The Need for a Genuinely *Empirical* Criterion of Decidability among Interpretations

Comments on a Paper of Fred Moseley's

Andrew Kliman, March 14, 2000. Please do not quote or cite without permission.

1. Dogma and Appeals to Authority vs. Empirical Demonstration

Fred Moseley's (2000) "The Determination of Constant Capital in the Case of a Change in the Value of the Means of Production" is a critique of my "Determination of Value in Marx and in Bortkiewiczian Theory" (Kliman 1999a). Although the present paper is a rejoinder, I am oppressively aware that I will not convince him, and I am oppressively aware that I will not convince any proponent of simultaneist interpretations of Marx's value theory.

That in itself does not bother me, because it is the disinterested reader I have in mind. But the danger is that the disinterested reader, seeing that a debate is ongoing, will wrongly take this as evidence that the issues have not been decisively resolved. Perhaps s/he will even conclude that "the truth is somewhere in the middle," in other words that Marx's theory is riven with internal inconsistencies. To head off such a reaction, I want to say two things to the disinterested reader. First, the fact that the opponents of the temporal single-system (TSS) interpretation of Marx's value theory are not and will not be persuaded has no bearing upon whether it is correct. Second, the reason its opponents keep arguing and resisting is that they refuse to accept genuinely empirical criteria in order to decide whether an interpretation is correct or not.

That people oppose a new truth even after it has been demonstrated is far from uncommon. The *New York Times* (March 11, 2000, p. A1) recently reported that a nationwide poll in the U.S. found that "almost half the respondents agreed that the theory [of evolution] 'is far from being proven scientifically'." But this is not only, or even especially, a problem among the uninformed public. The greatest resistance to new truths comes from the experts. *It is the experts who have a stake in and commitment to the old ideas, and they who have the most difficulty in breaking free from their accustomed categories and ways of thinking.*

Max Planck (1949:33-34), who developed quantum field theory, complained that "a new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it." The historical record provides ample evidence of this. Kuhn (1970:150-51) notes that "Copernicanism made few converts for almost a century after Copernicus' death. Newton's work was not generally accepted, particularly on the Continent, for more than half a century after the *Principia* appeared. Priestly never accepted the oxygen theory, nor Lord Kelvin the electromagnetic theory, and so on."

The historical record thus suggests two things. First, the reaction to the TSS interpretation that has come from simultaneist quarters is precisely what one might expect, even if the subject matter were not "political economy, [in which] free scientific inquiry does not merely meet the same enemies as in all other domains" (Marx 1977:92, "Preface to the First Edition" of *Capital*). Second, that proponents of simultaneism refuse to accept the TSS interpretation does not make it any less true.

But what *explains* their refusal to accept it? It is not merely that they find it hard to break free from their accustomed categories and ways of thinking. If this were the only

problem, they could acknowledge that, even though the TSS interpretation makes no sense to them, the empirical evidence nonetheless confirms that it is correct. The acknowledgement might go something like this:

The TSS interpretation doesn't make sense to me. It contradicts what I've always thought *Capital* is all about, and I don't think I'll ever be able to shake the gut feeling that it contradicts what Marx actually wrote. I just can't see how the proponents of the TSS interpretation can read the texts the way they do. But I've got to admit that the evidence shows the TSS interpretation is correct: *when you do read the texts the way they do, Marx's value theory becomes a coherent whole.* All of the things we all thought were errors or internal inconsistencies in Marx turn out not to be. They've cleared up all the problems. And what more can I say? Proof is proof. Now, don't get me wrong — there's no way I'm going to embrace the wrongheaded, unscientific drivel that the TSS interpretation turns Marx's value theory into. But I have to admit that this wrongheaded, unscientific drivel really is Marx's. That's what the evidence shows. So I guess I'll just have to accept that I don't like Marx's value theory. I don't agree with it.ⁱⁱ

The proponents of simultaneism will acknowledge nothing of this sort. They will keep on refusing to accept that the TSS interpretation is correct. And that is because they refuse to use genuinely empirical criteria in order to decide among interpretations.

At the 1999 miniconference of the International Working Group on Value Theory, I asked a prominent proponent of simultaneism under what conditions he would be prepared to accept that his interpretation was incorrect? Although it is a simple and rather obvious question, he had no answer to it. (I doubt that many natural scientists, faced with the analogous question concerning their theories, would have trouble answering it.) But if one can think of nothing that would falsify one's interpretation, it is literally and precisely a dogma.

