

## All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 9

Andrew Kliman, August 13, 2016

In Part 8 of this series of comments on Fred Moseley's new book, I stated, hopefully, that "we may be seeing the first step of forward movement in the debate" (Kliman 2016, p. 1). I should have remained without hope. Moseley's (2016c) response to Part 8 takes several steps back. His arguments are getting more and more feeble, but he persists nonetheless. He seems determined to prove, once and for all, that Marxian economics means never having to say you're sorry.

### Return of the "Circular Reasoning" Gambit

For one thing, he has now re-introduced his "circular reasoning" gambit in order to reject Part 8's general-case demonstration that his interpretation of Marx is physicalism in "macro-monetary" clothing:

Kliman argued that his table on the bottom of p. 4 of his Part 8 is in terms of given quantities of money capital and labor, as in my interpretation. But that is not true. This table is the same table that was on the bottom of p. 8 of his Part 7, and the monetary quantities in that table in Part 7 were derived ... from ... given physical quantities ....

Kliman then goes in the opposite logical direction and derives input-output coefficients from the monetary quantities he has derived as above ....

Thus Kliman argues in a circle and proves nothing about my interpretation of Marx's theory.

*This is the silliest argument I have ever encountered.* My argument in Part 7 and my argument in Part 8 were two *different* arguments. The Part 8 argument started from monetary quantities. Within that argument, they were not derived from anything. There was therefore no circular reasoning. There is only circular reasoning if one moves from a starting-point to the conclusion and back again to the starting-point of the *same* argument.

I will not belabor this point, both because it is so obvious and because I am sure that Moseley will not accept it. For his benefit, I have included here an appendix that starts from a whole different set of monetary quantities but shows, yet again, that the physicalist rate of profit is quantitatively identical to his rate of profit.

I think it will be harder for him to argue that the monetary quantities of this new example are derived from physical quantities. But I do have to admit that I began with physical quantities when I produced the new example—1 computer, 1 monitor, 1 keyboard, 15 minutes of labor, etc. So maybe he can use that fact to declare once again that I'm guilty of circular reasoning.

## A Plain Falsehood

In his response to Part 8, Moseley also states:

Kliman's numerical example on p. 13 \*reverses the relation of causation\* between the rate of profit and prices of production, in the following way:

Kliman's representation of my interpretation first determines prices of production by the product of given physical quantities and unit prices.

$$P_i = p_i Q_i$$

e.g.  $P_1 = 5 (10) = 50$

Then the amount of profit in each sector is \*derived from the predetermined  $P_i$ \* as follows:

$$\pi_i = P_i - (C_i + V_i)$$

$$\pi_1 = 50 - (24 + 3) = 23$$

And then the rate of profit in each sector is determined by:

$$r_i = \pi_i / (C_i + V_i)$$

$$r_1 = 23 / 27 = .85$$

Thus Kliman's logical sequence is:  $p_i Q_i \rightarrow P_i \rightarrow \pi_i \rightarrow r_i$

which is the \*opposite relation of causation\* between the rate of profit and prices of production compared to my interpretation of Marx's theory.

Therefore, Kliman's numerical example does not apply to my interpretation of Marx's theory.

This is just plain false. I did not reverse a thing. *I used the information that Moseley himself provided.* This is what he wrote in his failed attempt to show that he could obtain an equalized rate of profit (.29 = 29%) that differs quantitatively from the physicalist rate (.11 = 11%):

For example, if it is assumed instead that new value in Sector 1 = 6 and new value in Sector 2 = 30, and  $p_1$  and  $p_2$  are calculated in the same way that Kliman did, by setting  **$P_1 + P_2 = W_1 + W_2$**

$$\mathbf{10p_1 + 10p_2 = (C_{21} + 6) + (C_{12} + 30)}$$

$$= (8p_2 + 6) + (4p_1 + 30)$$

and this equation is satisfied by the prices  **$p_1 = 5$  and  $p_2 = 3$** .

