Value / Time: An Essay on the Principles of Political Economy

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Abstract

This study offers a critical reflection on the concept of value as it has taken shape in political economy, resuming the debate from where both classical political economy and Marxism had left it. It does not merely recall the old categories but proposes a reconstruction of the very measure of value by introducing the element of time into its determination—an element long neglected since the writings of the nineteenth century. From this perspective, the study reconsiders the dialectical relationship between humans and machines, not as a simplistic opposition between labor and technology, but as a deeper understanding of how value is formed within a civilization that continuously reproduces the conditions of its own existence. Technological progress does not lead to the erasure of value but rather to a reshaping of the conditions of its production and distribution in accordance with prevailing forms of social domination. The machine does not eliminate labor; it reorganizes it and generates through it new forms of labor in different economic spaces. Technology, while reducing the individual value of goods and labor, does not do so as a manifestation of social progress, but rather as the outcome of a social struggle between productive forces and forces of domination. In response to Western theses that herald the end of labor and the disappearance of value under the banner of the "technological revolution," this study adopts a critical stance that reasserts the centrality of labor. It emphasizes that value—as a historical social relation—does not vanish but rather transforms in its modes of appearance. It also demonstrates that capitalism, in the face of these transformations, does not collapse but instead reproduces itself through mechanisms of adaptation to what appears to be its own negation. This text does not merely trace the impact of technology on political economy; it proposes an alternative theoretical path for understanding value—one that places time at the heart of the analysis, affirming the underlying dialectic between labor and technique, between society and machine, and between value and time.

Keywords

Value, Political Economy, Technology, Labor, Machines, Time, Surplus Labor, Capitalism, Technological Development, Crisis of Consciousness, Social Forces, Labor Power, Commodity Value, Stagflation, Economic Structure, Historical Materialism.

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Preliminary delimitations: Objective and methodological

From the very outset, it must be emphasized that this study bears no essential resemblance to prior research, even if it appears—superficially—to intersect with them on the question of time; for its treatment of this issue emerges from a radically different perspective, grounded in an entirely distinct objective and methodological foundation.

In the context of late modernity, and through his book The Condition of Postmodernity, David Harvey sought to grant time a central dimension in understanding the transformations of capitalism—not as a material essence, but as a perceptual framework shaped by its movement. Through the mechanism of "time-space compression," capitalism reconfigures space and social relations in line with its essential demand: accelerated accumulation **(1)**. However, in this treatment, time remains conditioned by cultural transformation and constrained by crisis; it holds no existential independence as a material determinant of value **(2)**. In Harvey's analysis, time is merely a medium through which image mediates the substance of matter, and sign prevails over social labor **(3)**. It is, therefore, an extension of an intellectual tradition that sees time only as a mirror of capital's shifting relations.

In my own study, Value/Time, time is not considered a secondary result of capital's transformations, but rather reclaimed as an objective, material, and rigorous measure of value—based on the quantity of socially necessary energy required to produce a commodity during its production time. Time here is not a cultural container or a perceptual framework, but a precise calculative unit by which the objective law of value is measured. Accordingly, I do not treat time as a dependent variable, but as a structural determinant of the law of social value. My proposition involves a fundamental correction of the value measure itself: through the ratio of socially necessary energy to actual production time. Thus, time becomes not merely a context, but a constitutive component of value—one that capitalism cannot bypass without dismantling its very structure.

In his book The Enigma of Capital, Harvey reaffirms his earlier thesis, viewing time as a domain within which capitalism moves or collides with its own impotence **(4)**. Yet, although he recognizes the importance of time, he does not grasp it as a measure of value, but as an external field for capital's motion. In contrast, in my work, time is not an external dimension, but an internal component of value's composition—a structural element through which price is socially calculated according to a strict and objective law.

Barbara Adam, for her part, touched upon another dimension in her book Time and Social Theory, where she revealed how capitalism reshaped human perception of time, transforming it into a coercive apparatus externally imposed on individuals **(5)**. Yet she, like Harvey, remained focused on the impact of time on life. As for me, I explore how time affects not only life but value itself. For me, time is a calculative component—a mathematical relation that links production time with socially necessary energy to determine value in a strictly material manner.

Andrew Kliman, in his attempt to defend Marx in Reclaiming Marx's Capital, believed he had overcome contradictions through a static mathematical analysis **(6)**. But he never reached the core of the issue, as he remained confined within an outdated measure whose validity had not been

proven. He failed to see that the crisis of value lies within its very measure. My work, by contrast, aims to dismantle the measure itself and propose a new one: the quantity of social energy (living, stored, and surplus) divided by production time. Time, then, is not merely a tool for understanding, but a tool for calculation.