Nor was this particular proponent of simultaneism the only one who had no answer. None of them had an answer. The only one who even gave it a shot was Fred Moseley. He eventually said that textual evidence must be used to decide whether an interpretation is correct and, if the existing evidence is insufficient, then there needs to be more evidence. But as I pointed out at the time, this doesn't answer my question. *Of course* one refers to the textual evidence. Yet the problem is that, referring to the exact same textual evidence, temporalists and simultaneists again and again and again come to opposite conclusions. We read it differently. It therefore just doesn't help to say "look at the evidence"; that is a pseudo-criterion. What is needed, instead, are genuinely empirical criteria of decidability. One needs to be able to specify *the conditions under which one would acknowledge that the evidence falsifies one's interpretation*. If one cannot, then one is holding fast to it dogmatically.

Reading Fred's unfinished paper, I see that nothing has changed. He continues to put forth his pseudo-criterion: "the main criterion for choosing between different interpretations ... is what Marx actually wrote about this subject. One should read everything Marx wrote on this subject, in systematic and chronological fashion" (Moseley, 2000, introductory section). Okay, and then what? What would Marx need to have written that would lead you to conclude that your interpretation is incorrect? Fred still fails to answer this question.

Without genuinely empirical critieria of decidability, without some standards that exist *outside* the interpreter's own head, we have a vicious circle in which an interpretation is allowed to confirm itself. One reads the texts and arrives at an interpretation. Then one does what Fred recommends; one reads some more. But one necessarily does so *on the basis of* one's own

interpretation — its concepts, its delineation of the issues, its notion of what constitutes textual evidence, and so forth. Is it any wonder, then, that one finds that the new evidence confirms one's interpretation and contradicts one's opponents' interpretation? Fred's recommendation thus allows the proponents of one interpretation to decide that "the evidence" shows that their interpretation is correct and the contrary interpretation is wrong. It is as if you were to ride into a small Southern town, get picked up by the chief of police and, since this same individual also serves as the town's prosecutor, judge, and jury, you are quickly sent up the river, never to be heard from again. Meanwhile, the chief of police/prosecutor/judge/ jury counts the ballots in the local election and finds that he's been unanimously re-elected.

This is not a mere abstract possibility; it is precisely the method of Fred's paper. He claims to conduct "a comprehensive review of everything Marx wrote on this subject of the determination of constant capital in the case of a change in the value of the means of production" (Moseley, 20000, end of introductory section). But who is it that has decided what evidence is "on this subject" and what is off the subject? Fred Moseley. As I will discuss in greater detail below, he ignores the most crucial piece of evidence I presented in my paper, Marx's critique of Ramsay. In this text, Marx explicitly assumes that the value of the means of production is changing, and he computes the value transferred according to the current cost of the means of production when they enter production, not according to their post-production replacement cost. The reason Fred ignores this text is not that he lacked the time to finish his critique of my paper; it is absent from his own "comprehensive review of everything Marx wrote on this subject," which he did complete.

And who has decided what "this subject" is and isn't? Fred Moseley. As I will also discuss below, he defines the subject as the "determination of constant capital," a concept I reject as overly broad, vague, and misleading. Moreover, he dismisses a whole slew of evidence I presented because it supposedly does not pertain to the determination of the sum of value transferred "in the case of a change in the value of the means of production." But who is it that has decided that my evidence does not pertain to that case? Fred Moseley. Whose criterion of what pertains and what doesn't did he employ? Fred Moseley's. And finally, who is it that has decided what each of the texts mean and what the evidence as a whole indicates? Fred Moseley, and Fred Moseley.

Any guesses as to whose interpretation he finds to be supported by his "comprehensive review"?

There does exist a simple and widely accepted method for breaking out of this closed circle, an empirical criterion of decidability. I have proposed it persistently for several years now, most recently in the paper Fred critiques, but he and other proponents of simultaneism have just as consistently rejected it or ignored it. What is even worse, he distorts it beyond recognition. It is very telling that in a paper so chock-full of quotations, some of which are nearly 500 words long, he chooses to give readers his interpretation of the criterion without also letting my own words speak for themselves.