With these prices,  $V_1 = 3$ ,  $S_1 = 3$ ,  $V_2 = 15$ ,  $S_2 = 15$  (so the total  $S = 18$ ),  $C_{21} = 24$ ,  $C_{12} = 20$ , and the rate of profit is  $18/62 = .29 \neq .11$ .<sup>1</sup> [emphases added]

Note that *Moseley himself*, not I, was the one who specified that  $P_1 = 10p_1$ , that  $P_2 = 10p_2$ , that  $p_1 = 5$ , and that  $p_2 = 3$ .

I request that he retract his false statement.

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<sup>1</sup> Moseley (2016a). This passage also appears on p. 9 of my Part 8 (Kliman 2016).

But I have no objection to proceeding in the opposite direction (determining an equalized rate of profit on the basis of given amounts of total surplus-value and total advanced capital, then computing average profits, then computing the sectoral prices of production by adding the profits to cost-prices, and finally, dividing the prices of production by physical outputs to get per unit prices). I'm delighted to do this. I do it all the time. So did Marx.

In contrast to Moseley's procedure, this procedure *does* result in an equalized rate of profit (29.0%) that differs quantitatively from the physicalist rate (11.1%):

sector	$C_1$	$C_2$	$V_1$	$S$	$W$	$\pi$	$P$	$r = \frac{\pi}{C_1 + C_2 + V_1 + V_2}$
1	0	24	3	3	30	7.84	34.84	29.0%
2	20	0	15	15	50	10.16	45.16	29.0%
total	20	24	18	18	80	18.00	80.00	29.0%

The thing is, this successful procedure is the one that does not “apply to [Moseley’s] interpretation of Marx’s theory.” *It is the temporal single-system interpretation of Marx’s value theory!*

That bears repeating: *The successful procedure does not apply to Moseley’s interpretation of Marx’s theory because it is the temporal single-system interpretation of Marx’s value theory!*

How do I know? Simple. The prices are determined temporally, not simultaneously. In other words, per-unit input prices and per-unit output prices aren’t equal. The input prices are Moseley’s:  $p_1 = 5$  and  $p_2 = 3$ . But the output prices are  $p_1 = 34.84/10 = 3.484$  and  $p_2 = 45.16/10 = 4.516$ .

### **Yes, You Do Need to Prove It, Fred: Once More on the Fully-Automated Economy**

In his response to Part 8, Moseley also tries to dismiss another example of mine that disproved his claim that his rate of profit differs from physicalist rate. He claimed that, in a fully-automated economy, (a) his rate of profit equals zero, but (b) the physicalist rate of profit may be positive, because (c) a physical surplus may exist. I showed that if (a) his rate of profit equals zero, then (~b) the physicalist rate of profit will also equal zero because (~c) a physical surplus (in the relevant sense) will not exist.

Moseley does not challenge this demonstration. Instead, he tries to wave it away by appealing to a “well-known result in Sraffian theory”:

In the section on “full automation” in his Part 8, Kliman argued that I “need to prove that there can be a physical surplus in this case [his example]. He simply assumes it.”

But my argument about full automation is not based on Kliman's example. My argument is based on the well-known result in Sraffian theory that, if there is a physical surplus-value, then the rate of profit will be positive (e.g. Steedman, "Robots and Capitalism", New Left Review, 1985).

In my interpretation of Marx's theory, on the other hand, as derived algebraically in Chapter 2 of my book,  $S = m(SL)$ , and if  $SL = 0$ , then  $S = 0$  and the rate of profit  $= S/(C+V) = 0$ , even if there is a physical surplus-value. This is a clear and definite difference between Sraffian theory of the rate of profit and my interpretation of Marx's theory of the rate of profit.

His second paragraph is true. But note that the contrapositive of "if there is a physical surplus-value, then the rate of profit will be positive" is "if the rate of profit is not positive, then there is not a physical surplus-value." And note that if a statement is true, so is its contrapositive. Indeed, this is why, when I showed that the physicalist rate of profit will also equal zero ( $\sim b$ ), I was able to conclude immediately that a physical surplus will not exist ( $\sim c$ ).

As for Moseley's third paragraph, he is correct that, if there is no surplus labor (SL), then there will be no surplus-value (S), and his rate of profit will equal 0. That was the premise (a) of my demonstration. But the rest of the third paragraph is false because of the phrase "even if there is a physical surplus-value" My example *demonstrated* that this is false: if (a) is true, then so is ( $\sim c$ ).

