Marx’s “transformation” made easy

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Andrew Kliman, *Reclaiming Marx’s* “*Capital*”: *A Refutation of the Myth of Inconsistency* (*Lexington*, *2007*), *£17.99*

Since the publication of the third volume of Capital in 1894 Karl Marx’s analysis has suffered at the hands not simply of those who openly oppose Marxism, but also of those who claim to stand in his tradition. Two key planks of Marx’s work have been challenged. The first is the “law of the tendency of the rate of profit to fall”. The second is Marx’s solution to what has become known as the “transformation problem”—the shift from the analysis of “values” in the first volume of Capital to the analysis of “prices” in the third.

Andrew Kliman’s book answers Marx’s critics new and old. Setting aside the question of whether Marx’s ideas are right or wrong, Kliman argues that *Capital* can, and should, be interpreted in such a way as to render it “internally consistent”. Only by following this method can a sensible interpretation be constructed and tested against reality. Kliman’s book sets out one such interpretation of *Capital*, which satisfies this criterion. All this is done with admirable clarity, in stark contrast to most of the literature on “value theory”.

Kliman responds to the attacks on Marx’s law of the tendency of the rate of profit to fall in a chapter that parallels the article by Chris Harman in this issue of International Socialism. But it is the second challenge to Marx, the so-called “transformation problem”, that forms the most interesting section of this book. The problem has often been posed using complicated mathematical formulations, making it seem like the preserve of Capital geeks, but the basic issues are relatively easy to grasp.

For Marx the value of a commodity reflects the amount of “living labour” expended by workers in its creation, plus the amount of “dead labour”—past labour crystallised in the instruments of production, raw materials, etc—used up in its production. The value can be measured as a sum of money reflecting the “socially necessary labour time” required to produce the commodity. Here “socially necessary” refers to the labour time required under normal conditions with the average prevalent skill and intensity.

The capitalist has to purchase the dead labour, and makes no profit from this. The living labour, on the other hand, has a double value. The capitalist receives a day’s labour, but only has to pay enough, in the form of a day’s wages, for the reproduction of the labour power. Because the wage merely reflects the amount of value needed to get the worker back to work, and raise the next generation of workers, it will tend to be less than the new value the worker creates. The remaining hours create “surplus value” for the capitalist, and this is the basis of profit. The rate of profit is the ratio of surplus value to the total capital advanced in wages and inputs of dead labour.

Marx provides this basic account in the first volume of *Capital*. Here he is considering "capital in general". He abstracts from the effect of competition between different capitals or the coexistence of different sectors of the economy. This allows him to locate the origin of surplus value in the exploitation at the heart of the capitalist production process. In the third volume of *Capital* he goes beyond the concept of capital in general and considers capitalism as a concrete system where there are "many capitals"; to do this he must integrate the sphere of "production" with the sphere of "exchange".

On the basis of the analysis of value in the first volume of *Capital* each industry would have a different "rate of profit", because each uses a different ratio of living and dead labour (different "organic compositions of capital", as Marx put it). But in capitalism as it actually exists, profit rates tend to equalise across economies. Marx argues that capital flows between sectors, from those with low rates of profit to those with high ones, as capitalists seek to maximise their profitability. Those goods in sectors with a high rate of profit will be produced in greater quantities, lowering their prices, while those in sectors with a low rate of profit will become scarce and their prices will rise. Over time these changes in price will tend to equalise profit rates between sectors. This process is the "transformation" of values into what Marx called "prices of production".

According to this analysis, prices of production are a more complicated expression of value. The surplus value created across the whole economy is reallocated to different capitalists in such a way as to form a "general rate of profit". Marx showed that, from the point of view of the capitalists, this process seems to happen the other way round. In calculating the price of their goods, capitalists look at their input costs (their "costs of production") and then mark up the price according to the general rate of profit multiplied by the capital invested. It appears as if the capitalist simply receives from society a share of total profit reflecting their investment.

Because prices of production are, in Marx's analysis, simply a complex form assumed by value, a number of "aggregate equalities" must hold. The total price of the outputs of an economy must equal the total value of the outputs, and total profit must equal the total surplus value produced.

