All Value-Form, No Value-Substance: Comments on Moseley's New Book

Andrew Kliman, May 11, 2016

A number of people have written to me, wanting to know what I think of Fred Moseley's (2016) new book. So I've reluctantly decided to address this matter, in order to show that he hasn't smashed the temporal single-system interpretation (TSSI) of the quantitative dimension of Marx's value theory, even though I think that this response will prove to be a waste of time and effort.

In truth, my efforts to engage with the Marxian economists during the last three decades have consistently been a waste of time and effort. Their primary aim is to hawk their wares—promote their "approaches"—not to get at the truth, resolve outstanding issues, or better understand Marx's work if a better understanding comes into conflict with their "approaches." Even some former proponents of the temporal single-system interpretation (TSSI) of the quantitative dimension of Marx's value theory have refashioned themselves as purveyors of a so-called "temporal approach."

Moreover, those who have turned to Marx since the Great Recession have, unfortunately, largely imbibed these norms. In some cases, promoting one's "approach" is conducive to their own careerist aspirations. In other cases, they can't be bothered trying to force open a genuine debate and trying to ensure that it doesn't just display wares for them to choose among, but decides outstanding matters. It still other cases, they are just unfamiliar with anything but hawking wares. And there are still more than a few opponents of reason around, postmodernist and otherwise.

Because I have other (and, in my opinion, better) things to do, and especially because I don't anticipate that anything positive will result from my commenting on Moseley's book, I'll make the comments in installments, and I may quit and move on before I've said everything I should say.

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I'm going to begin with a matter that could—in a better world—easily be decided by reasoned debate. Moseley has long tried to distinguish himself from physicalists (proponents of what Ian Steedman called the "physical quantities approach" to the determination of relative prices, profits, and the rate of profit). Indeed, he describes his interpretation of Marx's value theory as "macro-monetary," which certainly sounds different. So, is there in fact any quantitative difference between Moseley's equilibrium rate of profit and the equilibrium rate of profit of the (other) physicalists?

He has long claimed that they are indeed different, and he repeats the claim in the new book (see, e.g., p. 307). Whereas technology and the physical ("real") wage rate are the only proximate determinants of the equilibrium rate of profit of the Sraffians and other physicalists, Moseley

contends that, in his interpretation of Marx, the equilibrium rate of profit is instead "determined by the ratio of the actual total annual surplus-value ... to the actual total stock of capital invested" (p. 36).

In *Reclaiming Marx's "Capital": A Refutation of the Myth of Inconsistency* (Kliman 2007, pp. 172–4), I showed that this contention is false. By means of numerical and algebraic examples, I showed that Moseley's equilibrium rate of profit is quantitatively identical to other physicalists, because it is "determined by the same technological and real wage coefficients that determine all other [physical] theorists' rate of profit, and in exactly the same manner. That he expresses his rate of profit as the ratio of surplus-value to capital value advanced, instead of as a ratio of physical coefficients, makes no difference. It is all value-form and no value-substance."

Moseley does not challenge my results. He tacitly concedes that, in the examples I provided, the two rates of profit are quantitatively identical, and determined by the exact same factors, in the exact same manner. But he fails to point this out explicitly. And he is not ready to set the record straight.

Instead, he complains about the fact that my examples are for a one-good economy ("corn" is the only means of production, wage good, and product). According to Moseley, this is an "inappropriate assumption." *But he does not bother to try to explain why it is "inappropriate."* In fact, it was quite appropriate for the task to which it was put—the task of illustrating how Moseley and other physicalists arrive at the same quantitative results even though they tell different stories and supposedly start from different "givens." Precisely because they were unrealistically simple, my examples illustrated this point more clearly than more complicated examples.

After presenting my examples, I noted (p. 173) that "[i]t is possible (but much more tedious) to show that the same conclusions hold true in multisector examples in which prices and values differ." Moseley (p. 307) charges that "this assertion is false." "[The one-good-economy] assumption, and only this assumption, makes it possible to cancel the λ 's (labour-values) on p. 173 and arrive at Kliman's conclusion" (emphasis added).

The person who denies an assertion is, of course, the one who bears the burden of proof. But Moseley offers no proof. Instead, he tells us what the "rate of profit in Marx's theory refers ... to." This is irrelevant for two reasons. First, the issue here isn't Marx's theory, but Moseley's interpretation. Second, the issue isn't what the words "rate of profit" refer to, but whether Moseley's and other physicalists' rates of profit are quantitatively identical, even though they "refer to" different things. (He also introduces another irrelevancy at this point, concerning the Sraffian conception of "joint products." I never claimed that his interpretation is specifically Sraffian; I claimed that it arrives at physicalist results. Sraffians are only a subset of physicalists.)