According to Fred's account, my "main criterion for choosing between different interpretations ... is which interpretation can better derive more of Marx's main conclusions (most importantly, the falling rate of profit)." This is appallingly wrong, but it gets worse. Later in the paragraph, he opposes to this his pseudo-criterion of reading everything Marx wrote, which gives the distinct impression that I favor the criterion of "deriving results" without regard to, and instead of, referring to the textual evidence. Even worse, as the paragraph continues,

"better derive more of Marx's main conclusions" morphs into what "makes it easier to derive a falling rate of profit."

What "makes it easier to derive a falling rate of profit" is simply not at issue, not at all. It is exceedingly easy to derive a falling rate of profit in any manner of ways. The simplest is to assume that capitalists destroy all the output; the profit rate falls to –100%. But this has nothing to do with "what Marx actually wrote about this subject," and precisely because it does not, I reject the notion that it is evidence of interpretive adequacy. An accurate interpretation of Marx's value theory must be able to show that the rate of profit can fall for the reasons his theory indicates, on the basis of his own, actual premises. In particular, since "Marx actually wrote" — not once, but over and over — that the profit rate falls because productivity rises, an accurate interpretation must be able to reproduce the cause as well as the effect. And it must do so without violating any of his other premises, for instance that no capitalist voluntarily adopts a new technique that will lower his own rate of profit. Simultaneist interpretations cannot do so. The TSS interpretation does.

In any case, the point is *not* to derive Marx's conclusions, but to test whether an interpretation does conform to what "Marx actually wrote." *His theoretical conclusions* — *taken together with the premises that lead to these conclusions* — *are a part, a large part, of what "Marx actually wrote.*" Once one recognizes this exceeding simple but continually overlooked fact, it is clear that we can reject as inaccurate any interpretation that, deploying its reading of his theory's premises, is unable to arrive at its conclusions.

As I discuss in detail in Kliman (2000), all simultaneist interpretations fail many applications of this test, while the TSS interpetation passes them all. And as I show in Kliman (1999b), simultaneist interpretations are unable even to replicate Marx's conclusion that surplus-labor is necessary and sufficient for profit to exist, even in the absence of joint production!

But all of these instances are merely *applications* of the criterion of decidability I have proposed. Despite what Fred writes, the replication of theoretical results is *not* the criterion itself. So what is it? Let me quote from the paper of mine (Kliman 1999a, emphases added) he critiques:

It is a standard tenet of hermeneutics that a textual interpretation is adequate to the degree that it can understand the text as a coherent whole. This may be impossible — the text may indeed be self-contradictory — but if it is possible, then an interpretation according to which the text forms a unified whole is superior to one that does not. Apparent self-contradictions are prima facie indications of the interpreter's misunderstanding (see, e.g., Warnke 1993:21).

So I certainly agree with Fred that an accurate interpretation must conform to what the author actually wrote. But I go much further. I insist that it must not merely seem to conform to this or that isolated passage or set of passages, when they are considered in isolation. An accurate interpretation must be able to conform to the text when it is considered as a whole. And again, theoretical results, taken together with their premises, are *part of that whole*.

Testing interpretations against the original theory's conclusions provides a broad test and, more importantly, a *genuinely empirical* test, of their relative adequacy. It provides a clear and simple answer to the question I posed last year. I will ask it of myself. Under what conditions would I be prepared to accept that my interpretation is incorrect. Answer: if my interpretation cannot reproduce the original theory's conclusions on the basis of its premises. That's not so

hard, is it? Why is Fred and why are other proponents of simultaneist interpretations unwilling to judge their interpretations according to the same test?

Deciding among interpretations according to how well they confrom to the text as a whole is, as I have noted, a widely accepted criterion that has been worked out and refined over centuries. I therefore think it is ill-advised to brush it aside and caricature it as Fred has does, or to give it the silent treatment that has come from simultaneist circles in general. But I am not one who maintains that authority or tradition are necessarily right, so if Fred or other proponents of simultaneism have any *argument* against deciding among interpretations by how well they conform to the text as a whole, I am willing to listen. Or if they have any *argument* that theoretical results are not part of the text as a whole, and therefore that an adequate interpretation need not conform to them, I am willing to listen. But they first have to provide us with these arguments, and stop stonewalling and caricaturing.

