive and periodic devaluation) though Marx emphasizes progressive devaluation. And as we noted above, Marx himself refers to this same process in volume 3 using the term "Entwertung". Illustrating "moral wear and tear" (really progressive devaluation of fixed capital) in volume 2 of *Capital*, he explains that railway cars and locomotives which can be purchased for £40,000 one year can generally be purchased for £30,000 ten years later. The development of the productive forces extends the life of fixed capital, on the one hand, by making it more durable, but shortens it on the other by these technological improvements which render previous fixed capital obsolete. "This involves a change in the means of production and the necessity of their constant replacement, on account of moral depreciation [Moralischen Verschliessess], long before they expire physically."²⁰

This process of the devaluation of fixed capital, which is translated as "moral depreciation," is clearly very different from the routine surrendering of value by fixed capital. Thus, on the one side, we have the devaluation of fixed capital, and on the other we have the physical wear and tear of fixed capital; between them we have a third process, the routine surrendering of value due to the productive consumption of fixed capital. How are we to conceptualize this latter process? It is clearly not a depreciation of fixed capital since the transfer of value has to do with the price sphere only in so far as the price at which used fixed capital could be exchanged would reflect both the deeper value transformations and the physical deterioration of capital. This is a depreciation process only in so far as it is simultaneously a more fundamental process occurring in the value sphere, and should therefore be distinguished carefully from depreciation proper. Nor is the routine transfer of value by fixed capital simply a devaluation process,
since far from happening outside the normal sphere of self-expansion, this regular transfer of value is a central part of the process. Would it, then, be reasonable to view this steady loss of value by fixed capital as the devalorization of fixed capital? After all, the loss of value by fixed capital throughout its productive life is due to a continuous change in the form in which capital presents itself -- a change of form from P to G -- and this is analogous to the change of form from M to C we analysed above under the heading of devalorization. On the other hand, we are here talking also about a quantitative loss of value by one moment of capital. Does this make the steady loss of value by fixed capital into a separate process from that of devalorization? Actually, the fact that a quantitative loss of value (by one moment of capital) is involved does not in the least invalidate the use of "devalorization" to characterize the steady loss of value by fixed capital. Rather, it points to a further refinement of the category of devalorization. So far, it has been assumed that in the C-M transformation, both C and M represent fixed quantities of value, and this is certainly consistent with Marx's treatment in Grundrisse and much of Capital. But this assumption must ultimately be relaxed too, and this is precisely the difference between Marx's and Riccardo's theories of value. For Marx the quantity of value contained in a commodity is not finally established until it is realized through exchange -- made real. Thus it is not possible to maintain absolutely that the quantity of value expressed in some particular M is exactly equal to the value of C. The devalorization of capital may indeed involve a quantitative loss of value. Just because a quantitative loss of value is involved, therefore, does not mean that the steady loss of value by fixed capital is not a process of devalorization.

In fact, it is quite appropriate to view this process as one of devalorization. Consistent with the earlier definition of valorization, this devalorization of fixed capital is an integral part of the valorization process. The only difference at first sight is that the devalorization if fixed capital involves a systematic loss of value by fixed
capital, whereas this is not true of the M-C transformation where loss and gain of value balance each other in the social averaging process. But this is not a real objection. In the first place, the loss and gain of value involved in the P-C transaction also balance. But second, there is a systematic pattern of loss and gain of value involved in the M-C transformation; this is precisely what Marx pointed to in the analysis of the prices of production. This process also occurs as part of the overall valorization process: since profit accrues to capital not on the basis of the actual quantity of surplus value extracted in that specific work process, but in proportion to the capital advanced, capitals with a high organic composition of capital attract a higher quantity of surplus value on the market than they produce, while those with a lower organic composition attract less. Just as with fixed capital, the valorization/devalorization process here implies that quantitative losses and gains of capital do occur in a systematic way but that they balance out; value is redistributed, not destroyed or created.