But let us shoulder Moseley's burden of proof for him and see whether, in fact, he is correct. Is it "only th[e] assumption" of a one-good-economy that transforms his "macro-monetary" interpretation into a physicalist one?

Let's consider a two-good economy, without fixed capital or "joint products." Sector one produces a good used as the means of production in both sectors. Sector 2 produces a good consumed by the workers of both sectors.

We begin with the following "macro-monetary" "givens":

sector	C	V	S	W	π	P	r
1	10	2	2	14	6	18	50%
2	2	10	10	22	6	18	50%
total	12	12	12	36	12	36	50%

where C, V, and S are constant capital, variable capital, and surplus value; W = C + V + S is the value of the sector's product; π is average profit = total S times the sector's share of total C + V; $P = C + V + \pi$ is the price of production of the sector's product; and $r = \pi / (C + V)$ is the equilibrium (i.e., uniform) rate of profit.

Next, let's introduce a technical change: sector 2's C is the same as before, but its V and S fall by 80%:

sector	С	V	S	W	π	Р	r
1	10	2	2	14	3	15	25%
2	2	2	2	6	1	5	25%
total	12	4	4	20	4	20	25%

Notice that the following relation among the variables holds true in both cases:

$$\left[\left(\frac{C_1}{P_1} \right) \left(\frac{V_2}{P_2} \right) - \left(\frac{C_2}{P_2} \right) \left(\frac{V_1}{P_1} \right) \right] (1+r)^2 - \left[\left(\frac{C_1}{P_1} \right) + \left(\frac{V_2}{P_2} \right) \right] (1+r) + 1 = 0$$
(1)

since

$$\left[\left(\frac{10}{18} \right) \left(\frac{10}{18} \right) - \left(\frac{2}{18} \right) \left(\frac{2}{18} \right) \right] (1.5)^2 - \left[\left(\frac{10}{18} \right) + \left(\frac{10}{18} \right) \right] (1.5) + 1 = 0$$

and

$$\left[\left(\frac{10}{15} \right) \left(\frac{2}{5} \right) - \left(\frac{2}{5} \right) \left(\frac{2}{15} \right) \right] (1.25)^2 - \left[\left(\frac{10}{15} \right) + \left(\frac{2}{5} \right) \right] (1.25) + 1 = 0$$

It also holds true in general.

Now note that, in Moseley's interpretation, the prices of production, P, are "long-run equilibrium prices," and therefore "input prices are equal to output prices" (p. 324). In other words, the perunit prices of means of production and workers' consumption goods—which partly determine C and V—are constrained to equal the per-unit prices of the products—which partly determine P. (Although Moseley denies that he is a simultaneist—proponent of simultaneous determination of input and output prices—he does, as we see, explicitly state that, when a uniform rate of profit prevails, input prices must equal output prices. That is exactly what the rest of us mean when we say that input and output prices are "determined simultaneously.")

Because, and only because, the per-unit prices of Moseley's inputs and outputs are constrained to be equal, every fraction in equation (1) can be rewritten either as an input-output coefficient (physical amount of the input required to produce one physical unit of the output) or as the product of a price ratio and an input-output coefficient:

$$\frac{C_{1}}{P_{1}} = \frac{p_{1}a_{1}X_{1}}{p_{1}X_{1}} = a_{1}$$

$$\frac{C_{2}}{P_{2}} = \frac{p_{1}a_{2}X_{2}}{p_{2}X_{2}} = \left(\frac{p_{1}}{p_{2}}\right)a_{2}$$

$$\frac{V_{1}}{P_{1}} = \frac{p_{2}b_{1}X_{1}}{p_{1}X_{1}} = \left(\frac{p_{2}}{p_{1}}\right)b_{1}$$

$$\frac{V_{2}}{P_{2}} = \frac{p_{2}b_{2}X_{2}}{p_{2}X_{2}} = b_{2}$$

where a_1 and a_2 are the amounts of good 1 needed to produce one unit of goods 1 and 2; b_1 and b_2 is the real wage (units of good 2) per unit of goods 1 and 2; X_1 and X_2 are the amounts of goods one and 2 produced; and p_1 and p_2 are the per-unit prices of goods one and 2 (both as inputs and as outputs).

Thus, equation (1) can be rewritten as

$$\left[a_1b_2 - \left(\frac{p_1}{p_2}\right)a_2\left(\frac{p_2}{p_1}\right)b_1\right](1+r)^2 - \left[a_1 + b_2\right](1+r) + 1 = 0$$
(1')

or, equivalently, as

$$[a_1b_2 - a_2b_1](1+r)^2 - [a_1 + b_2](1+r) + 1 = 0$$
(1")

Equation (1") is the standard physicalist equation for the uniform rate of profit. (The standard physicalist solution for r is the smaller of the 2 solutions for r.)