Finally, in his book Time, Labor, and Social Domination, Moishe Postone demonstrated that time in capitalism is not merely a context, but a form of domination [(7)]. However, Postone remained within the domain of social critique without advancing toward the formulation of a new standard for value. Time, in my work, is not only a tool of domination but the very core of value. It was never just a framework—it has always been a precise material standard, though it has never yet been used for calculation. That is precisely what I now attempt to do.

(I)

In the sixth edition of my book *A Critique of Political Economy* [(8)], I addressed the law of value and demonstrated that political economy, throughout its history, has measured value—its central and fundamental concern—using a scientifically incorrect metric. Consequently, it ended up formulating a theory of market price: the market, where everything depends on everything else! As a result, its interpretation of the phenomena related to production and distribution at the societal level became confused and inadequate. My argument against political economy's erroneous measurement of value is grounded in the assertion that value is an intrinsic property of a thing—a quality that distinguishes and defines it. In this regard, it is akin to weight, length, volume, height, etc. If an object exerts a certain force due to gravity, we say it has weight—it is weighted. If an object extends across a measurable distance between two endpoints, we say it has length—it is long. If an object occupies space, we say it has volume—it is voluminous. If an object extends vertically from its base to its top, we say it has height—it is tall. The same applies to value: a thing—a product—those results from labor (regardless of its form: free, enslaved, coerced, contractual) and thus contains a certain amount of human effort embodied in it, acquires value—it is valuable. Value, in this sense, does not depend on its measurement or estimation for its existence; it would be logically absurd to claim that a thing has no value merely because we do not yet know the amount of human effort expended in its production. For value, as a property, is inherent to the thing as soon as it embodies some degree of human effort. The measurement or estimation of value in terms of a quantity of another thing only arises at a subsequent stage—after value itself is established—just as the measurement of length necessarily follows from the presence of the dimension between the object's endpoints. When political economy asserts, for example, that a pen is worth 40 minutes, it merely means that the human effort embodied in the pen amounts to 40 minutes! [(9)]

However, the political economy approach to measuring value and its consequences collides with the principles of the science of measurement and even contradicts the concept of value itself; it is scientifically incorrect to say that the human effort exerted to produce something equals (Y) minutes or (X) hours, even though one may say that the human effort was exerted during (Y) minutes or (X) hours. Even when we say that the human effort was exerted during (Y) minutes or took place during (X) hours, this does not mean that we have measured this human effort; rather, it means that we only know the time during which the effort was exerted without knowing its magnitude. We know the time during which value was created, but we do not know the amount of

value itself! And because political economy has continued to ignore science by asserting, as a given, for over two hundred years that the value of a commodity is measured by the time spent in its production, it thus uses an incorrect measure to measure value; because it measures the human effort embodied in the product using the unit of time as a measure! It is as if, as I mentioned in my book, one is trying to measure length with the Richter scale or measure height using the English gallon!

Therefore, I reviewed over two hundred years of the history of political economy, to correct the measure and unit of value measurement; presenting the correct unit of measurement represented by the Necessary Calorie (N.C). Thus, value (as a quantity of human effort embodied in the product) is measured by the Necessary Calorie (N.C) socially, not by the hour, which is a unit of time measurement. Consequently, I assumed that I was able to reintroduce the law of value, and perhaps reframe political economy itself as a social science focusing on the law of value as a general law governing all phenomena related to production and social distribution, in a way that can address all the objective and methodological problems faced by the founding fathers of the science. Among the primary issues was the measurement of value in the field of services, which the founders excluded from productive labor. Most importantly, the solution to these issues occurs without the reliance on the market, as Smith, Ricardo, and Marx did **(10)**, who moved political economy from the realm of science to experimental circles, opening the door to a flood of misconceptions and fallacies that infiltrated economic science, stripping it of its social content and human substance!

After presenting my hypothesis regarding the correction of the value measurement, I proceeded to study the role that time plays in the formation of that value on a social level. Since political economy has traditionally studied the phenomena within its scope apart from the movement of time, with the exception of:

- Some doubt expressed by Ricardo, before writing the third edition of *Principles of Political Economy*, in his letter to Ramsay, in which he expressed his desire to re-analyze value by introducing the relative time that goods take before being put on the market. **(11)**
- Marx's attempt, which leaned on the ability of the tendency of profit rates to equalize in solving the problem of value formation with changes in time.

Therefore, it was necessary to start from this Ricardian doubt and trace it to its conclusion, while methodically considering Marx's attempt.