And let's get real. Please don't tell me that the original theory may be internally inconsistent, so you don't have to replicate its conclusions. I have dealt with that objection many times, most recently in footnote 3 of the present paper. And I do so again now: if there exists an interpretation that is able to resolve the apparent internal inconsistencies, the original theory cannot be said to be internally inconsistent. So you *do indeed* have to replicate its conclusions. *Hic Rhodus, Hic Salta*.

2. How Not to Read Capital, or Anything Else

Some things Fred writes simply overlook the evidence in front of him. For instance, he asserts baldly that "Constant capital can indeed *exist prior* to production, but the precise magnitude of this constant capital *can change*, if there is a change in the value of the means of production" (Moseley, 2000, section 2.3, near top). He writes this as if I had not presented a great deal of textual evidence — some of which he even quotes — in which Marx does address the issue of magnitude, and in which he says that the *precise magnitude* of the value transferred is determined by the pre-production cost of the means of production. iv

I could continue with a laundry list of other problems with his arguments, but I want to concentrate instead on two really fundamental weaknesses, weaknesses in Fred's *method* of reading the textual evidence. The first is *that he brings far too few conceptual distinctions to the texts*. He refers repeatedly to the "determination of constant capital." This is a catch-all concept that suppresses many necessary distinctions. For instance, it suppresses the distinctions between the determination of the sum of value advanced for the acquisition of means of production, the sum of value transferred from used-up means of production to the product, and the value of the means of production themselves.

Fred does make a distinction between the "stock of constant capital" and the "flow of constant capital." But there are several problems with this distinction. First, these concepts are ill-defined or, more precisely, left undefined (this allows him to avoid recognizing that he is using the same concept to refer to different things). Second, they are *not* Marx's own concepts. Fred imposes them on the texts, thereby distorting the meaning of the texts. Most importantly, just like "determination of constant capital," the stock/flow distinction conflates value and use-value aspects of determination. For instance, the "flow of constant capital" presumably covers both the sum of value transferred from used-up means of production and the value of these used-up means of production, which are two quite distinct things.

Because he works with too few concepts, Fred fails to distinguish between several different issues. They all pertain to the "determination of constant capital," so he lumps them all together. Yet they are distinct issues. Quite a high percentage of the "evidence" in his paper is thus simply irrelevant. It has nothing to do with the issue — the sole issue — I discussed in my paper, namely whether, in Marx's theory, "the value transferred from inputs depends on their post-production replacement cost" (Kliman, 1999a, section 3). Fred chastizes me for not mentioning a passage in the *Poverty of Philosophy* and for "miss[ing]" many in the *Grundrisse* and the Economic Manuscript of 1861-63 (Moseley 2000, section 2.3, beginning and end). But it was for a good reason that I didn't discuss these passages. They do not pertain to the determination of the sum of value transferred.

More importantly, because Fred works with too few concepts, he ends up juggling their distinct meanings, mixing and matching them. He thereby makes passages appear to refer to one thing when they in fact refer to another. For instance, passages which indicate that the value of means of production can change after they enter production (big surprise) get distorted into ones which supposedly say that the sum of value they transfer depends on their post-production replacement cost. The passages do, after all, pertain to a change in the "flow of constant capital," a catch-all term that Fred uses to cover both ideas. Likewise, passages which indicate that moral depreciation of fixed capital occurs (another big surprise), because they pertain to a change in the "stock of constant capital," get distorted into ones that supposedly say that the sum of constant capital that was advanced can be different from itself (that would be a big surprise). Fred (Moseley, 2000, end of introductory section) even challenges me to present a passage "in which Marx explicitly said that" the sum of constant capital that was advanced is Of course, Fred uses different terms here, his catch-all terms which not different from itself! obscure the fact that he is challenging me to produce a passage in which Marx wastes his time to tell us that something was what it was. (For the record: the value of means of production can change after they are acquired but, by definition, the sum of value that was advanced for them cannot.)

The other really fundamental weakness is that Fred fails to understand that *the particular* case is subsumed under, included within, the **general** case, unless the contrary is explicitly stipulated. He reasons as if the particular is *not* subsumed under the general unless one explicitly stipulates that it is. Thus he wrongly concludes that general statements concerning the determination of value, statements that pertain to the general case, do not apply in the particular case in which technology is changing.