Note that the price ratios, $\left(\frac{p_1}{p_2}\right)$ and $\left(\frac{p_2}{p_1}\right)$, cancel out. As a result, what remains are just ratios

of physical quantities—the a's, the b's, and the rate of profit, r, which is determined by the a's and b's. This shows that Moseley is wrong to allege that the prices (or values) cancel out, and consequently that his rate of profit is physically determined, only in a one-good economy.

It is instructive to analyze exactly why Moseley's rate of profit falls from 50% to 25%. Note that (again, because input and output prices are constrained to be equal), $\frac{P_l - \text{total } C}{\text{total } C} =$

 $\frac{p_1 X_1 - p_1 A}{p_1 A} = \frac{X_1 - A}{A}$, where A is the total physical amount of good 1 used as an input by both sectors. $\frac{X_1 - A}{A}$ is the *relative physical surplus* of good 1—the percentage by which the amount of it that's produced exceeds the amount of it that was used up in production throughout the economy. Before the technical change, it was $\frac{18 - 12}{12} = 50\%$. After the technical change, it falls to $\frac{15 - 12}{12} = 25\%$.

Similarly, $\frac{P_2 - \text{total } V}{\text{total } V} = \frac{p_2 X_2 - p_2 B}{p_2 B} = \frac{X_2 - B}{B}$ is the relative physical surplus of good 2, where *B* is the total physical amount of good 2 consumed by workers in both sectors. This relative physical surplus falls to the same extent, from $\frac{18 - 12}{12} = 50\%$ to $\frac{5 - 4}{4} = 25\%$. Hence, the reason that Moseley's rate of profit falls from 50% to 25% is that the relative *physical* surpluses fall from 50% to 25%.

Thus, even in multisector examples in which prices and values differ, Moseley's rate of profit is determined by the same physical quantities—technological and real wage coefficients—that determine all other simultaneist theorists' rate of profit, and in exactly the same manner. That he expresses his rate of profit as the ratio of surplus-value to capital value advanced, instead of as a ratio of physical coefficients, makes no difference. It is all value-form and no value-substance.

References

Kliman, Andrew. 2007. Reclaiming Marx's "Capital": A Refutation of the Myth of Inconsistency. Lanham, MD: Lexington Books.

Moseley, Fred. 2016. Money and Totality: A Macro-Monetary Interpretation of Marx's Logic in Capital and the End of the "Transformation Problem." Leiden and Boston: Brill.

All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 2

Andrew Kliman, May 12, 2016

In Part 1 of these comments, I discussed why I'm writing and publishing comments on Fred Moseley's (2016) new book, even though I'm reluctant to do so. I then demonstrated that, despite his insistence to the contrary, his equilibrium rate of profit is physicalist (its only proximate determinants are "physical quantities, i.e. physical input-output and real wage coefficients).

Although Moseley tacitly concedes in his new book that I demonstrated this claim in a one-good-economy context, he asserts that this is the *only* case in which it can be shown that his equilibrium rate of profit is physicalist. However, my demonstration in Part 1 of these comments assumed a *two*-good economy, and thus disproved Moseley's assertion. I thus concluded, as I had earlier concluded in *Reclaiming Marx's "Capital"* (Kliman 2007, p. 174), "That he expresses his rate of profit as the ratio of surplus-value to capital value advanced, instead of as a ratio of physical coefficients, makes no difference. It is all value-form and no value-substance."

Here, in Part 2, I will address his charge that the temporal single-system interpretation (TSSI) of the quantitative dimension of Marx's value theory is a misinterpretation because prices of production, as understood by the TSSI, can change even if "productivity" and real wages (per unit of living labor) do not. Moseley (see, e.g., p. 294) insists that Marx held that changes in "productivity" and real wages are the only causes of changes in prices of production. In his new book, he addresses this matter at great length. The bulk of his chapter on the TSSI is devoted to it (sections 2.1 and 3 of chapter 9), and he reviews a lot of textual evidence.

There is no need here to enter into a dispute over the textual evidence, because the simple fact is that *Moseley's prices of production can also change even if "productivity" and real wages do not*. I will show this presently, but I first need to point out that my demonstration does not resort to any terminological subterfuges. In other words, the demonstration defines *productivity, prices of production*, and *real wages* exactly as Moseley defines them.

By "productivity," he means technology. The productivity of labor changes when, and only when, there are "changes in the technology of production" (p. 289). "[T]hroughout the three volumes of *Capital*, Marx consistently defined the 'productivity of labour' in purely physical terms--as the ratio of the quantity of output produced per unit of labour" (p. 301).

Thus, my demonstration holds technology constant. In both periods, Branch 1 uses up 48 units of a means of production, and extracts 24 hours of living labor from its workers, in order to produce 60 units of the means of production. In the first period, Branch 2 uses up 24 units of a means of production, and extracts 6 hours of living labor from its workers, in order to produce 30 units of a consumption good. In the next period, Branch 2 doubles in size. But its technology, "the quantity of output produced *per unit of labour*," remains the same, since it uses up twice as much of the means of production, and twice as much living labor, in order to produce twice as much of the consumption good.