(II)

To continue our discussion on the role played by time in the formation of value, we must revisit the issue that political economy has faced and that Ricardo and later Marx addressed. The issue is as follows: there are three goods: wooden molds, wine, and pottery. Each of the three goods requires 120 hours of labor **(12)** (live, stored, and surplus). Up to this point, there is no issue with exchange according to the law of value; the exchange between the three goods will occur at a 1:1 ratio. However, the difficulty arises when political economy faces the problem of time:

- The owner of the wooden molds, who spent 120 hours of labor, must wait 240 days before the molds can be offered for exchange, and thus the capital will return with profit.
- The owner of the wine, who also spent 120 hours of labor, must wait 120 days before the wine can be offered for exchange.
- The owner of the pottery, who also spent 120 hours of labor, needs to wait only 60 days before the pottery can be offered for exchange, and then the capital will return with profit.

So how can we conduct an exchange naturally between goods that have equal production costs (120 hours of labor) but different production times [(13)] (240 days for the wooden molds, 120 days for the wine, and 60 days for the pottery)?

For Ricardo, the solution, in the end, is to provide a reward for waiting! He estimated this, in the third edition of his principles, at 10%. But Ricardo never told us why 10%, not 9% or 11%.

As for Marx (who distinguished, starting from the use of labor power, between the working day[(14)] and the period of labor [(15)], and also distinguished, starting from the use of capital, between labor time [(16)] and production time), he considered the tendency of profit rates to equalize across sectors as playing a decisive role in explaining the role of time in the formation of value. However, relying solely on the ability of this tendency—as Marx believed—to direct producers toward branches of production through the advance or withdrawal of capitals according to the "average rate of profit,"[(17)] necessarily leads to the conclusion that the owner of wooden molds and the owner of wine would both turn to pottery! But this does not, did not, and will not happen. We know that political economy—at least according to Ricardo's contribution—reached, at a relatively early stage, the determination of a commodity's value by the quantity of socially necessary labor expended to produce it. This value is not limited to the living labor expended in production alone; it also includes the necessary labor embodied in the construction of buildings, machines, and equipment essential to production—in other words, stored labor.

Therefore, the value of the coat, which required 100 hours of live labor and 50 hours of stored labor for its production, is equal to the value of the fabric, which required 80 hours of live labor and 70 hours of stored labor for its production. When Marx came along, he completed the components of value, and we came to know that the value of the coat is not only composed of live labor and stored labor but also includes surplus labor. This was his initial line of thought [(18)] before he deviated in his second stage, adopting the concept of average surplus labor.[(19)] However, the political economy as it stands does not, and will not, assist us scientifically in identifying the reason why our three friends remain in the market without any of them, either the owner of the wooden molds or the owner of the wine, shifting to the pottery production branch. This is because each of them, as we mentioned earlier, spends 120 hours of labor (live, stored, and surplus), but no capital returns laden with profit, since we have neglected the time spent in trading. This is only after 240 days in the wooden mold production branch, 120 days in the wine production branch, and only 60 days in the pottery production branch.

The hypothesis we propose is that the reason the three of them remain in the market is that the social value of the commodity, through its development, is determined by the amount of live, stored, and surplus energy (valued in necessary calories) divided by its production time. The relative social value of the commodity is determined by its social value divided by its production

time, compared to the social value of the other commodity with which it is exchanged, also divided by its production time.

When commodities meet naturally, they exchange according to this law. And when their prices fluctuate in the market, they oscillate around this social value. In applying this law, we encounter three hypotheses: either the production times differ while the social values are equal, or the social values differ while the production times are equal, or both the production times and the social values differ. In all cases, the law of relative social value applies, meaning the social value of the commodity divided by its production time, relative to the social value of the commodity with which it is exchanged, divided by its production time.

Based on this, and having applied our methodology in measuring value by replacing the labor hour with the necessary amount of energy, we assumed that each of the three—namely the owner of the wooden molds, the owner of the wine, and the owner of the pottery—spends 12,000 necessary calories (live labor + stored labor + surplus labor). However, as mentioned, the capital does not return with profit except after 240 days in the wooden molds production branch, 120 days in the wine production branch, and only 60 days in the pottery production branch. Therefore:

- The value of one unit in the wooden molds production branch equals the value of half a unit in the wine production branch.
- The value of one unit in the wine production branch equals the value of half a unit in the pottery production branch.
- The value of one unit in the pottery production branch equals the value of 2 units of wine and 4 units of wooden molds.