The third set of concepts follows on from the second. The economic lifetime of a given piece of fixed capital, the period during which it is actively devalorized through employment in the production process, is "determined by a calculation of averages." The actual lifetime of a given piece of fixed capital will vary from the average according to a number of forces, including the development of superior means of production, the level of competition between capitalists, and the performance of repairs on the currently employed capital. In any case, the capitalist must continually contribute to an "amortization fund" to allow for the replacement of fixed capital when the present machinery expires. When examining the lifetime of fixed capital and attempting to illustrate the principle upon which this duration is calculated, Marx resorts to an argument couched in accounting terms — how the capitalist calculates the
total price of his machinery (including repairs) and the size of his amortization fund. Marx admits that the "manner of the book-keeping does not of course change in any way the state of affairs booked," but continues nonetheless to base his analysis of the lifetime of fixed capital, and his analysis of the capital employed upon repairs and maintenance, on exactly this premise.21 This is the source of later problems for Marx, since without first examining the actual process of the devalorization of capital, upon which the various price sphere calculations are based, he is unable to fit fixed capital into the reproduction schema. This is not the place to lay out a more detailed analysis of the devalorization of fixed capital and the different forces that affect this process. The point here is simply to show that the devalorization of fixed capital lies behind much of Marx's discussion in volume 2 of Capital, and to point out the problems of his taking the price sphere analysis as accurately describing the circulation of fixed capital. Indeed, today, Marx's analysis is potentially obscurantist in that the rhythm of depreciation and amortization of fixed capital (price sphere) is often systematically different from the rhythm of devalorization of fixed capital (value sphere). Particularly in recent years, with the state attempting to stimulate private capital investment as a means to solve the world economic crisis, depreciation and amortization rates have been manipulated to release capital to the private sector, and are therefore increasingly divorced from any real relationship with the rate of devalorization. This is only part of the larger systematic departure of price from value, evident in a crisis, and it is clear that in the crisis the reality of their relationship will reassert itself forcefully, thus exposing the folly of shortening the period of depreciation in accounting terms, as a means to solve a real crisis.

In summary, then, we can identify four distinct processes concerning the
operation of fixed capital. 1. Physical wear and tear on machinery, buildings, etc. either through use or in non-use due to natural processes. 2. The devalorization of fixed capital resulting from its steady transfer of value to commodities. This is economic wear and tear, for Marx. 3. The devaluation of fixed capital ("moral depreciation" for Marx) which results from forces outside the direct production process. The development of more advanced items of fixed capital, for example, devalues certain already operating items, both shortening their lifetime and reducing the quantity of value passed on to each commodity. 4. The amortization of fixed capital, in which the capitalist regularly sets aside a given quantity of money capital, over a given period, in order to finance the reproduction of fixed capital. This occurs purely in the price sphere. The amortization rate — an accounting convention — may or may not accurately reflect the rate of depreciation of fixed capital where the latter is the price sphere expression of the first three processes (physical wear and tear, devalorization, and devaluation).

Finally, the larger implications of this clarification of fixed capital will not be elaborated here. Suffice it to say that fixed capital has been something of a poor relation in marxist theory, receiving little attention, and that it is perhaps most in need of theoretical analysis. By clarifying the different processes involved in the circulation of fixed capital, this analysis should enable us to begin deriving the actual cycle through which fixed capital moves. This in turn will shed light on the role of fixed capital in the equalization of the profit rate, and upon the necessity of disequilibrium between different sectors and regions of the economy. Further, it should allow us to fit fixed capital into Marx's reproduction schema, to link the value analysis of the circulation of fixed capital with the analysis of the circulation of fixed capital as a material commodity, and to evaluate
better the role of fixed capital in the origin and solution of crisis.

V

Finally, very direct conclusions concerning the characterization of capital employed by the state emerge from this analysis of depreciation/appreciation, devalorization/valorization, and devaluation/revaluation. Of increasing popularity in the last fifteen years has been the notion that the contemporary capitalist state, by definition, employs "devalorized capital". Capital invested by the state is invested at a negative, zero, or at least reduced rate so as to provide capital with products and services more cheaply than could be done by private capital. "Devalorized capital" is the key theoretical foundation to the theory of state monopoly capitalism. According to this theory, which originated around the French Communist Party, state monopoly capitalism is a new phase of monopoly capitalism which can be dated to the period from the 1930s to the second world war. The history of capitalism, according to the theory, can be divided between three fundamental stages — primitive capitalism, the stage of classic capitalism, and the imperialist or monopoly stage. The latter stage is divided between two phases — those of simple monopoly and state monopoly capitalism. At the centre of this second phase of third stage of capitalism is the ability of the state to employ "devalorized capital" in order to overcome the effects of the overaccumulation of capital and the falling rate of profit. Invested at negative, zero or below average rates of profit, capital is directed to those monopoly sectors of the economy where the profit rate has sunk particularly low, and because, strictly speaking, it is not capital, its employment does not contribute to a further fall in the profit rate.  

