

CRITIQUE OF “Phenomenology, Scientific Method and the Transformation Problem” published in Historical Materialism 30.1 (2022) 209–236

There are four schools of thought around the Transformation Problem. The first, it is impossible to relate price to value because they exist at different levels of abstraction, the second, that it is unnecessary to do so when dealing with aggregate values and prices, the third it is possible to relate prices to actual costs or values but only by using inputs and outputs that are already priced, and the fourth that it is methodologically possible but enormously difficult to relate prices to labour time, but which will need to be done in the future. The first school embraces a new article ‘Phenomenology, Scientific Method and the Transformation Problem’ and it also includes [William Jefferies’](#) article based on historical analysis, the second school embraces theorists such as [Fred Moseley](#), the third the [TSSI](#) and the fourth school is notable for its double solution as elaborated by [Brian Green](#).

This article is a critique of the paper found in Historical Materialism authored by Jesse Lopes and Chris Byron.

Before proceeding I would like to make a number of observations. Firstly the method of abstraction. This is not restricted to Marxism. It is found in a multitude of disciplines, from biology to weather forecasting, onto medicine and then through to computer science. Even the BBC has a primer, not bad, on the use of abstraction for students. This quote is taken from that primer: “[Abstraction](#) is the gathering of the general characteristics we need and the filtering out of the details and characteristics that we do not need.” The method of abstraction is of crucial importance to the computing industry where it is the basis of all algorithms and only those algorithms free of forced abstractions actually work and are predictive. This is the reason I used facial recognition to explain the method of abstraction in the preface to my [pamphlet](#). Programmers had to map out the structure of the human face which meant isolating those features which were both general to the human face and unique to it before computers could identify faces.

What is however generally unique to Marxism is that it is the only science which is pilloried for using the method of abstraction, often by those who use this method and are familiar with it. It seems that it is forbidden to use the method of abstraction to examine society lest it reveal its dark secrets.

The second observation is the difference between complicated and complex. This is a raging discussion in every part of the scientific community, a complex or is it a complicated discussion. As enlightening as the discussion in the paper is between the evolving methodologies of Aristotle and Galileo, Marxism needs to move on, both catching up to and engaging in the contemporary discussion over systems analysis and integration as found in aerospace, engineering, architecture and the like where the distinction between complexity and complication dictates solutions.

Likewise, our understanding of capitalism hinges on whether it is a complicated or complex system. If it is complicated it can be described and if it is complex it cannot be. Definitions differ, but here is one of the more intelligible explanations. “[Simple problems](#) are solved just by following obvious rules — there’s only one solution and it’s intuitive. Complicated domains are ones where the rules are known and predictable — but the rules are significant and cannot be instinctively understood without some training. Complex domains, though, are ones that cross multiple domains and one can’t predict whether a change in one part might affect another.” The authors in their paper, based on this definition, appear to consider capitalism to be a complex rather than a complicated system.

However, it is my firm belief that Marx saw capitalism as being a complicated system. I will quote from Marx, though I hate using this method which is so favoured by various Marxists because it amounts to no more than intellectual ping pong, i.e. you quote then I will throw back a quote, with the players failing to see the big picture. "[A complicated social process](#) intervenes here, the equalisation process of capitals, which divorces the relative average prices of the commodities from their values, as well as the average profits in the various spheres of production (quite aside from the individual investments of capital in each particular sphere of production) from the actual exploitation of labour by the particular capitals." (Chapter 48,) "**The value of commodities appears, directly, solely** in the influence of fluctuating productivity of labour upon the rise and fall of the prices of production, upon their movement and not upon their ultimate limits. Profit seems to be determined only secondarily by direct exploitation of labour, in so far as the latter permits the capitalist to realise a profit deviating from the average profit at the regulating market-prices, which apparently prevail independent of such exploitation." (Chapter 48, page 10/12)" (my emphasis) Note the use of the word complicated at the beginning of the quotes.