Marx's account has proved remarkably controversial. In particular, papers by Ladislaus Bortkiewicz from 1906-7, and similar accounts that have followed, sought to prove that "Marx's account produces a difference between input and output prices, and that this difference leads to 'internal contradiction'—specifically, to a spurious disruption of the production process" as inputs and outputs fail to match up. Having taken this step, "Borkiewicz 'corrected' Marx's account" with a solution that "severed values and prices into two discordant systems" (p46).

Kliman shows that there are two fundamental problems with approaches such as Borkiewicz's.

First, like most interpretations of *Capital*, Borkiewicz's is what Kliman calls a "dual-system interpretation". In chapter nine of the third volume of *Capital* Marx gives numeric examples to illustrate his transformation. But in these examples he does not appear to apply this transformation to the cost of the inputs into production that the capitalist purchases.

In the same chapter Marx comments, "We had originally assumed that the cost price of a commodity equalled the *value* of the commodities consumed in its production. But for the buyer the price of production of a specific commodity is its cost price, and may thus pass as cost price into the prices of other commodities. Since the price of production may differ from the value of a commodity, it follows that the cost price of a commodity containing this price of production of another commodity may also stand above or below that portion of its total value derived from the value of the means of production consumed by it." Dual-system interpreters conclude from this passage that the values of inputs must also be transformed into prices to complete the transformation process, leading to two separate systems.

One influential version of this is the "New Interpretation", which emerged in the 1980s. This account attempts to reconnect the value and price systems through wages—which are held to be equal in the two systems. Both the traditional dual-system accounts and the New Interpretation are flawed according to Kliman because "cost prices and capital advances differ across value and price systems. There are consequently two distinct and unequal general rates of profit as well, and the remaining aggregate equalities cannot hold true, contrary to what Marx concluded" (p33).

Kliman argues for a single-system interpretation. Such interpretations also emerged in the 1980s. They offer an alternative solution to the problems posed by Marx's shift from value to price in *Capital*. The inputs into production (wages, raw materials, machinery, and so on) are always values, rather than prices. But they are not the values required to produce these things, they are the values the capitalist must advance to purchase them. And, "to acquire the needed means of production...the firm needs to buy them at their actual *price*—not at their value" (p34). So the value advanced to purchase an input is its "price of production". Kliman provides textual evidence to show that this is a possible interpretation of Marx's writings. However, the evidence is hardly decisive either way. Kliman's case rests heavily on whether his interpretation allows a consistent account of *Capital*.

There is a second problem with Borkiewicz and most of those who have followed him. Borkiewicz assumes that the values of commodities when they are treated as inputs into a cycle of production are the same as their values when they leave the same cycle as outputs. Kliman refers to this as "simultaneous valuation", and he rejects it in favour of "temporal valuation". Kliman's point is simple: you can't produce anything using inputs that have not yet been produced! The value that must be advanced to obtain the inputs in a given period depends on the output price in the *previous* period.

Kliman gives a number of powerful examples to justify this claim. One of the most straightforward is to consider the entire economy as being based on the production of corn, which is itself grown from corn seed (corn is both the input and output). Kliman shows through a simple calculation that if a drought means that ten bushels of corn were planted but only nine were harvested, the living labour put in by the farmers must, by the simultaneous interpretation, be negative (equal to minus one bushel worth of labour). Ridiculous results such as this are avoided if it is assumed that prices of outputs and inputs do not have to match in a given cycle. In the example cited, the price of corn rises after the drought.

Kliman also shows that simultaneous valuation leads directly to what he calls “physicalism”. If inputs and outputs have the same value for a given commodity, then, whatever the intention of the author (and many claim to reject physicalism), the physical quantities of outputs, rather than the labour embodied within the outputs, are all that matters.

Kliman’s shift to temporal valuation immediately undermines Bortkiewicz’s argument. Borkiewicz bases his critique on a “simple reproduction” model, in which the same physical quantities of goods are produced in each cycle of production. Here the input and output values can be made to match up, so, for example, there is always sufficient demand for wage goods to match the output of the sector producing wage goods. Once values are transformed to prices, supply and demand no longer match and reproduction cannot continue. But Kliman can simply construct a second cycle such that the supply in the first cycle matches demand in the second cycle.

Once this is combined with the idea that prices of production of outputs are the values advanced to purchase inputs (the single-system approach) it can be shown that Marx’s aggregate equalities still hold—price is seen to be complex expression of value, and total profit equals total surplus value. The dual-system interpretations that Kliman surveys do not maintain these equalities.