On this illogical basis, he airily dismisses a whole slew of evidence I present in my paper, in which Marx writes that the sum of value transferred is determined by inputs' current costs when they enter production. This evidence, coming from a wide variety of texts, is unambiguous: there is *not* a *single* case in which Marx restricts the applicability of these statements by stipulating that they fail to apply when technology is changing. They are, in other words, general statements, statements which thereby cover the particular case of changing technology within themselves.

Yet Fred tries to deny that Marx's statements are unambiguous (Moseley, 2000, section 2.3, middle). Inverting the relationship between the general and the particular, he contends that the statements do not apply in the particular case in which technology is changing because Marx did not state explicitly that they do apply in this case.

I am sorry, that is simply not how the explication and definition of concepts works. At the start of *Capital*, Marx (1977:128) writes that the common property of commodities is that

they are products of abstract labor. He does not state explicitly that this applies when technology is changing. Does his statement thereby fail to cover this special case? On the next page, he writes that the exclusive determinant of the value of any article is the labor-time socially necessary for its production. Again, he does not state explicitly that this claim applies when technology is changing, so does the claim fail to apply when it does? I could of course produce tens of thousands of similar examples, from almost every paragraph Marx ever wrote, but I really think these two have been sufficient to make the point: the particular case of changing technology is included under general statements unless otherwise indicated.

But Fred doesn't only say that Marx's general statements fail to cover the particular case. He compounds the error by asserting that, since the passages in question are not "in the context of a discussion of the determination of constant capital *in the case of a change in the value of the means of production* [, ... i]mplicitly, all these passages are under the assumption that the value of the means of production does not change" (Moseley, 2000, section 2.3, middle). How does he think he knows this? He provides not a bit of evidence to substantiate this bald assertion of what Marx "implicitly" assumed. He just pulls it out of thin air. Perhaps, however, Fred thinks it is a logical deduction. If that is the case, let me simply point out how illogical it is. With equal justification — i.e., none — he could assert that, since the passages in question are not "in the context of a discussion of the determination of constant capital *in the case in which capitalists invest some of their profits* [, ... i]mplicitly, all these passages are under the assumption that the capitalists invest none of their profits! The structure of the two arguments is exactly the same.

The really sad thing is that such logical howlers are not Fred's invention. They have become mainstays of simultaneist discourse. What is at work is the modern version of the myth that Marx assumed in *Capital* I that organic compositions of capital are equal. After all, since in passage after passage in which he considered the determination of value in Volume I, Marx did not do so "in the context of a discussion of the determination of value in the case in which organic compositions vary across industries [, ... i]mplicitly, all these passages are under the assumption that organic compositions are equal." This is indeed the "justification" that was used to perpetuate the myth of equal capital compositions, and the same kind of "justification" is regularly used by proponents of simultaneism to dismiss scads of textual evidence that contradicts their interpretation.

And this brings us to the real point: the illogic is not innocent. Anyone can make a mistake, but when the employment of an illogical argument becomes regular, accepted practice, it is no accident. Illogic is employed because it *must* be employed in order to avoid admitting that one's interpretation is incorrect. The actual chain of reasoning goes like this:

- 1. My interpretation contradicts Marx's actual statements except in the case in which technology is not changing (organic compositions are equal).
- 2. A correct interpretation of a statement cannot contradict the statement.
- 3. My interpretation is correct.
- Ergo, 4. My interpretation does not contradict Marx's statements.
- Ergo, 5. Marx assumed that technology is not changing (organic compositions are equal).
 - 6. But he said nothing of the sort.
- Ergo, 7. He assumed it without saying it; he *implicitly* assumed that technology is not changing (organic compositions are equal).

The source of the erroneous conclusion is clear. The third premise, the dogmatic assertion that one's interpretation is correct, is false. The sound chain of reasoning in this case is:

- 1. My interpretation contradicts Marx's actual statements except in the case in which technology is not changing (organic compositions are equal).
- 2. A correct interpretation of a statement cannot contradict the statement.
- Ergo, 3'. My interpretation is incorrect unless Marx assumed technology is not changing (organic compositions are equal).
 - 6. But he said nothing of the sort.
- Ergo, 7'. My interpretation is incorrect.

3. This Textual Evidence, Which "Marx Actually Wrote," Doesn't Pertain to "The Determination of Constant Capital in the Case of a Change in the Value of the Means of Production"? Are You Kidding?