Used in this way, the concept of "devalorized capital" is an eclectic hybrid of a term. It has no basis in Marx since it is defined as a state
in which capital exists and not as a moment of the valorization process itself. In fact, what the term attempts to designate is capital which does not seek its own valorization, or at least does so at a reduced rate. This may or may not be a valid conception but it does not coincide with the process of devalorization (or, for that matter, devaluation). "Devalorization" is not a state in which capital exists but rather a moment of the valorization process; when it passes from being a moment in that process to being an actual state in which capital exists, this capital is then devalued.

In fact, the concept of "devalorized capital" used in this way is not just a contradiction in terms but a contradiction in reality. The state employs capital (as opposed to the revenue it also employs) precisely in order to guarantee a valorization process (both of its own capital and of private capital) which could not be brought about by private capital alone. This it is able to do because, unlike private capital, it is under the complete influence of private market forces but can be invested according to political as well as economic criteria, with less regard even no regard at all for the likely economic return on the capital. The fact of state centered social control over this capital in no way makes it devalorized. Indeed it is precisely the direct political control over this capital that allows it to be valorised in the first place; in a similar situation, private capital could not valorize its capital.

Further, the state may well assist in the process of counteracting the falling rate of profit but it does not do so because its capital is somehow different from other capital. In fact the role of the state here is very complex and nothing if not contradictory. In the first place, capital employed by the state contributes to the rate of profit in the same way as other capital. It enters the averaging process and to the extent that it
is above average it raises the rate of profit, and to the extent that it is below average it lowers it. But there is a major difference with the state. Because much of its capital is inherited from private enterprise, precisely because under private ownership and exposed to the full force of market competitiveness a necessary level of profit cannot be achieved, much of the capital employed by the state reaps a below average profit. This occurs out of necessity not choice; when it invests capital, the state attempts to create as much surplus value as possible. But then the function of the state vis-a-vis these inherited capitals is not simply to provide subsidized services and goods. It is also to restructure capital in such a way that it can begin to produce the requisite profit again. This it does through devaluing the capital it inherits, in precisely the same way that in the private sphere, the devaluation of capital in crisis paves the way for a new period of expansion. Thus, as regards the rate of profit, much capital employed by the state reaps a low profit rate and in so far as it enters the averaging process, it would help lower the profit rate, not raise it as suggested by the theory of state monopoly capitalism. In so far as the state is successful in restructuring capital, however, it would in all likelihood have the effect of raising the profit rate.

This all assumes, of course, that capital employed by the state does enter into the calculation of profit rate averages. It assumes further that capital employed by the state is equally capable of producing surplus value, that in fact, it acts as capital, not as revenue (although the state obviously expends large quantities of revenue also). Marx distinguishes between capital and revenue not in terms of its origin but in terms of its employment. Where funds are invested for the production of surplus value, they constitute capital, but where they are employed for individual consumption they constitute
revenue. Thus wages are capital for the capitalist but revenue for the worker. It matters not a whit, then, where the state gets its capital; if these funds are invested in wage labour for the production of surplus value, they do indeed constitute capital — state capital. The form of control over capital — the state rather than personal or corporate control — does not alter the fact that invested productive capital produces surplus value or that this capital enters into the averaging of profit rates. The major difference with the state, however, is this: the state is not constrained by the necessities of economic survival to reap as profit its share of surplus value. This is crucial. When the state invests capital productively, that is by employing workers for the production of surplus value, yet seems to get in return a negative, zero, or a lower than average profit, this is precisely because the surplus value produced as a result of the valorization of state capital does not necessarily return to the state, but is redistributed in the profits of other capitals. This is managed, for example, when the state sells its products and services below the market price that would pertain had these products and services been produced by private capital purchasing them; then this capital gets a certain quantity of social labour, embodied in its purchase, for less than its social value equivalent.