However, achieving 50 (value/time) **(20)** as in the wooden molds production branch, which is done by: 12,000 production cost and 240 production time, can also be achieved by:

- 6,000 production cost and 120 production time (as in the wine production branch).
- It can also be achieved by: 3,000 production cost and 60 production time (as in the pottery production branch).

Therefore, the two capitalists—the producer of wooden molds and the producer of wine—will adjust the (value/time) combination to 3,000/60. This is in response to the development in the degree of social struggle for control over new technology, without being compelled, with the ongoing revolution in the forces of social production, to transition from one branch of production to another. Let us observe:

First: The adjustment of the production combinations (value/time) in the factories of wooden molds, wine, and pottery occurs as a result of the law of relative social value, governed by the degree of social struggle in the field of technology, not as a result of an assumed waiting reward as Ricardo imagined, nor due to the tendency of profit rates to equalize as Marx believed.

Second: The adjustment in combinations using new production techniques to achieve 50 (value/time) at the lowest production cost (3000 N.C.) and the shortest production time (60 days) will lead to a general decrease in relative social values on a social level, within a framework of

intense competition to control new developments in the field of technology, with the aim of achieving the lowest (value/time). This may raise the question of whether the phenomenon of value itself could fade away as a result of the continuous development in the field of technology. Let us defer addressing this question until after discussing the first observation related to the ability of the tendency of profit rates to equalize in explaining the role of time in the formation of value.

(III)

To discuss this alleged ability, which is rooted deep in the science of political economy, of the tendency of profit rates to equalize in explaining the role of time in forming value, we will analyze the role of social value in adjusting the (value/time) ratio, starting from analyzing the components of the production price itself. We neglected this above and merely assumed that its value (in total) is 12,000 units, without examining the amount of each of its components, specifically: the stored labor and surplus labor. In other words, without examining the fixed capital (means of production) and the profit (surplus labor). Now, let's assume that the production price of the wooden mold producer, which is 12,000 (N.C), consists of 3,000 means of production, denoted by (M.P), and 9,000 surplus labor, which is the profit, denoted by (P). We will also assume that the production price of the wine producer, also 12,000 (N.C), consists of 9,000 (M.P) and 3,000 (P). As for the production price of the pottery producer, also 12,000 (N.C), let's assume it consists of 11,000 (M.P) and 1,000 (P).

According to Marx's hypothesis, it is now necessary, before analyzing the components of the production price, to reverse his theory. The wine producer and the pottery producer should now move to the field of wooden mold production, where the latter obtains the highest possible profit, which amounts to 9,000 units. They will continue to earn the highest profit even if the capital of the pottery producer undergoes four cycles for every one cycle of the wooden mold producer's capital. If the capital of the former undergoes four cycles, it will only earn 4,000 units in 240 days. The same applies to the wine producer; two cycles of his capital will only yield him 6,000 units in 240 days. Therefore, the capitals of the wine sector and the pottery sector, despite the uncertainty surrounding the issue, will tend toward the wooden mold production sector. The rush of capital in this manner toward the wooden mold production sector will be a result of the tendency of profit rates to equalize, exactly as Marx stated!

However, it is essential here, immediately, not only to discard the relationship between time and the dormant forces of production without labor, but also to ensure that the analysis, as we have just done, is carried out by entirely excluding the means of production from the calculations! Our calculations were as follows: 9,000/240 in the wooden mold production sector, 3,000/120 in the wine production sector, and 1,000/60 in the pottery production sector.

In other words, we ignored, following Marx's theory which, without any clear reason, disregarded the value of the means of production in each sector, and we only calculated the profit-to-production-time ratio! It is well known that profit can only be realized during time through the forces of production. Therefore, it is not acceptable to neglect them when calculating (value/time).

Hence, if we want to understand the role that time plays in the formation of value, we cannot rely on that excessive and scientifically unjustified confidence in the ability of profit rates to equalize!

Instead, the calculation must be done as follows: 12,000/240 in the wooden mold production sector, 12,000/120 in the wine production sector, and 12,000/60 in the pottery production sector.

In this regard, Marx's theory of the tendency of profit rates to equalize (which intentionally overlooks the value of dormant means of production as a component of the cost of production) stops short of explaining the capital flows in and out, without considering time! Marx's theory of the tendency of profit rates to equalize cannot, therefore, fulfill its purpose when used to understand the role that time plays in the formation of value! Only the law of relative social value can explain the role of time in the formation of value on a social level.

If we return to the example above, and apply the law of relative social value, which takes time into account and does not neglect the value of dormant means of production, we will find that the capitals, whether active in the production of wooden molds, wine, or pottery, will not leave one sector for another. Instead, adjustments will only be made in the production combinations (value/time) using available technologies to achieve 50 (value/time) with the lowest production cost of 3000 (N.C) and the lowest production time of 15 days.

