The Theoretical Relevance Of An Updated Marxian Theory Of Commodity In Economics

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By
P. E. Ahumada

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How does material production become socially recognised in capitalism? This is a fundamental question to be addressed in capitalist production, since material production takes place privately and independently in a global and atomistic system. This thesis shows that the question is tackled by Marx in the first three chapters of *Capital*. The process of social recognition of material production is that of the realisation of work carried out privately and independently as part of the social labour. For Marx this occurs through the private and independent work becoming objective social labour as the substance of the value of commodities, and through the latter finding its necessary developed mercantile expression in the price form of commodities. Therefore, private and independent work becomes social labour through the recognition of its product as equivalent to a certain amount of money.

The thesis argues that Marx’s answer is powerfully insightful but flawed because it did not succeed in fully characterising the historical specificity of commodity. Commodity is not merely the differentiated unity of use value and value but of use value and mercantile use value, and of labour value and mercantile value. The former dialectic is immediate and distinguishes between the utility of commodity as a direct means of consumption or production and that as a means of exchange, fully determining the behaviour of the private and independent commodity producer. The latter dialectic is objective and distinguishes between commodity as the embodiment of the social labour necessary to reproduce it and as
the embodiment of command over social labour, enabling the adjustment of the productive structure. Both dialectics are mediated by the mercantile form of value, which allows the indirect expression of labour value as the gravitational force of the system. The theory of commodity offered in this thesis, unlike that of Marx, consistently hinges on the atomistic private and independent commodity producer.

The thesis shows that commodity production is the organisation of society’s labour for its material reproduction, just as in any previous mode of production. The discovery of the generic aspect of commodity production breaks the false immediate link between production and supply, and that between the labour theory of value and both the supply-side-determined theory of price and the single-factor theory of production. The thesis also shows that the mercantile form of value is what allows society’s labour to become an objective and autonomous materially abstract substance regulating the adjustment of the productive system under the form of material signals. This is the specific aspect of a global mode of production comprised of free and independent individuals. The mercantile form of value is thus Adam Smith’s invisible hand.

Finally, the thesis analyses some implications of the framework with regard to the analysis of monetary phenomena, capital accumulation and sustainable development, and reviews the most popular Marxian topic in Economics: the transformation of values into prices of production.

**Keywords:** commodity, money, form of value, exchange value, labour value, mercantile value, use value, mercantile use value, comparative advantage, Marx, material production, invisible hand, dialectic.
To my mum and my grandma

To Jenny

To Sofí

To Pablo Levin

Without them, I would have not got here
# Table Of Contents

Chapter 1 – How Does Material Production Become Socially Acknowledged In Capitalism?. 1

1.1. Why a Thesis on Marx’s Commodity? ................................................................. 1

1.2. The Problem Posed ............................................................................................ 2

1.3. Research Questions of the Thesis ...................................................................... 4

1.4. Outline and Shortcomings of Marx’s Answer: The Mercantile Form of Value ........4

1.5. Goals and Methodology of the Thesis ................................................................. 7

1.6. Thesis Structure .................................................................................................. 9

Chapter 2 – The Transformation Problem And Commodity ........................................ 10

2.1. Introduction ......................................................................................................... 10

2.2. The Traditional Approach to the Transformation of Labour Values to Prices of Production ......................................................................................................................... 10

2.2.1. Böhm-Bawerk’s Refutation and Hilferding’s Defence ................................. 11

2.2.2. Bortkiewicz and Winternitz, or the Transformation Problem ...................... 12

2.2.3. Meek’s Synthesis .......................................................................................... 13

2.2.4. Seton’s and Morishima’s Post-Sraffian Approach ........................................ 15

2.2.5. Samuelson’s Challenge ................................................................................ 15

2.2.6. The 1970s Debate: Baumol, Samuelson and Morishima .............................. 16

2.3. The New Interpretations on the Labour Theory of Value and Commodity ..........20

2.3.1. Duménil and Foley, the Form of Value, the Law of Commodity Exchange and the Value of Labour Power ................................................................. 20

2.3.2. Mohun’s Synthesis and the Abstract Character of Labour ........................... 23

2.3.3. Lysandrou’s Commodity Theory of Exploitation ......................................... 27

2.3.4. Keen and the Dialectic of Commodity ......................................................... 28

2.3.5. Levin’s Technological Capital ....................................................................... 30
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4. Conclusion</td>
<td>31</td>
</tr>
<tr>
<td>Chapter 3 – Marx’s Attempted Solution To The Riddle Of The Social Recognition Of Material Production: Commodity And The Mercantile Form Of Value (I)</td>
<td>33</td>
</tr>
<tr>
<td>3.1. Starting Point and Route</td>
<td>33</td>
</tr>
<tr>
<td>3.2. Characterisation of Commodity in the Market</td>
<td>34</td>
</tr>
<tr>
<td>3.2.1. The Transition from Exchange Value to Its Substance: Labour Value</td>
<td>36</td>
</tr>
<tr>
<td>3.2.2. An Extrinsic Jump Rather Than an Immanent Transition</td>
<td>37</td>
</tr>
<tr>
<td>3.2.3. The Role of Use Value</td>
<td>38</td>
</tr>
<tr>
<td>3.2.4. Shortcomings of Marx’s Labour Theory of Value</td>
<td>41</td>
</tr>
<tr>
<td>3.3. The Dialectic of Use Value and Neo-Classical Economics</td>
<td>42</td>
</tr>
<tr>
<td>3.3.1. Reasons for Introducing Neo-Classical Economics to the Analysis</td>
<td>42</td>
</tr>
<tr>
<td>3.3.2. Patinkin: The Synthesis of the General Equilibrium School</td>
<td>43</td>
</tr>
<tr>
<td>3.4. Two Roles, One Actor: A Labour Theory of Value</td>
<td>46</td>
</tr>
<tr>
<td>3.4.1. Comparative Advantages</td>
<td>48</td>
</tr>
<tr>
<td>3.4.2. General Market Equilibrium vs. General System Equilibrium: Mercantile Comparative Advantages vs. Real Comparative Advantages</td>
<td>52</td>
</tr>
<tr>
<td>3.5. Significance of the Law of Labour Value</td>
<td>54</td>
</tr>
<tr>
<td>3.6. Commodity and the Law of Labour Value in a Nutshell</td>
<td>57</td>
</tr>
<tr>
<td>Chapter 4 – Marx’s Attempted Solution To The Riddle Of The Social Recognition Of Material Production: Commodity And The Mercantile Form Of Value (II)</td>
<td>60</td>
</tr>
<tr>
<td>4.1. Review of Marx’s Solution</td>
<td>60</td>
</tr>
<tr>
<td>4.2. Generic and Specific Features of Commodity</td>
<td>62</td>
</tr>
<tr>
<td>4.3. The Mercantile Form of Value</td>
<td>66</td>
</tr>
<tr>
<td>4.4. Elementary or Accidental Form of Value</td>
<td>67</td>
</tr>
<tr>
<td>4.4.1. The Relative Form of Mercantile Value and Its Inseparable Connection with the Equivalent Form</td>
<td>72</td>
</tr>
</tbody>
</table>
Chapter 1 – How Does Material Production Become Socially Acknowledged

In Capitalism?

1.1. Why a Thesis on Marx’s Commodity?

The present thesis is driven by a fundamental question that Economics has never addressed satisfactorily, let alone settled: how does material production become recognised as part of the social product in capitalist production? The question is of utmost relevance because capitalist production operates on a global scale and is de-centralised with material production taking place privately and independently. In other words, in capitalist production material production in its immediacy is not production proper; it is only production in potency.