In any case, since Moseley is the one who claims that his rate of profit will equal zero even if there is a physical surplus, it is he who bears the burden. He needs to prove that there can be a physical surplus in a case in which his rate of profit is zero. He has never proved this before, and he has not done so here. Indeed, he cannot do so, as I shall demonstrate in the next section.

However, he seems to think that he doesn't have to prove anything. He seems to think it has *already been proven* that a physical surplus exists in this case, and thus he waves away my demonstration that it isn't so. His line of thinking seems to be the following:

- (1) In a fully-automated economy, my rate of profit will be zero.
- (2) But there is already a proof, a "well-known result in Sraffian theory," that, in a fully-automated economy,
  - a. "if there is a physical surplus-value,"
  - b. "then the physicalist rate of profit will be positive."

It follows from (1) and (2)b that

- (3) my rate of profit differs quantitatively from the physicalist rate.

However, the conclusion, (3), is invalid. The argument goes through only if (2)b is true, but (2)b *has not been shown to be true*. The "well-known result in Sraffian theory" to which Moseley appeals does not show that (2)b is true, because it is a **conditional** result: **if** there is a physical surplus-value, **then** the rate of profit will be positive. So, to show that (2)b is true (and therefore that (3) is true), Moseley must prove that (1) and (2)a are compatible, i.e., that there can be a physical surplus (in the relevant sense) when his rate of profit equals zero.

## No, You Won't Be Able to Prove It, Fred

However, he will not be able to prove it. That's because it isn't true, as I will now demonstrate. *Note that this demonstration is completely general—it holds true when there is fixed capital and when there isn't, when some industries use their own products as inputs and when none does, etc.*

In Moseley's interpretation of Marx,

- (a) the total value of output is equal to the price of the used-up portion of the means of production (cost of materials plus depreciation of fixed capital), plus variable capital, plus surplus value,
- (b) the total price of output equals the total value of output,
- (c) the economy-wide rate of profit is surplus-value as a percentage of the total capital-value advanced, and
- (d) per-unit input prices and output prices must be equal if rates of profit are equalized across industries.

Now, assume that

- (e) the economy is fully automated,
- (f) the amount of capital-value advanced is positive, and
- (g) rates of profit are equalized across industries.

It follows from (e) that

- (h) there is no variable capital, and
- (i) there is no surplus-value.

It follows from (c), (i), and (f) that

- (j) Moseley's rate of profit equals zero.

It follows from (a), (h), (i), and (b) that

- (k) the total price of output equals the price of the used-up portion of the means of production.

It follows from (g), (d), (k), and (h) that

- (l) total profit, as defined by physicalist theory, equals zero.<sup>2</sup>

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<sup>2</sup> In physicalist theory, total profit is equal to the total price of output, minus the total price of the used-up portion of the means of production, minus wages (i.e., variable capital), where all prices are valued simultaneously (i.e., per-unit input prices are constrained to equal per-unit output prices).

It *follows* from (l) that

(m) the physical surplus equals zero.<sup>3</sup>

And it *follows* from (f) and (l) that

(n) the physicalist rate of profit equals zero.

Q.E.D.

### A Correct Representation

Moseley's response to Part 8 also suggests that I misrepresented him:

First a clarification: I did not acknowledge in my last comment that “[my] equalized rate of profit is quantitatively equal to the physical rate of profit”. Rather, I acknowledged that IF the rate of profit is determined by given physical quantities, then there is only one possible rate of profit. However, I argued further that according to my interpretation of Marx's theory, the rate of profit is NOT determined by given physical quantities, but is instead determined by given quantities of money capital and labor. And this \*different theory\* of the rate of profit leads to different conclusions.

Although Moseley suggests, by quoting me and negating the quote, that I misrepresented him, I did not. Compare what I actually wrote to his truncated version.

Moseley now acknowledges that, “if you assume given physical quantities,” his equalized rate of profit is quantitatively identical to the physicalist rate of profit, as I have been arguing.