So far, we have discussed adjustments in production combinations within different branches in a particular sector, such as the industrial sector. Now, in order to deepen the analysis, we must shift the level of discussion from branches to sectors. Let’s assume there are three agricultural products: wheat, rice, and corn. Each of these product’s costs 24,000 (N.C). However, the wheat producer must wait 480 days, the rice producer must wait 240 days, and the corn producer must wait 120 days. According to the law of relative social value, we will have different (value/time) here, where 50 (value/time) is achieved with 6,000 (N.C) in a production time of 30 days.

This means that the economy, at the sector level, has (value/time) in the industrial sector that differs from (value/time) in the agricultural sector. This natural difference in (value/time) across sectors is due to, and organized by, the size of the capitals on the one hand and the production time on the other. This difference in (value/time) across sectors, which arises from the law of relative social value, governed, as mentioned, by the degree of social struggle in the field of technology, rather than by the tendency of profit rates to equalize, gives us, at least, three hypotheses, or rather methodological explanations, where it can:

- And it must be the case that there is no equalization of wages across sectors.
- Also, it can, and must, be the case that there is no equalization of profits across sectors.
- It can also, and must, be the case that there is no equalization of the prices of means of production on the social level.

Let us now, for further analysis, shift the level of discussion to the field of foreign trade. This time, let’s take a homogeneous commodity as an example to see, from another perspective, how social value is determined over time, according to the prevailing production technique. Let us assume that the production of cheese in France, England, and the Netherlands costs 48,000 (N.C). However, it is only released into the market after 960 days in France, 480 days in England, and 240 days in the Netherlands. In this case, we will be dealing with a (value/time) that is also determined by the law of relative social value, composed of a production price of 12,000 (N.C) and a production time of 60 days. Therefore, capitals will make adjustments to their production

combinations (value/time) in order to achieve the lowest production price of "12,000" in the shortest production time of "60" on a global scale.

(IV)

Because these adjustments in the production combinations, whether in the industrial or agricultural sector within national economies, or even on a global scale, to achieve the lowest (value/time), depend primarily on the developments occurring in the field of technology. And since value, as we know, is the amount of labor (living, stored, and surplus) embodied in the product, the introduction of technology, in this sense, particularly affects the amount of living labor as one of the components of value, potentially reducing its quantity within value to zero. This might suggest the disappearance and obliteration of value; thus, we must dispel this illusion, the illusion of the machine curse, which might eliminate the phenomenon of value and abolish it historically!

It is clear that the contemporary capitalist world in the past twenty, and perhaps thirty, years has witnessed a rapid development in the social forces of production. It has become easy, with the mere press of a button on a keyboard, to transfer billions of dollars from one country to another, thousands of miles apart, in an instant. The situation might even reach the point where an entire nation could be erased from the face of the Earth, simply by pressing that same button on the keyboard!

Humankind has finally, through the power of machinery, achieved some victories over two stubborn adversaries: time and distance. With the exhilaration of this triumph, the human mind continued to affirm its success with further innovation, invention, and development in the field of technology. This victory, however, brought with it the bitter struggle between the historically victorious machine, driven by the continuous progress in technology, and the human hand, which had distinguished humanity from the animal kingdom. It has become common to replace dozens, and perhaps hundreds, of workers with a single machine—one that may even be operated remotely!

The image painted above, undoubtedly drawn from the daily reality that we all observe, has led some to imagine a new historical revolution akin to the Agricultural and Industrial Revolutions! (Without considering these as one of the intellectual products of the European mind and its conception of world history, beginning with Europe's own history!) The absurdity surrounding this supposed revolution has turned it into an unquestioned assumption, treated as a given, and has become the starting point for imagining the new relationship between the machine and the worker. No longer based on "contradiction," this relationship is now founded on "exclusion"—perpetual exclusion leading to the tragic end of human labor and even of humanity itself, when the machine declares its eternal victory! This outcome has caused those who believe in the illusions of this new historical revolution to attempt to draw a picture of the catastrophic end of the contemporary world, in the manner of biblical prophecies!