As I have noted, Fred's paper does not address the most crucial piece of evidence I presented, and the reason is *not* that his paper is unfinished. Apparently, Fred thinks it somehow does not pertain to the topic of his paper. The evidence is Marx's critique of Ramsay's early articulation of a physicalist conception of profitability. Marx *explicitly assumes that technology is changing*, and according to his calculations the sum of value transferred from the means of production to the product is determined by the price of the means of production when they enter production, not their post-production replacement cost.

What makes the critique of Ramsay such a crucial piece of evidence is that it is much less easy to distort than most of the evidence. When one deals only with Marx's words, it is always easy to twist and turn them around in order to make him appear to say the opposite of what he actually said. But in this case, rather than merely *discussing* how the value transferred is determined, Marx *shows* how it is determined. He actually *carries out the calculations*. One's interpretation either succeeds or fails to reproduce his calculations. The TSS interpretation reproduces them. The "replacement cost" interpretation fails to do so.

Ramsay maintained that if, due to rising productivity, a smaller share of total output is needed to replace inputs, the profit rate must rise. Marx challenged this contention by constructing a few numerical examples. The one most relevant to the present discussion is summarized in Table 1. All figures in boldface are Marx's own — what he "actually wrote" — the others are inferred from the context.

Table 1									
	Input	Total	Constant	Capital	Variable			Output	Rate of
Year	Price	Capital	Seed Corn	Other	Capital	Output	Profit	Price	Profit
1	£2/qr	60 qrs £120	20 qrs £40	20 qrs £40	20 qrs £40	100 qrs £200	40 qrs £80	£2/qr	66.7% 66.7%
2	£2/qr	60 qrs £120	20 qrs £40	20 qrs £40	20 qrs £40	200 qrs £200	140 qrs £80	£1/qr	233.3% 66.7%

Marx considers a farmer who produces corn by means of seed corn and other inputs. All costs are measured in terms of both money and corn. Marx assumes that, although "work was carried on in the same conditions" in both years, using "the same amount of labour," the output of year 2 is double that of year 1. The total value of this output, however, does not increase. "Since the 200 qrs [produced in year 2] are the product of the same amount of labour [as in year 1], then once again they are likewise = only £200. Thus, only £80 profit remains, which is now, however, = 140 qrs" (Marx 1991:267). Marx thus suggests that, contrary to Ramsay's claim, the rise in productivity causes neither profit nor the rate of profit to rise in year 2.

These conclusions are incompatible with the interpretation that the value transferred is determined by the input's replacement cost. Had Marx computed the value transferred from the seed corn in year 2 at £1/qr, profit would have exceeded £80. Used-up constant capital would have constituted a smaller share of the output's total value of £200, and thus surplus-value or profit would have constituted a larger share, even if variable capital is assumed not to change. Marx's conclusion that profit remains £80, despite the rise in the physical surplus from 40 qrs to 140 qrs, is valid only if the value transferred from the seed corn is determined by its pre-production value of £2/qr.

References

Jay, M. 1984. Marxism and Totality (Berkeley: University of California Press).

Kliman, A. 1999a. Determination of Value in Marx and in Bortkiwiczian Theory. Forthcoming in *Beiträge zur Marx-Engels Forschung, Neue Folge*, 1999.

Kliman, A. 1999b. Simultaneous Valuation and the Exploitation Theory of Profit. Presented at Eastern Economic Association Convention, Boston, MA, March. Available from the author at Andrew_Kliman@msn.com.

Kliman, A. 2000. Marx vs. the 20th-Century Marxists: A Reply to Laibman. Forthcoming in J. Wells, A. Kliman, and A. Freeman (eds.), *The New Value Controversy and the Foundations of Economics* (Cheltanham, UK: Edward Elgar).

Kuhn, T. S. 1970. *The Structure of Scientific Revolutions*, 2nd ed. (Chicago: University of Chicago Press).

Marx, K. 1977. *Capital: A critique of political economy*, Vol. I (New York: Vintage Books). Marx, K. 1981. *Capital: A critique of political economy*, Vol. III (New York: Vintage Books).

Marx, K. 1986, 1988, 1989. *Karl Marx, Frederick Engels: Collected Works* (New York: International Publishers). 1986, Vol. 28; 1988, Vol. 30; 1989, Vol. 32.

Moseley, F. 2000. "The Determination of Constant Capital in the Case of a Change in the Value of the Means of Production." To be presented at Eastern Economic Association conference, Washington, DC, March.