Interest in this issue is as old as capitalist production itself. Adam Smith (1776) was particularly concerned about the viability and desirability of a seemingly anarchic system of production with only an impersonal entity, the market, coordinating indirectly. He came to the conclusion that the required productive structure came about as if an invisible hand led individuals to specialise in the required productive activities in the required proportion. Economics has contented itself with the metaphor of the invisible hand and focussed on problems which pre-suppose that the research question has been settled. Being a metaphor, however, the invisible hand does not address the research question but only offers an intuitive first approach to the problem.

The stance taken by Economics has led it to rush into setting up models in which most of the historically specific mercantile forms of production are present but it has not stopped to analyse these forms.\(^1\) In production the human being has always been aided by natural and human-made means of production but it is only in capitalist production that they take the form

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\(^1\) To give an example, Economics directly identifies the value of a commodity with its developed mercantile form: exchange value.
of capital. In what regard does this change the nature of production and in what regard does it keep it the same? What makes the products of society’s productive activities take the form of commodities? Money is one of the oldest mercantile forms, like commodity. However, both in the past and to a much lesser extent in the present, there have been modes of production where money is absent. What gives rise to money? But more importantly, what makes it embodied purchasing power?

1.2. The Problem Posed

In Marx’s (1867, 1885, 1894) view production is a specific type of social relation entailing a material exchange with the environment. It therefore changes people’s living conditions. As such, production is the union of a material and a social or relational moment. According to Marx, any material transformation performed in isolation and for the self-satisfaction of a need or want cannot be said to be production.

In pre-capitalist modes of production like the Feudal system and the pre-Hispanic cultures of Latin America, the concept of production poses no major challenges. The commodity relation is not the main form of production, if it takes place at all, being limited to trade with foreign cultures and exchange of some of the surplus product within the local communities. The main productive relation in this setting is direct, like that between a feudal lord and his serfs. This implies that production in the relevant economic unit is consciously organised. It is then a direct relation between people, enabled by the fact that the relevant economic unit is the local community. The upshot is that the two moments comprising production make up an undifferentiated unity. That is, material production is already production in full.

Capitalist production, in contrast, implies generalised exchange of the products of labour. This brings about a break with previous modes of production since, for the first time in the history of humankind, production breaks the narrow boundaries of the local communities.
Production now takes place on a global scale and, as Smith (1776) puts it, individuals come to the assistance of one another without even intending to. It is thus no longer consciously organised but de-centralised. The main productive relation ceases to be direct and becomes indirect, through the products of labour. The consequence is that material production is no longer production in its immediacy and that the products of labour take a form according to their new social nature: commodity or product for sale. The two moments which make up production split into two autonomous yet interlocked spheres: material production and market exchange. However, production is still one and the same generically speaking, as shown in figure 1.1.

**Figure 1.1: The differentiation of production in capitalism**

![Diagram of production](image)

I have shown in Ahumada (2006) that neither Classical Political Economy nor Neo-Classical Economics has fully understood the differentiated unity that is capitalist production. They both recognise as production only its material facet, the social facet being understood as the
market. When they try to explain the origin of the market, if they wonder at all, they pin it down to the development of the natural propensity of human beings to truck and barter (Smith, 1776).

1.3. Research Questions of the Thesis

My thesis addresses a main and a secondary, though closely related, research question:

1. How does material production, carried out privately and independently, become recognised as part of the social product in capitalist production?

2. How are the process through which material production becomes realised (or production proper), the process through which private and independent work becomes acknowledged as part of the social labour, and the process giving origin to money related to each other?

The thesis argues that the research questions can be satisfactorily addressed by an updated version of Marx’s (1867) theory of commodity. It further argues that a thorough understanding of these and their implications, in turn, provides an alternative theoretical foundation for the analysis of both long-standing topics in Economics such as monetary phenomena and capital accumulation, and newer, though essential, topics such as sustainability.

1.4. Outline and Shortcomings of Marx’s Answer: The Mercantile Form of Value

Marx (1867) tries to capture the differentiated unity of production in the concept of commodity, the basic cell of capitalist production. Commodity in this regard condenses the identity and the difference between the two moments of capitalist production, and with this, the two-fold nature of commodity itself: a natural object and the representation of the social relations of production. The focus on commodity as the most general articulating concept is
not arbitrary. From a material viewpoint, it is the more concrete form of manifestation of the capitalist system,² being the final resultant of the whole capitalist process, what is traded in the market. Yet, it is not a static crystallisation. The logical contradictions of the commodity form of production (the most basic one appearing in the main research question) reconcile, clash with each other and evolve within commodity.

Marx points out that, production being a social relation, the problem of the realisation of material production as part of the social product is identical to the problem of the realisation of work carried out privately and independently as part of the social labour. This resolves through private work becoming abstract social labour as the substance of the value of commodities, and through value finding its necessary developed expression in the money form of commodities.

For Marx the study of capitalism starts with the two-fold character of commodity as a use value and as an exchange value, the reason being that this is the way commodity presents itself in the market: as a useful object for exchange. In principle, commodity is the differentiated unity of a generic and a specific aspect. Its generic aspect is that of being a use value, or a useful object, which is characteristic of the products of all forms of production. Its specific aspect is that of having exchange value. The analysis of exchange value, the social facet of commodity, should lead us necessarily to its underlying labour value, which regulates commodity’s exchange value. This transition is very important since labour value is nothing but the objective substantiation of private and independent work as abstract social labour. Furthermore, since for an individual commodity its labour value is given by the necessary social labour required to reproduce it, this step represents the necessary transition to the ghostly private sphere of material production, the other moment of production.

² Yet it is the most abstract and general concept (Levin, 1997).
However, this cannot be the end of the analysis of commodity, as in Classical Political Economy, otherwise Economics is just metaphysics. Understanding that social labour is the underlying substance of exchange value does not change our understanding of commodity in the market since it is a category which cannot be directly seen and measured. Hence, without further development, it is a phantasmagorical concept without bearing on the understanding of the capitalist mode of production. Marx argues that social labour manifests itself through the market: the money form of commodity is the necessary developed form of expression of value, the latter being the substantiation of social labour. This step represents the necessary transition back to the sensible world. However, it is not a return to the starting point, only a return to the market phenomena, whose nature and rationale can be now understood.

Marx’s argument presents some serious gaps. His original contribution rests on the step taken by Classical Political Economy. His transition from exchange value to labour value is rather a discontinuous jump. This by itself hinders the rest of the argument. Properly founded, Marx’s argument would support the unity of the functions of money, their being derived from that of being the necessary form of expression of value. By the same token, the process through which private and independent work becomes social labour would be spelt out: it occurs through the social recognition of commodity as equivalent to a certain amount of money.

However, Marx’s problems are not just inherited from Classical Political Economy. He himself points out that there is nothing mysterious in regarding the products of labour as values; that is, as representing the amount of labour necessary to reproduce them. Robinson Crusoe himself does that without producing commodities. But then, what is the specificity of commodity? If commodity is both a use value and a value and both features are generic, then commodity is not a specific form of production. Furthermore, if value is not specific to commodity production, how can it be necessarily expressed in the money form?
In figure 1.2 I graphically summarise Marx’s (1867) view on generic capitalist production. The arrows from exchange value to value, and from this to price, reflect the necessary transitions in commodity theory according to Marx.