I quoted his “if,” and while the identity between my version and his may not be as exact as the identity between his rate of profit and the physicalist rate of profit, it is damn close. If “there is only one possible rate of profit,” then that rate of profit is the physicalist rate, Moseley's rate, Santa Claus's rate, etc.<sup>4</sup> Therefore Moseley's rate, Santa Claus's rate, etc., are quantitatively equal to the physical rate of profit.

I also went on to say something identical in substance to his last two sentences:

Moseley concedes that he was wrong to contend that his rate of profit is quantitatively different from the physicalist rate, if—but only if—“you assume given physical quantities.”

However, if one does not assume given physical quantities, but instead assumes given quantities of money capital and quantities of labor-time and the labor theory

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<sup>3</sup> There is one exception: all per-unit prices relevant to the valuation of total profit (see note 2, above) might equal zero. But in that case, the physicalists' total profit and rate of profit will still equal zero.

<sup>4</sup> Note the first word of this sentence.

of value (as in my interpretation of Marx’s theory), then \*the rate of profit is determined in a different way and the rate of profit determined is different.\*  
[Moseley 2016 [b]]

**References**

Kliman, Andrew. 2016. “All Value-Form, No Value-Substance: Comments on Moseley’s New Book, Part 8.” August 10. Available at <http://www.marxisthumanistinitiative.org/miscellaneous/all-value-form-no-value-substance-comments-on-moseleys-new-book-part-8.html>.

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\_\_\_\_\_. 2016b. [Comment on “All Value-Form, No Value-Substance: Comments on Moseley’s New Book, Part 7”]. August 10. Posted in “Comments” section at <http://www.marxisthumanistinitiative.org/miscellaneous/all-value-form-no-value-substance-comments-on-moseleys-new-book-part-7.html>.

\_\_\_\_\_. 2016c. [Comment on “All Value-Form, No Value-Substance: Comments on Moseley’s New Book, Part 8”]. August 13. Posted in “Comments” section at <http://www.marxisthumanistinitiative.org/miscellaneous/all-value-form-no-value-substance-comments-on-moseleys-new-book-part-8.html>.

**Appendix: “Circular Reasoning” This!**

Let’s use a *new, spanking-clean* example to do what Moseley wants us to do, “assume[ ] given quantities of money capital and quantities of labor-time and the labor theory of value (as in my interpretation of Marx’s theory).” The quantities of money capital, and the quantities of surplus-value determined by quantities of labor-time and “the labor theory of value” are given in the following table.

sector	$C_1$	$C_2$	$V_1$	$V_2$	$S$	$W$	$\pi$	$P$	$r = \frac{\pi}{C_1 + C_2 + V_1 + V_2}$
1	0	3	0	1	1	5	2	6	50%
2	1	0	0	3	3	7	2	6	50%
total	1	3	0	4	4	12	4	12	50%

$C_{21}$  (= 3) is Sector 1's monetary advance of constant capital to purchase Good 2 as an input, and  $C_{12}$  (= 1) is Sector 2's monetary advance of constant capital to purchase Good 1 as an input.  $V_{21}$  (= 1) is the spending, by Sector 1's workers, on Good 2, paid for indirectly by variable-capital advances of Sector 1 firms.  $V_{22}$  (= 3) is the spending, by Sector 2's workers, on Good 2, paid for indirectly by variable-capital advances of Sector 2 firms.  $S$  is surplus-value,  $W \equiv C_1 + C_2 + V_1 + V_2 + S$  is the total value of output,  $\pi$  is (average) profit,  $P \equiv C_1 + C_2 + V_1 + V_2 + \pi$  is the total price of output, and  $r$  is the equalized rate of profit.

We see that Moseley's "macro-monetary" rate of profit, determined just the way he wants it determined, is 50%. What about the physicalist rate?

The physicalist rate of profit is the positive value of  $r$  that renders the determinant of matrix  $\mathbf{H}$  equal to zero, where

$$\mathbf{H} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} - \begin{bmatrix} (a_{11} + b_{11}) & (a_{12} + b_{12}) \\ (a_{21} + b_{21}) & (a_{22} + b_{22}) \end{bmatrix} (1 + r),$$

$a_{ij}$  is the amount of good  $i$  needed to produce each unit of good  $j$ , and  $b_{ij}$  is the amount of good  $i$  paid as real wages in sector  $j$ , per unit of good  $j$  produced.