Planck, M. 1949. Scientific Autobiography and Other Papers (New York).

Warnke, G. 1993. Justice and Interpretation (Cambridge: The MIT Press).

Notes

My paper either has been published or will soon be published (in English) in the 1999 issue of *Beiträge zur Marx-Engels Forschung* (Neue Folge). The 1998 issue appeared in 1999, so I expect that the 1999 issue will appear in 2000. On September 30, I posted a draft of the paper on the OPE-L e-mail list, in seven parts (post numbers 1375-1381), under the subject heading "Determination of Value." The posts can be downloaded from the OPE-L Archives, www.st.rim.or.jp/~ikita/OPE. I will also be happy to send electronic or hard copies to interested readers; please contact me at Andrew_Kliman@msn.com.

ii In case anyone would want to tell me that I am fantasizing, that admissions of this sort do not occur, let me recall the case of Lucio Colletti. Once an important Marxist philosopher with an international following, a major figure in the school that attempted to turn Marx into a positivist scientist, Colletti was finally forced to conclude that the evidence was against him: "The contradictions of capitalism ... are not, for Marx, 'real oppositions' (as I too, following Della Volpe, believed until yesterday), i.e., objective but 'non-contradictory oppositions, but are dialectical contradictions in the full sense of the word." Thus, as Jay (1984:449) notes, "Forced to choose between Marxism and Science, as he understood it, he [Colletti] chose the latter. ... he ruefully concluded that Marxism was a pseudo-science that had to be abandoned." (The above quotation from Colletti can also be found in Jay's account.)

The one exception to this rule that I recognize is that an interpretation does not have to be able to replicate the original theory's conclusions if it can be *demonstrated* that the original is self-contradictory. But I caution that to demonstrate self-contradiction, one must show that there exists no possible interpretation under which the original theory is found to be coherent. Thus, if such an interpretation does exist, the allegation of self-contradiction is thereby refuted. I and other proponents of the TSS interpretation claim that it is such an interpretation. This claim can be refuted in one of two ways only. One must demonstrate that the TSS interpretation either contradicts some aspect of Marx's own theory (not just a variant *interpretation* of that aspect) or is itself internally inconsistent. In twenty years, this has not been done.

- All of the following passages presented in my paper eleven in all explicitly indicate that the *precise magnitude* of the value transferred from used-up means of production depends on their cost when they entered production, not their post-production replacement cost:
- "[Production results in] the preservation of *the amount of labour* already objectified" in used-up means of production (Marx 1986:288, emphasis added).
- It "thus preserves the previously existing value of the capital" (Marx 1986:290, emphasis added).
- Raw materials and means of labor "add to the labour time contained in the product *only as much labour time* as they themselves contained *before* the production process" (Marx 1988:177, first emphasis added).
- The consumption of means of production increases the product's value by "the amount of its own value"; Marx further specifies that this means, "to be precise, the value it has when it enters the process of production" (Marx 1988:322-23, emphases added).
- A means of production "does not add more value to the product than it possessed before production. ... As value, this part of capital therefore enters unchanged into the production process and emerges from it unchanged" (Marx 1989:362, emphasis added).

- "[T]he values of material and means of labour only re-appear in the product of the labour process to the extent that they ... were values before they entered into the process" (Marx 1988:79-80, emphasis added).
- Although their values can change during the course of the process, this "involves absolutely no alteration in the circumstance that in the labour process into which they enter as material and means they are always preposited as given values, values of a *definite magnitude*. For in this process itself they *only emerge as values in so far as they entered* as values" (Marx 1988:79-80, emphases added).
- A change in the value of constant capital "never alters the fact that in the process of production, into which it enters as a condition of production, it is a postulated value which must reappear in the value of the product. ... it is a *definite quantity* of past, objectified labour, which passes into the value of the product as a determining factor" (Marx 1988:413, emphasis altered).
- "[M]eans of production *never transfer more value* to the product than they themselves lose during the labour process by the destruction of their own use-value" (Marx 1977:312, emphasis added).
- "The *maximum loss of value* the means of production can suffer in the process is *plainly limited by the amount of the original value* with which they entered into it" (Marx 1977:313-14, emphases added).
- The constant capital portion of a commodity's value is "the value or price at which these means of production went into the commodity's production process" (Marx 1981:992, emphasis added).

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