**Figure 1.2: Marx’s conceptualisation of basic capitalist production**

![Diagram of commodity production](image)

**1.5. Goals and Methodology of the Thesis**

The main aim of the thesis is to clarify and develop Marx’s analysis of the process through which the work of private and independent producers becomes (or not) part of the social labour in commodity production. This, in turn, should show that the same process is also the process through which material production, still potentially production, becomes production proper, and that this process gives rise to money.
In capitalist production, social labour as such is an abstract notion since it is nothing but work carried out privately and independently, realised as social only through the impersonal exchange process in the market; that is, ex-post. Therefore, private work is social labour only potentially. Answering the main question of the thesis will then help understand the nature of the most basic and general co-ordination process in the capitalist mode of production.

Secondary aims and objectives, closely related to the main one, are the following:

First, to show that Marx’s concept of form of value in the context of commodity provides the answer to the way work carried out privately and independently becomes social labour. It also accounts for the existence of irreproducible commodities commanding a price, for permanent divergences between labour values and market values, and for the reason that all reference to socially necessary labour vanishes in the determination of the exchange ratio of commodities.

Second, to show that price fluctuations and the adjustment of the productive structure are but the manifestation of the process through which the work of private and independent producers becomes social labour.

Third, to show why in capitalist production social labour takes an autonomous materially abstract form in the value of commodities and why its allocation takes of necessity the fetishist appearance of an allocation of things. This should make clear that stating that capital and natural resources are sources of value is wrong even in a developed capitalist economy.

Last, to show that in a society where individuals relate to one another through the products of their labour, it must follow of necessity that one and only one of the commodities becomes the common denominator of all the rest and at the same time the embodiment of materially abstract social labour. This means that the genesis of money is explained by the development
of the expression or form of value, even though money in its most developed form may not be a commodity itself.

The methodology for the undertaking consists in re-working the section on commodity in *Capital* with particular stress on Marx’s (1867) concept of form of value and its linkages to the genesis of money. The concept of comparative advantages in Ricardo (1817) together with a synthesis of the general equilibrium strand of thought of Neo-Classical Economics is brought to bear in the above reconstruction. This way I set in motion the incomplete transitions in *Capital*.

My unit of analysis is a system of simple commodity producers with means of production but where they have not as yet taken the form of capital. Thus, long-run relative prices tend to the respective relative labour values in my setting despite the fact that with the introduction of the form of capital they diverge permanently. My analysis of the form of value, however, will allow future researchers to accommodate this in further research.

**1.6. Thesis Structure**

Chapter 2 offers a review of the literature on the topic which has caught the most attention in Economics, namely the transformation of labour values into prices of production, together with newer and more comprehensive approaches, highlighting the need to complete the analysis of commodity. Chapters 3 and 4 offer the answer to the thesis’s two research questions. Chapter 3 deals with the transition from exchange value to labour value and chapter 4 with that from labour value to its money form, following the sequence presented in figure 1.2. Chapter 5 puts the thesis in perspective, puts forward a new interpretation with regard to the transformation of labour values into prices of production and highlights some of the implications for future research.
Chapter 2 – The Transformation Problem And Commodity

2.1. Introduction

In chapter 2 I review both the traditional and the new interpretations on the transformation of labour values into prices of production. The review highlights the inability of most of the positions to integrate the different aspects of the debate into a single framework and therefore reach a definitive conclusion. The exception is Levin (1997), briefly discussed in the last section of the chapter. In addition, the review makes a case for the satisfactory completion of the analysis of simple commodity production as a necessary pre-requisite to address this and any other issue resting on the commodity form of production.

2.2. The Traditional Approach to the Transformation of Labour Values to Prices of Production

The transformation problem presented in Capital (Marx, 1894) can be summarised as follows: in developed capitalist production equilibrium prices do not gravitate towards the labour values introduced in Volume I but to the transformed prices of production of Volume III. Marx (1894) argued that the divergence between long-run equilibrium prices and labour values occurs due to the fact that in developed capitalist production it is not quantities of necessary social labour that tend to be equalised in the market exchange but quantities of social capital. This result is mediated through the well-known Classical law of equalisation of the rate of profit among the different capitals.

In Marx’s (1867, 1885) terminology capital can be classified according to two different criteria: its organic composition and its turnover period. The former distinguishes between variable capital (labour power) and constant capital (encompassing the remainder of the outlay). This distinction focuses on the value creating capacity of capital with only variable
capital creating value and constant capital merely transferring its own value to the final product. The latter draws the well-known distinction between fixed and variable capital, related to the time structure of capital but not to its properties regarding the generation of value (Levín, 1997).

Although capital is but social labour taking an objective autonomous form and expanding itself, both the organic composition and the turnover period of the different capitals vary. Since the law of equalisation of the rate of profit ensures that equal capital outlays of the same turnover period yield the same profit, regardless of their organic composition, it follows of necessity in Marx’s (1894) terminology that exchange according to the social labour content of commodities is unfeasible.

2.2.1. Böhm-Bawerk’s Refutation and Hilferding’s Defence

Within the newly established Economics, the aforementioned issue led Böhm-Bawerk (1896) to conclude that Volume III of Capital refuted the labour theory of value of Volume I (Sowell, 1967). His view was that Marx shifts from the incorrect model of labour values of Volume I to the correct model of prices of production of Volume III. However, in his opinion the model of Volume III is no advance over the established Classical knowledge and on top of that, Marx disregards the role of use value.

Hilferding (1904) took up Böhm-Bawerk’s challenge and put the latter’s argument down to a misunderstanding. In Hilferding’s view, at no point does Marx throw away his labour theory of value but rather labour values are transformed into prices of production as more concrete determinations of capital are included in the analysis. He further drew attention to Marx’s (1894) claim that the divergence between labour values and prices of production occurs thanks to the law of labour value and not at its expense, meaning that they are determinate.
2.2.2. Bortkiewicz and Winternitz, or the Transformation Problem

Bortkiewicz (1907) was the first to pose the problem of the determinate character of the divergences between labour values and prices of production as a system of equations to be solved. In Marx’s (1894) example with different capital compositions, exchange at labour values would yield different rates of profits. To arrive at the uniform rate of profit Marx added up the surplus value from the different sectors of the economy, generated exclusively by the variable capital (labour power), and redistributed it among them in a way that a uniform rate of profit obtains. This redistribution causes commodities to exchange not at their labour values but at what Marx called prices of production. The divergence between the former and the latter would be nonetheless determined by the amount of surplus value generated in the economy and the different organic compositions of the different concrete capitals. As a result, the following two equalities would simultaneously hold: total price = total value and aggregate profit = aggregate surplus value.

Bortkiewicz came to the conclusion that Marx’s example is valid only in the very restrictive case where there is no joint production. The reason is that whereas the output is sold at prices of production, the different capitals are reckoned in terms of value. Such a scheme is consistent only with a case where the different sectors are vertically integrated. If joint production were to be allowed, then inputs have to be reckoned at prices of production as well, since they are bought in the market from other capitals maximising the rate of profit. Bortkiewicz’s way of tackling the issue came to be known as the problem of the transformation of values into prices of production.

Bortkiewicz found out that in his set-up, the two equalities posed by Marx hold simultaneously only in Marx’s explicit example without joint production, in which case it is trivial. In the general case with joint production, total price comes out to be different from total value. Only in the very restrictive case where the money commodity is produced in
average social conditions regarding the organic composition of capital in its production do the two equalities hold simultaneously. Bortkiewicz regarded this result as the proof of an irreconcilable contradiction between the analysis of Volume I and Volume III of Capital, much in the spirit of Böhm-Bawerk.