Complex systems do not have laws or rules in modern parlance. They evolve, change direction, disappear, emerge, cause and effect demerge, in a word they are unpredictable. As the physicist Murray Gellman that said: "*The only valid model of a complex system is the system itself.*" Complex systems do not lend themselves to abstraction. Here is a fuller explanation on the same theme. "[Complex](#) problems result from networks of multiple interacting causes that cannot be individually distinguished and must be addressed as entire systems. In complex systems the same starting conditions can produce different outcomes, depending on interactions of the elements in the system."

Many historians have noted how often and with what emphasis Marx talks about the laws which govern the capitalist mode of production. This, not quotes, is the convincing argument that Marx saw capitalism to be a complicated system, one which could not be "*instinctively understood*". Marx spoke of the laws arising from an increase in the composition of capital, the laws which governed the expenditure of labour time, the law of surplus value, the laws behind the tendency of the rate of profit to fall and so on and so forth. Laws mean cause and effect, though these laws are modified by mediators as in the counter-vailing factors affecting the fall in the rate of profit, which means therefore, these laws express themselves always and only as tendencies.

And it is for all these reasons, that Marx, in the quote above, can talk of fluctuations in productivity **directly** imposing themselves on the prices of production. We can now turn the paper recently published.

Phenomenology, Scientific Method and the Transformation Problem

This is the way the authors define phenomenology. *By phenomenology, we mean the study of what appears immediately to consciousness without reflection, and therefore independent of the causes behind (and the scientific laws governing) those appearances.* (page 210) This is unscientific. The surface of a phenomenon would be static, frozen in time, if it were independent of the causes that lie below (a better use of language than behind it). The surface of a thing is never static but dynamic because it is the interface between its inner self (or life of the thing) and the outside forces acting on it. However, because these surface movements are range bound, therefore familiar to experience, they do not challenge conscious perception until exceptional events cause them to break out of range or break down.

The problem is somewhat different. Because outside forces tend to be visible, while the inner forces are obscured, the explanation of what is causing the appearance of something to change, the nature of this

interaction, tends to be vulgar without analysis. Glass can be used to describe this. Glass can be either a window or a mirror. Surface appearances tend to mirror the outside world, but through analysis windows can be opened to examine the interior of the thing, which once fully described predictively explains the interacting of the thing with the world outside. The thing is no longer only experienced but understood.

The other aspect the authors adopt in order to underpin their approach to the transformation problem is that spontaneously observable surface features are **absolutely** detached from their inner essence. While connections exist causality does not. And causality fails because it is unobservable *“But more importantly for our thesis, the production price of a commodity is the appearance – the descriptive datum – resulting from, and expressive of, a properly unobservable value”*. (page 214) (my emphasis) So the known is derived from the unknown.

This view is repeated many times. *“The problem with this objection is that the abstract quantities of value and surplus-value are part of the abstract theory of capital, which can never in reality be equal (gleich) to the quantities of transformed forms of concrete phenomena. If they could, then – but only then – they would be commensurable. For if they were commensurate, they would be identifiable, and therefore reducible. But values can never be theoretically reduced to their prices on pain of losing the scientific character of the analysis. And that is because values and prices do not have a common measure; that is the reason why prices can only approximate the formulae of the abstract theory.* (page 217) (my emphasis) There is so much wrong with this view. Firstly, prices need to be reduced to values, not the other way round, for to do so would turn abstraction on its head. Secondly, they are commensurate in the aggregate, total prices will equal total values, total profits will equal total surplus value and so on. Thirdly, prices and values do have a common measure, labour time, but in the case of value it is embodied labour time, and in the case of prices it is commanded or captured labour time. (Captured is the better expression as it is captured by money.)

If they did not share a common measure then how can we determine that prices diverge from values. *“The only answer lies in the application of scientific method (not peculiar to Marx); for what cannot be ascertained phenomenologically, but can be postulated scientifically, is a **‘divergence of price from value’** or appearance from reality. Phenomenologically, what is seen are cost prices (what it takes to make a commodity) and prices of production (what it takes to get a normal rate of profit back on a commodity). Value, however, is not seen: it is an invisible theoretical hypothesis assumed to exist in order to explain why prices hover around certain numbers for certain durations.”* (my emphasis) Ah, the scientific method. How long will it take me to walk to town, consult the scientific method, how warm is it today, consult the scientific method. Will my investment pay off, consult the scientific method.