Moseley's "prices of production" are, of course, the prices that would ensure that the rate of profit is equalized across branches of the economy. He also insists that prices of production are (what the rest of us call) simultaneously determined—the per-unit prices of inputs and outputs are equal (see Part 1 of these comments). Finally, he contends that prices of production are "the sum of the total annual costs in an industry plus the average annual profit, the "gross annual industry revenue" (p. 35). Thus, they are not relative prices (ratios of prices). And they are not per-unit prices.

This last bit is quite peculiar, since it immediately implies that Moseley cannot consistently assert that prices of production change only when productivity and real wages change. It is obvious that, all else being equal, if all industries were to double in size, then every industry's "gross annual revenue" would also double in size. This observation suffices to demonstrate that Moseley's "prices of production"—as he defines them—can change even if productivity and real wages do not. But the demonstration below will not exploit his confusion on this matter. It will make clear that his implicit per-unit prices of production also change even if productivity and real wages do not.

Moseley does not provide an explicit definition of "real wage." But he uses the term to mean what it normally means in physicalist theory (see, e.g., p. 230), workers' physical consumption bundle *per unit* of labor performed. In the demonstration below, the real wage is 5/12 unit of the consumption good per unit of living labor performed, in both branches and in both periods.

Thus, the demonstration is one in which productivity and real wages, as Moseley understands them, remain constant. But prices of production, as Moseley understands them, still change!—see Table 1. The amounts of "gross annual revenue" obviously change because Branch 2 doubles in size. But—and this is the important point—the per-unit prices of production also change, from 2 to 2.5 in Branch 1 and from 0.8 to 1 in Branch 2.

It should be noted that the changes in these prices of production are *not* caused by changes in Moseley's (simultaneist) monetary expression of labor-time (MELT). The simultaneist MELT is the economy-wide monetary value added (equal to V + S) divided by the total amount of living labor performed throughout the economy, and this ratio equals 1 both before and after Branch 2 doubles in size. It is this growth of Branch 2 that causes the prices to change.

Hence, if the TSSI misinterprets Marx because it implies that prices of production can change even when technology and the real wage rate do not, then Moseley misinterprets Marx in the same way. Simple logic dictates that he must either admit to misinterpreting Marx on this point or accept that Marx's prices of production can change even if technology and the real wage do not.

References

Kliman, Andrew. 2007. Reclaiming Marx's "Capital": A Refutation of the Myth of Inconsistency. Lanham, MD: Lexington Books.

Moseley, Fred. 2016. Money and Totality: A Macro-Monetary Interpretation of Marx's Logic in Capital and the End of the "Transformation Problem." Leiden and Boston: Brill.

Table 1: Moseley's Prices of Production Change Although "Productivity" and Real Wages Do Not

Before branch 2 doubles in size

MELT $(V+S)/L$					1	
output price per unit (1	2		8.0			
price rate of profit $\pi/(C+V)$	20.0%		20.0%		20.0%	
value rate of profit $S/(C+V)$	8.0%		80.08		20.0%	
total price of output $C + V + \pi$	\$120	[09]	\$24	[30]	\$144	
$\frac{profit}{\pi}$	\$20		\$4		\$24	
total value of output $C+V+S$	\$108	[09]	\$36	[30]	\$144	
surplus- value S	88		\$16		\$24	
variable capital ${\cal V}$	\$4	[2]	88	[10]	\$12	[15]
constant capital C	96\$	[48]	\$12	[9]	\$108	[54]
living labor		[12]		[24]		[36]
input constant price per living capital unit labor C	2		0.8			
branch	1		2		total	

After branch 2 doubles in size

MELT $(V+S)/L$			1
output price per unit	2.5	0.8	
fice rate for profit $(C+V)$	20.0%	20.0%	20.0%
value rate price rate of profit of profit $S/(C+V)$	2.6%	56.0%	20.0%
total price value rate profoutput of profit o $C+V+\pi$ $S/(C+V)$ π_{λ}	\$150 [60]	\$60 [60]	\$210
$\frac{\text{profit}}{\pi}$	\$25	\$10	\$35
surplus- total value value of output S $C+V+S$	\$132 [60]	\$78 [60]	\$210
	25	\$28	\$35
variable capital $\scriptstyle V$	\$2 [2]	\$20 [20]	\$25 [15]
onstant capital C	\$120 [48]	\$30 [12]	\$150 [60]
living c er labor L	[12]	[48]	[09]
input price per unit	2.5	1	
branch	1	2	total

Note: Physical quantities of inputs and outputs are in square brackets.