Winternitz (1948) took up Bortkiewicz’s analysis and decided to normalise his system of equations so that total price is equal to total value, since he deemed that that was closer to Marx’s spirit (Meek, 1956). In Winternitz’s solution aggregate profit diverges from aggregate surplus value except in the tautological case of vertical integration or in the very restrictive case where the workers’ consumption goods are produced in average social conditions regarding the organic composition of capital. Despite the similarities between both solutions, Winternitz did not regard his result as a proof of Marx’s (1867, 1885, 1894) contradiction but as a technical correction of his framework. In his opinion Marx’s main theoretical constructs remained unchallenged.

2.2.3. Meek’s Synthesis

In 1956 Meek published a seminal article summarising the analytical underpinnings of the transformation problem as presented by Bortkiewicz (1907) and Winternitz (1948) in an attempt to provide the last word on the issue. He showed that Bortkiewicz’s and Winternitz’s solutions are basically identical, the only analytical difference being the normalisation used in their respective systems of equations. According to Meek (1956), this exposes the triviality of the whole problem as so posed.

The essential point for Marx (1894), according to Meek, was that aggregate profit is redistributed aggregate surplus value. Meek understood this point in the more restrictive version that after aggregate surplus value is transformed into aggregate profit, the share of labour in aggregate value remains invariant. In Meek’s opinion, the equality between total
prices of production and total value ought not to be taken at face value, since it has secondary importance and is brought up by Marx as a defective way of posing the aforementioned invariance. Therefore, although total value will in general differ from total price, and so will aggregate variable capital reckoned at labour values from the one reckoned at prices of production, they will always change in the same proportion, rendering the labour share invariant in both scenarios. This is the core of the transformation problem and the solution to its mathematical gap according to Meek.

In Meek’s (1956, 1976) opinion, there is still another gap in the transformation problem which is historical rather than mathematical. For him, the transformation problem also refers to an historical shift from commodities being reckoned, if not also actually exchanged, at labour values to their being reckoned at prices of production. Meek called this an historical change in the supply price of commodities. Morishima & Catephores (1975, 1976) denied the historical facet of the transformation problem in that in order for commodities to be regarded as values, exchange has to be the universal productive relation, and when this occurs capital is already present with the basic law of the equalisation of the rate of profit. In other words, Marx’s commodity is the commodity of capital (Levin, 1997).

In Meek’s (1956) view the above results do not refute Marx’s (1867, 1885, 1894) theory. Meek claimed that Marx’s (1867) analysis of value and surplus value is still necessary to account for both the origin and determination of profits and the relation between capital and labour. He further claimed, following Marx (1894), that without them Political Economy is left bereft of a rational basis and the average rate of profit turns out to be an average of nothing.
2.2.4. Seton’s and Morishima’s Post-Sraffian Approach

Seton (1957) and Morishima & Seton (1961) tackled the transformation problem from a Sraffian perspective. Instead of starting with a system of labour values and transforming it to one of prices of production, they utilised input-output matrices of the Leontief type summarising the technical conditions of production in the economy. In their approach they showed that from the technical constraints it is possible to arrive at both the system of labour values and surplus value and that of prices of production and profit once the workers’ consumption bundle is defined. At first sight, this appeared to provide further evidence that the transformation of labour values to prices is feasible. However, it faces the same shortcoming as Meek’s (1956) approach in that only one of the above two equalities postulated by Marx (1894) can hold at a time unless very particular restrictions are imposed.

2.2.5. Samuelson’s Challenge

When it appeared that the transformation procedure could be challenged only from an ideological standpoint, Samuelson (1970, 1971) published provocative articles claiming that the transformation problem amounted to calculating exchange values according to labour values, then deleting them and replacing them with the correct model of prices, not to a transformation proper. Furthermore, he argued that the existence of an algorithm converting values into prices is no proof of the usefulness of the concept of labour value. Given an appropriate algorithm one may turn anything into anything else. His articles were a real theoretical challenge since they drew heavily on both Meek’s (1956) seminal article and the alternative input-output approach to the issue taken by Seton (1957) and Morishima & Seton (1961). Thus, Samuelson’s (1970, 1971) sweep was broad, reaching the whole Marxian spectrum on the matter.
In Samuelson’s (1970, 1971, 1973, 1974a) view, the problem that Marx (1894) was trying to solve in the transformation procedure was the translation of labour values from Volume I of *Capital* into market prices, dealt with in Volume III. However, these are two mutually exclusive systems to Samuelson (1970, 1971, 1973, 1974a). Exchange values can be explained in terms of either labour values or prices but not both. Moreover, he claimed that market prices can be determined without recourse to labour values, which is something that Marx would have never argued against (Baumol, 1974a; Duménil, 1984a; Levin, 1997; Mohun, 1984-85, 1994).

In order to show that the systems of values and prices are two different and opposite systems altogether, Samuelson (1971) compared them with the difference there is between a turnover tax and a value added tax system. By analogy, he likened the former to the price system and the latter to the value one. The logic to him was simple, whereas the price system would imply a mark-up on all the outlays (the rate of profit), the value one would imply a mark-up on a single item (labour inputs), a view also held by Brems (1978). To Samuelson (1971), the fact that a tax rate for each system could be found which renders the tax burden equivalent in both systems does not imply that the turnover tax can be derived from the value added one or vice versa, nor that they are equivalent systems.

The model of labour values introduced by Marx in Volume I of *Capital* is for Samuelson (1971, 1974a) an unnecessary and uninsightful detour on his way to the more correct model of prices of production. The latter, however, is not essentially different from what had already been put forward by Classical Political Economy (Samuelson, 1971).

### 2.2.6. The 1970s Debate: Baumol, Samuelson and Morishima

Baumol (1974a) accurately pointed out that much of the controversy on Marx (1867, 1885, 1894) concerned accounting for the systematic divergence between prices of production and
values in Capital. In his view, the two most common interpretations of Marx’s (1894) transformation problem are the following:

- That from his values of Volume I of Capital he grudgingly retreated to the more empirical prices of production of Volume III in the same way as Smith (1776) retreated to the theory of costs of production. After all, his prices of production are none other than conceptualised costs of production.

- That Marx’s (1867) values are but a first approximation to prices in the same spirit as Ricardo (1817), to which Samuelson (1970, 1971, 1973, 1974a, 1974b, 1982) appeared to subscribe.

To this usual misunderstanding Baumol (1974a) counter-posed the view that the transformation problem is peripheral. Prices have to be explained to get them out of the way, since they conceal instead of disclosing the origin of profit. There are therefore no contradictions between the analysis of Volume I and Volume III of Capital according to Baumol (1974a). The former deals with the generation of surplus value stripped of all disguise. The latter returns to the appearances and intends to account for profits within the framework of surplus value generation.

Against the above interpretation, Samuelson (1974a) argued that the same set of technical data plus the real wages determine both the values and the prices of the economy, its rate of profit and the rate of surplus value. Since there is no need to determine one system first in order to determine the other, Samuelson argued that one can no more say that values determine prices and surplus value determines profits than the converse. However, since the empirical system is the one of prices and profits, why bother with values and surplus value?
Baumol (1974a) argued that trying to find in *Capital* a theory of market price determination is to reveal one’s own misunderstanding and bias as a bourgeois economist. In this perspective Volume I of *Capital*, with its metaphysical entities of labour value and surplus value, is an unnecessary and uninsightful detour towards the empirical model of prices, wages, interest, profit and rent of Volume III. However, Baumol accurately pointed out that a theory of labour value as a theory of embodied labour to explain the determination of natural prices is Ricardian, not Marxian. Marx (1894) takes pains to stress that prices and values differ systematically in a capitalist economy, though this does not mean that they are conceptually unrelated, as Samuelson (1970, 1971, 1973, 1974a) implied. In Baumol’s (1974a, 1974b) view, the main purpose of *Capital* is to explain the source of profits, or for that matter of all non-wage income. The key to this is the representation of abstract labour in the form of value.