The issue of the conflict between the machine and humanity, which leads to the end of value, and the analysis of the fate of humanity through the promotion of a new revolution, a revolution coming from the West, only appear as manifestations of a crisis of consciousness. This crisis appears both at the structural and operational levels: Since humans descended from the trees, they have not ceased creating. Through the heroic movement of history, they have discovered all the

technologies that helped them subdue nature to their will, compensating for their weaknesses. They surpassed wild animals in strength, speed, ferocity, and destruction, challenging nature with grandeur and fortitude, overcoming their frailty; they soared higher than birds without fear, dived into the depths of the seas without hesitation, and walked on water, carrying their burdens to the furthest limits. In this way, from the very beginning, humans never stopped discovering, innovating, and developing. They never ceased striving, by nature, to discover the means that would make them more productive and prosperous, constantly working to develop those means. Therefore, no new structural insights can be offered. Perhaps the form has changed—the form of the tool, the form of the machine, the form of society, and the form of political organization. But the essence remains the same, unchanged and unaltered. The development is formal, not substantive. It is this "formal" aspect that has misled those who believe in the new revolution; they imagined a change in the "substance"! For perhaps the easy communication between people thousands of miles apart, and the smooth transition from the north of the planet to the south, and the most advanced machines performing the most complex production processes and the most destructive means have led these believers in the new revolution—whom I do not share belief with—to claim victory for what they believe in! However, historical truth confirms that the world, through the slow and grand movement of history, with the shifting of civilization's centers of gravity from east to west, then from west to east, and again from east to west, has always known, just as it does now, the same forms of development, the same level of amazement, and the same degree of awe. The difference has only been in the "form." Just as mobile phones, computers, and luxury vehicles with advanced technology have dazzled people's eyes, even captivated their souls, in our contemporary world, mechanical devices, valves, perfumed oils combined with sodium hydroxide, crystal glasses, metal wires, lenses, cameras, surgical tools (around 150 tools, still used today), threads used in surgeries that dissolve in the body after the procedure, thermometers, analog computers, astrolabes, distillation, filtration, evaporation, sterilization, oxidation devices, insulating materials, geometric arches, and mathematical numbering systems—all these, and certainly this is just an example, have played the same magical role. Just as factories spread in Europe in the nineteenth century, factories and workshops using hundreds, perhaps thousands, of workers producing for the market, even the international market, for profit, spread in Baghdad, Nishapur, Seville, and Tanis.

Just as scholars from Europe and the United States have excelled in our contemporary world, so too did, for example, Al-Kindi, Ibn Bajjah, Ibn al-Baitar, Al-Idrisi, Al-Biruni, Ibn Sina, Al-Khwarizmi, Al-Zahawi, Al-Majriti, Al-Jazari, Ibn Hayyan, Ibn al-Haytham, and Al-Dinuri. Promoting a new revolution, a revolution coming from the West that claims to be superior, can only succeed by first distorting consciousness and erasing humanity’s memory!

If, at the structural level, it is about erasing humanity’s memory, at the analytical level, it is about preventing the formation of memory altogether! This prevention requires disabling understanding and obliterating critical awareness to the extent of creating false consciousness that denies the phenomenon of value, imagining its decline and eventual historical disappearance as a final result of the machine’s victory! Can we, in reality, at the performance level, claim that value can wither away and disappear? The answer to this question, though simple and clear, and the related critical questions, is not what we should focus on. Rather, we should focus on the path the mind takes to provide that answer. For it is in this path that all the shortcomings of the contemporary economic mind appear, the one that has been raised on mechanical visions and linear methodologies, or the

one that grew up with generalizations and absorbed the principles of initial summaries. Therefore, assume that the path the mind takes to answer the above question is defined by critical awareness of the following ideas:

1. The social value, in its simplest form, consists of living labor, stored labor, and surplus labor. The introduction of machines, due to advancements in technology, which reduces living labor and, by extension, surplus labor in a certain sector to zero, does not mean the historical disappearance of value. The machine itself is a quantity of human labor embodied in the product.

2. If we assume, according to the prevailing view, that a particular machine has been invented which causes the displacement of a number of workers in a certain sector, the question arises: Didn't this new and innovative machine, which replaced the dismissed workers, require the effort of other workers in different sectors to produce it? From the inventive mind to the hands that cast, shaped, and manufactured it... and so on, including the extensive activation of supporting and accompanying economic activities such as construction, supply, transportation, security, and financial operations... etc. Therefore, technological development, which leads to the substitution of machines for labor in a particular branch or sector, inevitably brings about a modification in the employment structure, both in depth and extent. As a result, the use of machines does not solely lead to the exclusion of workers in the branch or sector in question; it also, at the same time, leads to the creation of new productive fields that require a different, qualitative, and specific workforce. Thus, the machine, which causes unemployment for workers in one sector, creates numerous jobs in another sector, unless, with the freedom of economic activity, new productive sectors are created.