Kliman’s solution will look counter-intuitive to anyone more familiar with dual-system interpretations—the total value of inputs and outputs changes between cycles (and this is not simply a question of quantities of money; the amounts equally represent labour time), even though the physical output and production methods are identical in each cycle. But -counter-intuitive solutions are not always wrong, and Kliman’s case is powerfully stated.

This book is the clearest exposition of what has become known as the temporal single-system interpretation (TSSI), an approach shared with authors such as Guglielmo Carchedi and Alan Freeman.

Unfortunately, the most convincing recent rival interpretation—provided by Alfredo Saad Filho in his book *The Value of Marx*—is dismissed by Kliman in a single footnote. Saad Filho’s account builds on Ben Fine and Laurence Harris’s 1979 work *Rereading Capital* and John Weeks’s 1981 work *Capital and Exploitation*. This body of work does seem to lead to two separate systems. As Fine and Saad Filho write in their most accessible account of Marx's theory, *Marx's Capital*, "commodities have values as well as prices…two distinct account systems (not necessarily equally significant either in theory or practice) are possible". However, whatever one thinks of this, their work presents persuasive evidence that Marx's transformation is not primarily a theory of prices, and the various attempts to "solve" the "transformation problem" are therefore missing the point.

This body of work has also sought to capture some of the temporal nature of capitalist accumulation by highlighting the distinction drawn by Marx between the organic and value compositions of capital. Both are value measures of the technical composition of capital (the physical ratio of dead labour to living labour). The organic composition abstracts from the sphere of exchange, ignoring the continual changes to the value of inputs due to technical change in other sectors; the value composition integrates the two spheres of exchange and production and takes into account these changes.

Saad Filho claims that Marx sets out his "transformation" using the organic composition of capital, not the value composition, proving that Marx was not concerned with developing a price theory at this point. The role of Marx's transformation is merely to show how prices are formed in the sphere of production as surplus is reallocated. Only then is a "second stage" possible in which, Saad Filho argues, the value composition must be used and inputs transformed to prices. A more direct engagement with this account would both challenge this body of work and strengthen Kliman's analysis.

Finally, no attention is given to the possibility of developing temporal dual-system interpretations. There is an important, but little known, article, first published in English in *International Socialism 5* (1979), by Miguel Angel Garcia. Garcia, in one of the earliest temporalist critiques of the "transformation problem", writes, "Since von Borkiewicz it has frequently been assumed that Marx's solution to the 'transformation problem' is faulty. In this article we shall try to show: (a) that Marx's solution was correct; (b) that it leads to no inconsistencies in his theory of value."

The system Garcia presents is similar to that of Kliman: it preserves the aggregate equalities of Marx and it explicitly rejects the use of simultaneous equations. Garcia writes that even if the inputs needed to be transformed, "this transformation could not be the same as that involving the commodities that they create. When they were acquired these products did not yet exist… To determine cost prices of commodities by their sales prices is a 'solution' which recalls that of Baron Munchausen, who descended from the moon several times tying one end of a rope to another, and in order to do this he had to untie them first of all."

However, Garcia's critique differs from Kliman's in two respects. First, it is a system of prices, not values, although "prices remain linked to values". Second, Garcia maintains that "simple reproduction" makes no sense in this context (and it can be shown that Garcia's solution does not work in simple reproduction models). Once the analysis shifts to many capitals and away from capital in general (which Garcia wrongly associates with pre-capitalist commodity production), he argues that "equalisation of the rate of profit…

is a consequence of the way in which commodities appear, not now as simple values, but as means for the realisation of the capitals that produce them. This implies expanded accumulation and not simple accumulation."

If Garcia is right, there may still be space to develop a "temporal dual-system interpretation" of *Capital*. Kliman himself seems less than decisive in dismissing this possibility: "Direct textual evidence suggests that Marx was a single-system theorist. A good deal of evidence clearly favours this interpretation. Evidence adduced on behalf of the dual-system interpretation is equally compatible with the single-system interpretation."

Nonetheless, the interpretation developed by Kliman and others must certainly have a strong case to be considered the most compelling and consistent interpretation of *Capital*. This book deserves to be read and debated by all those interested in getting to grips with Marx's theory.