Morishima (1974) defended Volumes I and II of *Capital* against Samuelson’s (1971, 1974a, 1974b) attack by interpreting that the labour values scheme was Marx’s (1867, 1885) approach to deal with technical production conditions before the introduction of Leontief’s input-output analysis. In his view, this approach is correct when no joint production is considered. He furthermore stated that the rate of profit is positive only if the rate of surplus value is positive (known as Morishima’s Fundamental Marxian Theorem). Samuelson (1971, 1974a) pointed out that this can be turned the other way around to state that the rate of surplus value is positive only if the observable rate of profit is positive.

The theoretical approach to the transformation problem has forked since the 1970s landmark. Within Marxism three main strands of thoughts can be distinguished.

One strand is usually referred to as Post-Sraffian Marxism and follows the line of Bortkiewicz (1907) and Morishima (1974) in the analysis, to the point that the double character of commodity (natural and social) together with the labour theory of value are thrown away.
They deal with production in its unilateral material moment and focus on the determination of equilibrium prices and profits grounded on the technical data of the economy. In this regard, they are very close to Neo-Classical Economics and could even be termed Vulgar Marxism. From the original Marxian concerns they keep the notion of labour exploitation but within this framework it is an extrinsically defined category which may be treated in the context of distribution, as in Neo-Classical theories. Steedman (1976, 1977), Carling (1984-85), Bandyopadhyay (1984-85) and Roemer (1980) are four of its exponents.

A second strand keeps the notion of labour value as a holistic concept. Its role as an analytical tool for the analysis of real phenomena falls in the background. In this regard, it is anachronistic. It holds on to the concept of value shorn of organic connection to the rest of the theory and downplays the irregularities found by the transformation authors, namely that only one of the two equalities posited by Marx (1894) can hold at a time. This strand follows Meek (1956, 1976), Laibman (1984-85, 2000), Olgin (1992), Skillman (1996-1997) and Sekine (1984-85).

The third strand is new and stems from Baumol’s (1974a) interpretation of what is at issue in the transformation problem of *Capital*. It seeks to bring Marx’s (1867) concept of form of value back to the forefront to bear on the whole theoretical system (Duménil, 1984a, 1984b; Foley, 1982, 1983; Mohun, 1984-85, 1994, 2000), to recover the central role of the concept of commodity (Lysandrou, 2000), or even to integrate the whole set commodity, labour value and form of value organically (Levin, 1997).
2.3. The New Interpretations on the Labour Theory of Value and Commodity

2.3.1. Duménil and Foley, the Form of Value, the Law of Commodity Exchange and the Value of Labour Power

Duménil (1984a) argued that it is erroneous to suggest that Volume I of *Capital* deals with a pure system of labour values and Volume III with prices, making the former a theoretical detour. The price form is presented in all its determinations in Volume I (Duménil, 1984a). The form of value allows us to understand that in *Capital* there is a single law of value yet two different laws of exchange, namely exchange according to labour values and exchange according to prices of production (Duménil, 1984a; Levin, 1997; Mohun, 1994).

One of the reasons that the two equalities sum of prices = sum of values and aggregate surplus value = aggregate profits cannot hold simultaneously in the transformation of values into prices of production is that the problem is posed incorrectly (Duménil, 1984a; Foley, 1982; Mohun, 1984-85, 1994). The alleged sequence followed by the transformation problem is Law of value – Theory of surplus value – Law of capitalist exchange (Duménil, 1984a). However, since the form of value is disregarded, the actual sequence is, according to Duménil (1984a), Law of value – Law of simple commodity exchange – Theory of surplus value – Law of capitalist exchange. This is inconsistent: two laws of exchange cannot co-exist.

The second source of confusion is that the equality of total prices to total value is taken over the gross product when it holds only for the net output (Duménil, 1984a; Foley, 1982; Mohun, 1994). Adding up the value of the whole gross product amounts to taking a Leontief input-output matrix and summing over all the rows and columns (Duménil, 1984a). Double-counting is the upshot: the items which are inputs in the production of other goods are counted both as a final product and as an input. This makes the transformation troublesome.
when joint production and choice of technique are involved, as in Bortkiewicz (1907), Meek, (1956), Morishima & Seton (1961), Samuelson (1971), Seton (1957), and Winternitz (1948).

In Duménil’s (1984a) framework, the value of the net product is the value of the total labour performed and makes up the sum of income (wages, profit, rent and interest). Hence, the law of labour value implies a theory of distribution of social labour according to a law of exchange given by the form of value rather than a theory of individual commodity pricing.

Foley (1982, 1983) tried to drive home the argument that labour value is a fundamental concept for Economics by making the link to the form of value, in particular its money form, more explicit and by utilising this link to re-cast the analysis of the value of labour power. Money is a form of value, the most developed and general form (Foley, 1982, 1983). As a general equivalent, erected simultaneously by the rest of the universe of commodities (Marx, 1867), its main function is to be the embodiment of value or of general social labour regardless of whether money is a commodity itself or not (Arthur, 2004; Foley, 1982, 1983; Somerville, 1933). Thus, the identity between the value of money and that of the money commodity occurs only in the very special circumstances taking place in the first section of Volume I. Nevertheless, whatever the circumstances, money is still the embodiment of abstract labour (Foley, 1982). At the same time, money representing more or less labour than it contains is in agreement with a content which expresses itself in an objective autonomous form (Foley, 1982).

In developed capitalist production the trace of a money commodity has vanished. In this context Foley (1982) defined the value of money, or the factor translating labour values into prices, as the ratio of aggregate direct labour time to aggregate value added. He further called his theory of value a theory of abstract labour as opposed to a theory of embodied labour, seeking to put an end to the confusion between price and value. With this, Foley attempted to
capture the dialectic between price as a form of expression of abstract labour and value as representing the labour contained by a given commodity, or in Smith’s (1776) terms, the interplay between the labour commanded by and the labour contained in a commodity. In Foley’s theory of the value of money, if some commodities exchange above their labour content (or command more abstract labour than they contain), then necessarily and by definition other commodities must be selling below their labour content (or command less labour than they contain) so that the divergences cancel one another out.

Foley (1982) objected to identifying the commodity labour power with a subsistence bundle of commodities and then introducing it as a technical condition in an input-output matrix, as the traditional transformation approach does. Once workers receive their wages, they are not compelled to spend it on a set of given commodities, even though their choice is constrained by their wages. A system which identifies the value of labour power with a set bundle of goods assumes that workers are paid in kind and not in money (Foley, 1982). Furthermore, being unable to take advantage of a theory of the form of value, it is the approach of a barter economy which can regard the function of money as that of a mere numéraire, giving up the tools to analyse monetary phenomena (Foley, 1982, 1983).

Even granting for the sake of simplicity that workers’ wages are associated with a fixed bundle of commodities, due to differences in organic composition and turnover period of the different capitals, commodity prices differ systematically from their labour values (Baumol, 1974a; Duménil, 1984a; Foley, 1982, 1983; Levin, 1997; Meek, 1956, 1976; Mohun, 1984-85, 1994). Then, there is no reason to expect labour power to exchange at its labour value, unlike the remainder of the commodities, as the traditional transformation approach assumes (Foley, 1982).