Now because—and only because—Moseley is a simultaneist (i.e., he constrains per-unit prices of inputs to equal per-unit prices of outputs), we can express each of the physical input-output coefficients—the  $a$  and  $b$  terms—either as a ratio of his "macro-monetary" variables, or as the product of a ratio of his "macro-monetary" variables and a per-unit price ratio:

$$a_{11} = \frac{p_1 a_{11} X_1}{p_1 X_1} = \frac{C_{11}}{P_1} = \frac{0}{6} = 0$$

$$a_{21} = \left( \frac{p_2 a_{21} X_1}{p_1 X_1} \right) \left( \frac{p_1}{p_2} \right) = \left( \frac{C_{21}}{P_1} \right) \left( \frac{p_1}{p_2} \right) = \left( \frac{3}{6} \right) \left( \frac{p_1}{p_2} \right) = 0.5 \left( \frac{p_1}{p_2} \right)$$

$$b_{11} = \frac{p_1 b_{11} X_1}{p_1 X_1} = \frac{V_{11}}{P_1} = \frac{0}{30} = 0$$

$$b_{21} = \left( \frac{p_2 b_{21} X_1}{p_1 X_1} \right) \left( \frac{p_1}{p_2} \right) = \frac{V_{21}}{P_1} \left( \frac{p_1}{p_2} \right) = \left( \frac{1}{6} \right) \left( \frac{p_1}{p_2} \right) = 0.1667 \left( \frac{p_1}{p_2} \right)$$



$$a_{12} = \left( \frac{p_1 a_{12} X_2}{p_2 X_2} \right) \left( \frac{p_2}{p_1} \right) = \left( \frac{C_{12}}{P_2} \right) \left( \frac{p_2}{p_1} \right) = \left( \frac{1}{6} \right) \left( \frac{p_2}{p_1} \right) = 0.1667 \left( \frac{p_2}{p_1} \right)$$

$$a_{22} = \left( \frac{p_2 a_{22} X_2}{p_2 X_2} \right) = \left( \frac{C_{22}}{P_2} \right) = \left( \frac{0}{30} \right) = 0$$

$$b_{12} = \left( \frac{p_1 b_{12} X_2}{p_2 X_2} \right) \left( \frac{p_2}{p_1} \right) = \left( \frac{V_{12}}{P_2} \right) \left( \frac{p_2}{p_1} \right) = \left( \frac{0}{30} \right) \left( \frac{p_2}{p_1} \right) = 0$$

$$b_{22} = \left( \frac{p_2 b_{22} X_2}{p_2 X_2} \right) = \left( \frac{V_{22}}{P_2} \right) = \left( \frac{3}{6} \right) = 0.5$$

Therefore

$$\mathbf{H} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} - \begin{bmatrix} (0+0) & \left( 0.1667 \left[ \frac{p_2}{p_1} \right] + 0 \right) \\ \left( 0.5 \left[ \frac{p_1}{p_2} \right] + 0.1667 \left[ \frac{p_1}{p_2} \right] \right) & (0+0.5) \end{bmatrix} (1+r)$$

$$= \begin{bmatrix} 1 & -0.1667 \left( \frac{p_2}{p_1} \right) (1+r) \\ -0.6667 \left( \frac{p_1}{p_2} \right) (1+r) & 1 - 0.5(1+r) \end{bmatrix}$$

and so the physicalist solution for the equilibrium rate of profit is the positive value of  $r$  that render the determinant of  $\mathbf{H}$ ,

$$1 - 0.5(1+r) - (0.1667) \left( \frac{p_2}{p_1} \right) \cdot (0.6667) \left( \frac{p_1}{p_2} \right) (1+r)^2 = 1 - 0.5(1+r) - 0.1111(1+r)^2$$

equal to zero. That value is 0.5, so the physicalist rate of profit is 50%, exactly like Moseley's "macro-monetary" rate! The latter is supposedly determined by "given quantities of money capital and quantities of labor-time and the labor theory of value," but, as we should all know by now, that's all value-form and no value-substance. Contrary to what he claims, the value-form stuff makes no quantitative difference; it is simply not the case that "the rate of profit determined is different."