In his brilliant exegesis on the making of Marx’s Capital, Rosdolsky attempts to show that the structure of the valorization process renders impossible the concepts of state capital and state capitalism. In fact, the structure of valorization and the development of accumulation, as Marx elaborates them, make state capital an inherent tendency of the capitalist mode of production. Rosdolsky argues that because "the reciprocal between capitals is already contained" in the concept of capital, state capitalism "would only be possible with several capitals, organized by the state,
confronting each other". He argues, second, that "the capitalist is con-
tained within the concept of capital, ... and 'capitalism' without the capita-
list class would be a contradiction in terms." In the first place, there
is clearly a reciprocal repulsion between capitals, but as Marx argued and
as Rosdolsky himself repeated, this is counteracted by the attraction of
capitals, their concentration, and "transformation of many small into a few
large capitals." This is the concentration and centralization of capital,
which is equally contained in the concept of capital. The real issue here
is the form of control over capital and the scale of this control. In fact,
Rosdolsky assumes that the capitalist state exists only at the nation state
level and that therefore a capital organized at that level through the state
would by definition be non-competitive, but this is not true. The capitalist
state is organized at all spatial scales from the urban up to the interna-
tional, and there is absolutely nothing in the concept of capital that pre-
vents a single capital, in competition with other capitals, organized
at the level of the nation-state. Indeed, the concept of state capital
makes eminent sense as an internal development of the concept of capital it-
self, given the tendency for an increased centralization of capital. The
main issue that worries Rosdolsky here is not so much the scale at which capi-
tal is organized, but the coalescence of seemingly separate
economic and political spheres of control. This is the gist of his second
argument which, like the distinction between the political and economic it-
self, is wholly specious.

It is not the capitalist as individual but the capitalist class and
internal competition within this class which is contained within the concept
of capital. And as Marx made clear, there is a tendency for control over
capital to pass from individuals in the class to what Marx calls the "collective
capitalist". This is particularly prevalent with the progressive centralization of capital. The question becomes one of establishing the institutional arrangements through which this collectivity of capitalists are to control the valorization of their capital. Here again there is nothing in the concept of capital which excludes the state as a possible institutional form, just as there is nothing which excludes the joint stock company or the multinational. Indeed again, we would expect capital increasingly to organize and control its valorization process through the instrumentality of the state, as centralization proceeds and as the international capitalist system moves into crisis requiring more directly political solutions and the seeming emancipation this affords from the necessity to profit. It is of course only a seeming emancipation; displacement of the crisis leads to its exacerbation and generalization.

As employed in the theory of state monopoly capitalism, the notion of "devalorized capital" contradicts Marx's analysis of value. In order to understand the realities of contemporary capitalist development, one need not go to the elaborate stage and phase structure of state monopoly capitalists. Well before the fruition of state capitalism, Marx was well aware of the development of state capital. In "so far as governments employ productive wage labour in mines, railways, etc.," he said, they "perform the function of industrial capitalists" and comprise the "state capital" [Staatskapital]. For in reality, the capitalist state developed out of an economic foundation, and it has continued to develop this foundation as part of its political function. Neither devalorized capital, nor state 'capital' as revenue, provide the basis from which to analyze state capital and the emerging reality of state capitalism. 27
VI

Clarification of the different processes of depreciation/appreciation, valorization/devalorization, and valuation/devaluation can contribute not only to our immediate understanding of the movement of value but also to a number of broader issues of contemporary significance.
VII Footnotes


5. ibid. p.1574


10. c.f. "This devaluation [Entwertung] (Marx uses the word in this sense only in the Rough Draft [Grundrisse]), which constitutes a moment of the process of valorisation itself, should be distinguished from the devaluation of capital, which results from the increase in the productive power of labour." Roman Rosdolsky, *The Making of Marx’s Capital*, Pluto Press, London, 1977, p. 318n. We distinguish it here with the term "devalorization".

11. *Das Kapital*, Zurich, 1933, Vol. 3, p. 132. In the English translations, see p.p. 110-111. (Here incidentally, "Wertsteigerung" and "Entwertung" are typically translated as appreciation and depreciation.)

12. *Grundrisse der Kritik* ... p. 350. In the English translation Nicolaus not only confuses depreciation [depreziation] with devaluation [Entwertung], but mistranslates the key passage pointing to their distinctions. Admittedly Marx's original is not as clear as it could be. Still, where Marx writes that "devaluation, unlike depreciation, can be general, absolute, not merely relative". Nicolaus translates this as the exact opposite: "devaluation, like the depreciation, can be general, absolute and not merely relative..." (*Grundrisse*, p. 446). (As regards devaluation and revaluation, the recent New Left Review/Penguin translations of *Capital* Vols 1 and II by Fowkes and Fernbach, 1976, 1978, are somewhat more accurate and consistent.)