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Labour commanded should be understood here as abstract social labour and not as labour power as Smith (1776) sometimes seemed to understand.
In Foley’s (1982) scheme the value of labour power is given by the product of the rate of wages and the value of money as defined above. The value of labour power is given thus in terms of what Foley (1982, 1983) calls abstract labour (or labour commanded). In our simplified model, it would coincide with the labour value of the subsistence bundle only in a setting where commodities exchange at their labour values. In capitalist production the value of labour power thus defined will systematically differ from the labour value of the subsistence bundle. It will, however, coincide with the market value of this bundle, that is, with the price of the bundle multiplied by the value of money.

With the above re-conceptualisation the equalities total price = total value and mass of profits = mass of surplus value are a tautology (Duménil, 1984a; Mohun, 1994). Otherwise, only one equality at a time can hold, depending on the normalisation chosen for the algebraic solution of the problem. However, contrary to what Febrero Paños (2000) claimed, the new interpretation does not depend on any particular normalisation but rather brings to light an invariance condition (Mohun, 2000). This conservation principle asserts both that value is not created in the process of exchange but becomes re-allocated through the law of exchange, and that the part of total value not paid to labour is the source of profit. Moreover, this general result does not depend on a uniform rate of either profit or surplus value (Duménil, 1984a).

2.3.2. Mohun’s Synthesis and the Abstract Character of Labour

Mohun (1984-85, 1994) put forward an alternative interpretation, which is a synthesis of Foley’s (1982) and Duménil’s (1984a) approaches. According to Mohun (1984-85), the Neo-Classical concept of commodity and the traditional Marxian approach are polar opposites. The former focuses entirely on the form of value in exchange disregarding any content of value other than its market form. The latter focuses on the objective content of value in material production disregarding Marx’s (1867) analysis of the form of value, the same way Ricardo (1817) in general did. Both positions are untenable because they give unwarranted primacy to
either the moment of exchange or the moment of material production (Mohun, 1984-85).
Although both spheres have objective independent existence, they are nonetheless related
since they make up a unity. The missing link is the concept of form of value understood as the
necessary form of expression of a determinate content (Duménil, 1984a, 1984b; Levin, 1997;
Mohun, 1984-85, 1994).

The state of the debate on the transformation problem was perfectly understandable for
Mohun (1984-85). In the most advanced treatment of the issue (Morishima & Seton, 1961;
Samuelson, 1971; Seton, 1957), it was shown that the technical data of the economy and the
real wage are necessary to determine both prices and profit and labour values and surplus
value. Hence, the former are not derived from the latter, and the latter can therefore be
dispensed with (Samuelson, 1971, 1974a). In Mohun’s (1984-85) opinion, there is actually
nothing logically wrong with the above view. However, if the Leontief input-output approach
appears to be the end of the story, it is because Marxian writers themselves have demolished
the theory of value.

The major failure of Marx’s (1867, 1885, 1894) theory as interpreted by the traditional
Marxian approach stems from the Ricardian reading they have made of him (Mohun, 1984-
85, 1994). According to both Baumol (1974a) and Mohun (1984-85), the main aim of the
transformation appears to be the correction of the labour values system in order to determine
relative prices and profits. In this regard, they (Bortkiewicz, 1907; Meek, 1956; Morishima &
Seton, 1961; Samuelson, 1970, 1971, 1974a; Seton, 1957; Winternitz, 1948) stick to a
concept of value unilaterally identified with the labour embodied in individual commodities,4
as though this and the organic composition of capital were to determine prices and profits and
accommodate the general tendency towards the equalisation of the rate of profit (Mohun,
1984-85).

4 That necessary to reproduce them.
Volume I of *Capital* appears to warrant the above interpretation (Mohun, 1994). Commodities are exchanged at their labour values, value is expressed directly in the money form, the value of money is equal to the labour value of the money commodity, and the value of labour power is equal to the labour value of the workers’ consumption bundle. However, the aforementioned identities are not theoretical but contingent (Mohun, 1994). They are contingent on a law of exchange according to labour values (Duménil, 1984a). That this is only one form of concretisation of the law of value cannot be seen unless the concept of form of value is grasped (Duménil, 1984a; Mohun, 1984-85, 1994). Otherwise, the law of labour value is only understood in the restrictive context of Volume I because the form of value is irrelevant regarding the main long-run equilibrium results.

In Volume III of *Capital*, commodities’ labour value is not expressed directly in the money form, the value of labour power does not coincide with the labour value of the bundle of wage goods, and the labour value of the money commodity does not express the value of money anymore; that is, its ability to command social labour (Mohun, 1994). Yet the traditional transformation approach kept regarding the value of labour power as that of the bundle of wage goods, attempted to tackle the issue of the value of money through the organic composition of capital in the production of the money commodity, and disregarded the question of the expression of value altogether (Mohun, 1994).

Mohun (1984-85, 1994) and Anton (1974) correctly argued that by focussing on the content of value and remaining heedless of the form, the traditional Marxian approach rubs the specificity of capitalism out of the analysis. To give an example, sight is lost of the fact that constant and variable capital are qualitatively different from each other and cannot be treated symmetrically (Mohun, 1984-85). The labour force is not reproduced capitalistically. There is neither profit to be earned nor technique to be chosen.
A further major problem in the transformation approach is the aggregation of labour (Mohun, 1984-85). As is well known, the main feature of the labour producing the different commodities is that it is heterogeneous, giving rise to the diversity of commodities for sale. Thus, stating that labour is the common substance which makes commodities commensurable is prone to objection. The defenders of the labour theory of value in the Ricardian interpretation bring up the collective worker as a defence. In a factory several workers combine their skills and efforts to come up with a commodity. In this regard, the different types of concrete work are but alternative modes of expenditure of the labour of the same entity: the collective worker or factory. This way of reasoning, however, cannot be extrapolated to the whole system (Mohun, 1984-85). Whereas “production” within the factory is planned, at the system level it is completely decentralised (Mohun, 1984-85). Hence, there is no obvious way to homogenise heterogeneous labours.

Mohun (1984-85) claimed that the answer to the above riddle is given by the form of value. Labour as homogeneous abstract labour is not a mind abstraction, he sustained, but has objective existence. In Mohun’s argument this happens when commodities come into relation as values through expressing their own value in the money form. Hence, the abstraction takes place indirectly under the appearance of a relation between things, which makes it very difficult to understand.

Mohun’s main argument is then that the law of value is supposed to show that it is social labour that the price system allocates in capitalist production and hence the source of every form of income. In other words, the transformation problem should show that the price system redistributes a substance which is generated logically previous to its distribution and which is labour (Mohun, 1984-85, 1994). Hence, the law of labour value is compatible with any system of prices/distribution.

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5 It is not production proper since it is only the material moment and the product has yet to be sold to become part of the social product. Factory production is potential production.
2.3.3. Lysandrou’s Commodity Theory of Exploitation

Lysandrou (2000) criticised the approach to Marx (1867, 1885, 1894) in Economics based one-sidedly on the law of labour value on the grounds that it prevents accounting for exploitation on the basis of distancing through the market. Both main strands on the theory of value, represented by Baumol (1974a) and Samuelson (1971, 1974a) in the 1974 debate, by giving unwarranted primacy to either the moment of material production or the market, present a picture where exploitation appears to be either direct, through the ownership of the means of production, or a matter of market struggle. Thus, the differences are not just a matter of opinion as Bronfenbrenner (1973) implied but substantive. However, both positions are misleading (Lysandrou, 2000).