3. And if we stretch our imagination further and suppose that machines, on the widest possible scale and in all fields of economic activity, begin to produce themselves entirely, rendering humans completely obsolete in the production process, then capitalism will inevitably correct its course and abandon the machine—either directly or indirectly, willingly or unwillingly. For capitalism has never allowed, nor will it ever allow, the kind of impoverishment that would lead to its own demise. It has never permitted the extinction of exchange values that would bring its movement to a halt. Whenever the capitalist economy ceases to function, capitalism—defined as the subjugation of production and distribution in society to the laws of capital's motion **(21)**—intervenes to revive it, even if that means temporarily sacrificing some of its own achievements.

4. Imagine, for example, an agricultural society consisting of 1,000 individuals, 990 of whom are wage laborers working for 10 landowners. If those 10 landowners, in obedience to technological development, decide to replace their laborers with machines, they will soon find themselves bankrupt—perhaps even transformed into potential wage laborers themselves—since their products will find no buyers. The laborers, now unemployed, hold no exchange values. At that point, capitalism will not simply stand by and watch its own collapse; it will intervene, according to its own laws of motion, to correct the trajectory—even if that means rejecting the very machine which, by then, will also find no one to purchase it, having become ineffective in generating profit.

5. Technological development is not, as commonly claimed in the discourse of official educational institutions, linked to the level of societal advancement; rather, it is determined by the intensity of

conflict among social forces competing to impose their dominance over innovations in the field of social productive forces.

6.This struggle to acquire the new in the field of technology leads to a reduction in the social value of the commodity to its lowest (value/time) ratio. Consequently, the lowered value of a given commodity reduces the values of the products that contribute to its final production. The same applies to the value of labor power: for the value of labor power to decline, increased productivity must also affect other branches of industry whose products determine the value of labor power.

7.The contradiction between the general rise in prices at the social level and the long-term downward tendency of value is what explains the stagflation that plagues the contemporary capitalist economy. When value—and especially surplus value—declines due to the degree of social struggle in the technological field, capitalists raise the prices of their products to compensate for the continuous shrinkage in profits. At the same time, capitalism, no longer functioning naturally, casts more and more victims out of the labor market. The result: a steady increase in the money supply, rising prices to absorb the excess of monetary units, increasing unemployment, stagnant markets, and piled-up goods. Then capitalism, as usual, intervenes to manage its crisis—albeit only to the extent that the laws of its motion are allowed freedom by the political system.

Footnotes

(1) David Harvey, ***The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*** (Oxford: Blackwell, 1990), p. 284. “The conditions of postmodern time-space compression exaggerate in many respects the dilemmas that have from time-to-time beset capitalist procedures of modernization in the past.”

(2) Harvey, Ibid., p.328. “The experience of time and space has changed, the confidence in the association between scientific and moral judgements has collapsed, aesthetics has triumphed over ethics as a prime focus of social and intellectual concern, images dominate narratives, ephemerality and fragmentation take precedence over eternal truths and unified politics…”

(3) Harvey, Ibid., p.102. “Postmodern concerns for the signifier rather than the signified, the medium (money) rather than the message (social labour), the emphasis on fiction rather than function, on signs rather than things, on aesthetics rather than ethics, suggest a reinforcement rather than a transformation of the role of money as Marx depicts it.”

(4) David Harvey, ***The Enigma of Capital and the Crises of Capitalism*** (London: Profile Books, 2010), p.29. "Capital has to circulate continuously, or it faces devaluation. The crises occur when the circuits of capital are interrupted, slowed down, or blocked."

(5) Barbara Adam, ***Time and Social Theory*** (Cambridge: Polity Press, 1990), p. 122. "Industrial time is clock time: abstract, linear, and external. It separates human activity from natural rhythms, organizing life around schedules and efficiency."

(6) Andrew Kliman, ***Reclaiming Marx’s Capital: A Refutation of the Myth of Inconsistency*** (Lanham, MD: Lexington Books, 2007), p.3. "Marx’s value theory would be necessarily wrong if it were internally inconsistent. Internally inconsistent theories may be appealing, intuitively plausible and even obvious, and consistent with all available empirical evidence—but they cannot be right. It is necessary to reject them or correct them. Thus, the alleged proofs of inconsistency trump all other considerations, disqualifying Marx’s theory at the starting gate. By doing so, they provide the principal justification for the suppression of this theory as well as the suppression of, and the denial of resources needed to carry out, present-day research based upon it. This greatly inhibits its further development. So

does the very charge of inconsistency. What person of intellectual integrity would want to join a research program founded on (what he believes to be) a theory that is internally inconsistent and therefore false?"