Imagine how we would rebut a modern Böhm-Bawerk criticising Chapter 9 on this basis. According to the authors the following answer would suffice: “you fail to understand Marx’s scientific method.”

The answer is not the scientific method, but the method applied to labour time which is real in both cases. In the former instance - value - it is measured by expenditure and in the latter it is an aliquot share of the total labour time of society. So if we did not know that total prices represent the total labour time of society, how can we know that an individual price represents an aliquot share of this time. All price tells us concretely, is that on average a capitalist firm captures a specific aliquot share of labour such that the firm tends to enjoy an average rate of profit. The only difference between price and original value, is that price emerges after the redistribution of surplus, while value exists prior to its redistribution. Knowing why and how this redistribution works, enables us to link the two.

And this is exactly what Marx does in Chapter 9. Before and after redistribution, forms the content of this Chapter. But more. He shows the redistribution follows rules which confirms this matter is complicated not complex. Firstly, he proves that redistribution has a direction. It moves from low composition industries to high composition industries and not the other way round. If it did, then instead of the rate of profit averaging out, differences in the rate of profit would enlarge. Secondly, he shows that there are limits to this movement predicated by differences in composition, employment, and exploitation. He shows that it takes 26, not 24 or 28 to achieve an average rate of profit in his tables.

Thus the divergences have direction and limits. This would not apply to a complex system which by definition could give rise to any direction and whose expansion could be limitless.

Conclusion.

Marx's method is scientific. He had to explain how it was that the source of value and hence of price was buried deep under the facades laid down by the actual process of capitalist production and circulation. I do not diverge one iota from the authors on this and they have done a good job collating and describing the fetishism of commodities and capital.

However we are not the actors in capitalist production - the capitalist and worker - both oblivious to the inner workings of capitalists. The former rewarded by their ignorance, the latter plagued by it. We are the analysts, and our exact purpose is to retrieve and estimate what is "unknowable" to the actors.

Of course appearance is concrete. We walk on pavements oblivious to the fact that at an atomic level there is more space than matter and that really every centimetre of pavement is filled with trillions of minute potholes, that we are in effect walking on air. The prices at which commodities circulate are real and immediately apparent, and despite being shaped by many conflicting forces, they still serve to primitively distribute the labour time of society. They enable us to make choices. They enable capitalists to calculate their rates of return.

I would like to conclude with two quotes from the end of Volume 3 which are notable for the fact that Marx uses the word "merely". *The transformation of values into prices of production, then, does not remove the limits on profit, but merely alters its distribution among the various particular capitals which make up the social capital, i.e., it distributes it uniformly among them in the proportion in which they form parts of the value of this total capital...*" (Chapter 50 page 6 of 16) *Let us assume that according to direct experience the values of a Commodity, or the prices of production -- which merely appear to be independent of the values -- always coincide with the market-prices of the commodity rather than merely prevailing as the regulating average prices by constant compensation of the continual fluctuations in market-price.* (page 11 of 16) (my emphases) There is thus no rupture merely an apparent break.

I consider the authors' paper to be not only wrong but dangerously wrong. Firstly it undermines our defence of Chapter 9. Secondly, it subverts our preparations for a future society. Das Kapital should be viewed not only as a Critique of Capitalism but a primer for Communism as well. By teaching us how prices work in a capitalist society Marx enables us to replace prices of production with objective prices insolubly tied to actual costs of production or what is the same thing – weighted average labour times.

Which is why I consider the fourth response to the transformation problem to be the only historically valid approach. It is possible to relate prices to values in a closed system which I call the *Double-Solution* and it tends to be verified by [empirical data](#) whose divergences it in turn explains. Yes, moving away from closed

systems used for illustrative purposes, the complicated system of capitalism modified to reward capital, would take a great deal of [intellectual effort](#) to unravel. But it can and needs to be done in the future if we are to introduce conscious planning.

Brian Green, 25th May 2022.