Lysandrou argued that in capitalism, unlike previous modes of production like the feudal system, there is no direct class exploitation. Exploitation takes place in an indirect fashion through the commodity relation in the market; that is, under the appearance of exchange of equivalents. Moreover, it is unintelligible even for capitalists since they do not act as a unified class but compete as a personification of the different capitals. Exploitation through distancing seeks to capture its alienated character in capitalism for all of the actors involved. Alienation describes the state not only of the labouring class. The capitalist class is also alienated with regard to the means of exploitation (Lysandrou, 2000). This is what makes it especially difficult to spell out, for capitalists do not privately appropriate the surplus value generated within their domain but surrender it through the market, through which they also appropriate the social surplus value which will make up their profits.

The common view held in the transformation debate is that Marx starts from the essence in Volume I, namely the process of material reproduction considered in isolation, and moves on to the appearances, namely the market phenomena, in Volume III (Baumol, 1974a; Bortkiewicz, 1907; Carling, 1984-85; Foley, 1982; Meek, 1956; Morishima & Catephores,
However, as Lysandrou (2000) and Duménil (1984a) accurately pointed out, Marx (1867, 1885, 1894) starts and ends in the market because he starts his analysis with commodity and commodity has its objective existence in the market. Moreover, his theory of exploitation is not just any theory of exploitation but a commodity one (Lysandrou, 2000).

Lysandrou’s interpretation of Marx’s sequence from exchange at labour values to exchange at prices of production is that Marx, in agreement with his method of moving from the abstract to the concrete, progresses from a model with a “thin” market to a “thick” one. The progression would be as follows: first, only the products of labour, produced in identical technical conditions, are exchanged in the market; second, the above plus labour power; and third, the above plus the means of production, so that there is choice of technique involved. Though more coherent than the traditional view that exchange first equalises the labour content of commodities and then the rate of profit, it lends itself to the interpretation of an historical transformation problem (Meek, 1956, 1976), correctly rejected by Morishima & Catephores (1975). This type of misunderstanding occurs because in an unsatisfactory theoretical framework, it is hard to explain why there should ever be a stage where profits strike no chord whatsoever, as in Capital’s section on commodity.

2.3.4. Keen and the Dialectic of Commodity

In his Master thesis, Keen (1990) went further than the transformation approach to criticise the interpretations tendered on Marx’s economics since the late 1800s. In Keen’s view, until the publication in English of Marx’s (1857) Grundrisse in 1973, and particularly until the publication in English of Rosdolsky’s (1969) The Making of Marx’s Capital in 1977, Marxian writers seemed to be of the opinion that use value played no economic role in Marx’s (1867, 1885, 1894) system, value being characterised as the total abstraction from use value. However, according to Keen, the fundamental tool of Marx’s analysis is the dialectic between
commodity’s use value and its exchange value. Therefore, this issue is logically prior to any consideration of the more concrete problem of the transformation of surplus value into profits.

The basic dialectic between use value and exchange value properly and thoroughly applied renders *Capital* consistent, offers powerful insights and also powerful tools for the analysis of economic phenomena, though it demolishes the labour theory of value according to Keen (1990). As Keen argued, in the exchange of capital for labour power, the concept of use value has economic relevance in dialectic contraposition with the concept of exchange value. This is because for the capitalist, the use value of labour power is the generation of exchange value, the capitalist’s source of accumulation. Thus, in this instance use value is quantitative and commensurable with exchange value.

A surplus thus arises from the use of the commodity labour power because its exchange value, given by its conditions of reproduction, differs from (and is less than) its use value; that is, it arises from its capacity to make commodities with a higher exchange value. However, according to Keen, this reasoning shows that labour is a source of surplus but not that it is the only source of surplus. Applying this scheme, one is bound by consistency to reach the conclusion that all of the inputs to production are a source of surplus. As Keen argued, there is no a priori reason why this quantitative divergence between use value and exchange value should be limited to the commodity labour power. However, it should be noted that to reach his result, Keen applied a dialectic concerning the immediate consciousness of producers to the issue of value and surplus value generation, which concerns but the objective moment of production. The aforementioned process falls out of individuals’ consciousness.

Armed with this reasoning and in agreement with Steedman (1977), Keen (1990) gave his interpretation on why the transformation problem is a pseudo-problem. In Capitalist production all of the commodities which are inputs to production are subject to the same
dialectic as labour power: they have a quantitative use value which differs from their respective exchange values. In other words, all of the inputs to production are a source of surplus value. Therefore, there is no reason for the rates of surplus value to differ from those of profit in the long run. Consequently, there is no reason for the rates of surplus value to differ across different branches of production either. Otherwise, capitalist competition would bring them back in line. It should be noted, however, that in his scheme Keen made the generation of surplus value, a specific capitalist form (Hodges, 1972; Wartofsky, 1983), the immediate equivalent of the generation of a surplus product, which is a general form of slack (Foley, 1993).

In sum, Keen (1990) is a crossover between the Sraffian approach and Marx. In accordance with Sraffa (1960), he pinned down the source of value and surplus value to all of the commodities entering into the production process. Therefore, value and surplus value are generated, in Keen’s terms, in the production sphere, not in exchange. However, this result is arrived at by utilising, in Keen’s understanding, the most basic tool in Marx’s (1867, 1885, 1894) analysis; that is, the dialectic between the use value and the exchange value of commodities.

2.3.5. Levin’s Technological Capital

Levin (1997) has offered the most fruitful interpretation of Marx (1867, 1885, 1894) to date. He put the concept of commodity at the centre of the analysis, just as Marx, and used it as the cornerstone of the characterisation of capitalist production as the differentiated unity of a market and a private material moment. Levin thus encompasses the views of Mohun (1984-85, 1994), Lysandrou (2000) and Keen (1990), bringing them under a single framework. Moreover, he turned fundamental unconceptualised notions in Marx into the necessary concepts to complete the characterisation of commodity as a historical specific mode of production.
“Homo-laborans” and “homo-mercator” refer to the roles played by the individual according to whether they are acting in the private material sphere of production or in the market. The two roles are thus the reflection of the differentiated unity of commodity production on the individual behaviour. He further introduced the concept of “mercantile use value”, in dialectical relation to the usual use value, to refer to the historically specific usefulness of commodity as a means of exchange. Likewise, he introduced the concept of “mercantile value”, in dialectical relation to what is known as labour value, as a conceptualised substitute for the realisation value of commodities in terms of social labour. The interplay between the objective and subjective moments of production allowed him, in turn, to draw the distinction between comparative advantages and “mercantile comparative advantages”.

However, Levin’s interest did not lie in simple commodity production, or even in capitalist production under the driving force of the tendency towards the equalisation of the rates of profit, but on the modern concrete configurations of capital in hierarchical productive structures. This allowed him to lay down a typology of capital according to their place in the concrete process of production, with what he called technological capital at the top of the hierarchy of most dynamic structures, thereby regulating the conditions of accumulation of the other capitals in the relevant sub-system. Levin’s commodity is thus that of technological capital. If the transformation issue comes logically after that of commodity production, the concrete configuration of productive subsystems comes logically after the transformation issue.