(7) Moishe Postone, ***Time, Labor, and Social Domination: A Reinterpretation of Marx's Critical Theory*** (Cambridge: Cambridge University Press, 1993) p. 202. "In capitalism, abstract time becomes the temporal form of social mediation. This form of time is not merely a neutral framework but is socially constituted and historically specific. It structures the labor process and the rhythm of daily life, imposing a homogeneous and continuous measure that serves the imperatives of capital."

See also:

Luc Boltanski and Ève Chiapello, ***The New Spirit of Capitalism*** (London: Verso Books, 2005).

E. P. Thompson, ***Time, Work-Discipline and Industrial Capitalism***, Past & Present, no. 38 (1967): 56–97.

Antonio Negri, ***Marx Beyond Marx: Lessons on the Grundrisse*** (Brooklyn, NY: Autonomedia, 1991).

Jason W. Moore, ***Capitalism in the Web of Life: Ecology and the Accumulation of Capital*** (London: Verso Books, 2015).

While these important works offer diverse and insightful treatments of time within the capitalist system—ranging from its role in shaping social discipline, cultural spirit, ecological dimensions, to political-economic struggles—my approach in Value/Time differs fundamentally. Rather than treating time solely as a social or ideological construct, I establish time as a structural, material determinant of value itself, quantified precisely as the ratio between socially necessary energy expenditure and actual production time. This provides a novel and rigorous metric for value measurement, beyond previous conceptualizations. While these seminal works provide rich and varied analyses of time within capitalism—ranging from Jonathan Crary's exploration of the capitalist assault on sleep and continuous temporality, through E. P. Thompson's classic study of time discipline and labor organization in industrial capitalism, to Boltanski and Chiapello's critique of the "new spirit" of flexible capitalism; as well as Antonio Negri's focus on living labor and historical time in Marx's Grundrisse, and Jason Moore's environmental perspective on capitalism's exploitation of nature and labor—my approach diverges notably in its conceptualization of time and value. Unlike these studies that predominantly emphasize time as a social, cultural, or ecological phenomenon, my contribution centers on the precise quantification of time as an intrinsic structural determinant of value. I develop a rigorous framework where value is measured as a function of the ratio between socially necessary energy expenditure and actual production time. This materially grounded metric provides a novel perspective on the interplay of time and value beyond prior theoretical treatments, thus offering a distinct and complementary lens on capitalist temporality and value creation.

(8) This edition marked the formation of the fundamental outlines of my critique of political economy. It served as a refined formulation of all my ideas, which developed through previous editions, incorporating additions, modifications, and corrections. With each new edition, I became its first critic, evaluating not only its ideas but also its method of presentation. My goal was, free from the illusions of authors and avoiding the nonsense of writers, to reach the shores of scientific truth without claiming ownership of its essence. See: Muhammad Adel Zaky, ***Critique of Political Economy*** (Tunis: Dar Al-Muqaddima, 2021), especially: Introduction to the Eighth Edition, pp. 13-17, as well as: Chapter Six: On Value.

(9) See: Smith, ***The Wealth of Nations***, Book I, Chapter VI. Ricardo, ***Principles of Political Economy***, Chapter VI, Section I. Marx, ***Capital***, Book I, Chapter I.

(10) For details, see: ***Critique of Political Economy***, Chapter II.

(11) See: ***Ricardo's Letters to Ramsay***, edited by Hollander, New York, 1895.

(12) As a temporary measure, we will retain here the error in political economy regarding the measurement of value.

(13) The period of labor is: the total period of time required to complete a specific product, meaning the possibility of capital remaining tied in the production field without actual use, i.e., it remains dormant without work. Therefore, the price of the product, according to Marx, will generally rise because he believes that the transfer of value to the product is not calculated according to the time during which fixed capital performs its functions but according to the time during which it loses its value!

(14) The working day is: the period during which the worker must expend their labor power daily.

(15) The labor time is: the time during which capital is actually used productively.

(16) That is, the total of surplus values in the branch ÷ the total active capitals in the same branch.

(17) ***Capital***, Book I, Chapter VII.

(18) ***Capital***, Book III, Chapter IX.

(19) By dividing the value by time in each branch and the ratio of the products of the division in each branch to each other.

(20) For my critique of the common concept of capitalism and my explanation of its laws of motion, see**: *Critique of Political Economy***, Chapter I, Chapter VII, and Chapter III, Chapter V.

(21) Therefore, the increase in productivity in branches of production that do not provide the necessary means of subsistence for labor power, nor the means of production necessary for their creation, keeps the value of labor power itself unchanged. See: ***Capital***, Book I, Chapter X.