2.4. Conclusion

Summing up, the problem of the transformation of labour values into prices of production and of surplus value into profit is mainly an issue concerning the relevance of the law of labour value for understanding the workings of capitalist production. Regardless of the perspective in which the issue is considered, it cannot be tackled without resorting to the concept of form of
value. However, both the concept of labour value and that of form of value are partial and disjointed if the concept of commodity is not brought into play. The reason is that labour value expresses itself in a form determined by the commodity relations of production.

Commodity is then the framework within which the dialectic of value and that of the form of value take place and develop. At the same time, only by a developed concept of commodity can the differentiated unity of capitalist production as a process of two independent yet interlocked moments (material and relational) be properly understood and accounted for. The return to the simpler framework of commodity should not be prompted only because in the above debate the concepts were still incomplete and have to be traced back to their theoretical origin. What is at issue is the process through which material production carried out privately and independently becomes part of the social product; the problem of the realisation of profits and the determination of prices is but its manifestation in the setting of capital.

Thus, the thesis now turns to the thorough analysis of generalised commodity production in order to answer the two research questions set out in chapter 1. After the analysis is completed in chapters 3 and 4, chapter 5 returns briefly to the transformation problem to offer a new (and hopefully definitive) interpretation in the light of the results obtained in chapters 3 and 4.
3.1. Starting Point and Route

As seen in chapter 1, the fundamental question to be addressed to understand capitalist production is how a process of material transformation carried out privately and independently becomes socially recognised as production. This is no minor issue since production takes place at a global scale and in a de-centralised fashion. In other words, to understand capitalist production we must understand its specific form. As argued in chapter 2, this is what the transformation and dialectic approaches have overlooked.

Marx’s (1867) answer is that private and independent work objectifies itself as social labour as the substance of the value of commodities, and that the latter finds its necessary developed mercantile expression in the price form of commodities. Thus, Marx’s answer to the main research question can be broken down in two: the transition from exchange value to labour value (the main theme of Classical Political Economy), and that from labour value to the price form of commodity (Marx’s own contribution). The latter hinges on the former.

Breaking down the answer in two transitions arises from the conceptual need to account for the two moments of production (material and social) in a system where the visible phenomena occur in the social moment: the market. The material moment is not subservient to the social one but since it occurs in social isolation, it has no direct form of manifestation. The only way to trace it is through the social moment’s determination of the productive behaviour of individuals (the first transition). Its objective existence, on the other hand, can only be seen through its bearing on the social moment (the second transition). This way the differentiated
unity of production is acknowledged and with this, the autonomous existence of and the interplay between the two moments of production.

In this and the following chapter I show that Marx’s answer is basically correct and powerfully insightful, but flawed. The flaws are gaps which prevent the full characterisation of commodity as a historically specific mode of production. I then show that the gaps can be filled by a proper integration and conceptualisation of the elements already present in the commodity section of Capital. This chapter deals with the transition from exchange value to labour value, and chapter 4 with that from labour value to the price form of commodities.

3.2. Characterisation of Commodity in the Market

Marx argues that the inquiry into the capitalist mode of production must start from the concept of commodity.\(^6\) His argument is two-fold: first, in the capitalist mode of production, the material wealth takes or has taken the form of commodity; that is, of goods exchanged in the market through buying and selling. Second, commodity is the basic articulating cell of an atomistic mode of production operating on a global scale. Thus, the basic key to understanding the historical specificity of capitalist production lies in understanding the specific and generic features of commodity production and their interplay.

As Marx states, “a commodity is in the first place an object outside us, a thing that by its properties satisfies human wants of some sort or another” (Marx, 1867 [1954, p.35]). However, neither the nature of such wants nor whether commodities satisfy them directly as a means of subsistence or enjoyment or indirectly as a means of production matters in this characterisation of commodity. In this regard, they are useful things looked at from the two points of view of quality and quantity. The course of history may change the uses of a

\(^6\) Note that though entitled On Value, Ricardo (1817) also starts from commodity in his Principles of Political Economy and Taxation and so does Smith (1817) in Wealth of Nations if we leave aside his introduction on the division of labour. At any rate, Smith’s discussion is on the commodity division of labour.
commodity or the amounts in which it should be present to be useful. However, the utility of a commodity is a property of it as a useful object which is present in certain quantities, and this makes it a use value.\textsuperscript{7}

Marx pushes the above analysis of the utility of a commodity to state that it is independent of the amount of labour required to appropriate the commodity’s useful qualities. Consumption, however, is not an effortless and miraculous appropriation of the useful properties of commodities. Neo-Classical Economics in its praxiological branch has long ago shown that this effort may determine whether an object is a use value or not and in what degree, affecting the demand for it. Nevertheless, Marx’s point is that what makes a commodity useful is its physical features, thus grounding the analysis of use value in the commodity’s natural – as opposed to social – side. The effort of appropriating its useful properties may then make it not worthwhile but those properties concern commodity only in its natural aspect. Marx’s inaccurate terminology on this issue should be nonetheless acknowledged. As Marx points out, use values become reality by use or consumption and they constitute the substance of all wealth, whatever its social form. Thus, the fact that commodities are useful things satisfying needs and fancies does not distinguish commodity from any other historical form of product. Use value is then a generic feature of commodities.

From the analysis of commodity as a generic use value, a natural thing satisfying wants, Marx moves on to the analysis of its other immediate feature: exchange value, completing the immediate characterisation of commodity, which is depicted in figure 3.1. Exchange value, says Marx, presents itself as a quantitative relation, as the proportion in which values in use of one sort are exchanged for those of another sort, a relation changing with time and place. Hence, Marx argues, an intrinsic value seems a contradiction in terms.

\textsuperscript{7} “[T]his utility is not a thing of air. Being limited by the physical properties of the commodity, it has no existence apart from that commodity” (Marx, 1867 [1954, p.36]).
3.2.1. The Transition from Exchange Value to Its Substance: Labour Value

Looking at things more closely, commodities have not only one exchange value, or relative price in Neo-Classical terminology, but many. A given commodity can be exchanged for many others in the most different proportions. Therefore, if according to the relative prices $x$ corn can be exchanged for $y$ linen, $z$ coal, $w$ silk and so on, $x$ corn, $y$ linen, $z$ coal and $w$ silk must as exchange values be replaceable for or equal to one another. Thus, according to Marx, the valid exchange values of a given commodity express something equal.

Hinging on the above argument, Marx claims that exchange value is only the mode of expression, the phenomenal form, of something contained in it, yet distinguishable from it. If a quarter of corn exchanges for $x$ kg of iron, in 1 quarter of corn and in $x$ kg of iron there exists in equal quantities something common to both. “The two things must therefore be equal to a third, which in itself is neither the one nor the other” (Marx, 1867 [1954, p. 37]). Marx argues that the common “something” making commodities equivalent cannot be a natural property of them, since such properties claim our attention only insofar as they make commodities use values and “the exchange of commodities is evidently an act characterised by a total abstraction from use value” (Marx, 1867 [1954, p. 37]). According to Marx, if we leave out of consideration commodities as natural objects, they have only one property left:

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8 This thesis, however, sticks to Marx’s terminology when there are equivalent terms unless there are conceptual reasons not to.
that of being products of labour. He highlights, however, that the product of labour has undergone a change under this viewpoint. In effect, if we abstract from commodities’ natural properties, we also make abstraction from the concrete forms of application of labour, reducing it to human labour in the abstract.

In the next paragraph Marx attempts to crown his argument. If we consider the residue of each of these products, it consists of the same unsubstantial reality in each, a mere congelation of homogeneous human labour, or labour power expended without regard to its mode of expenditure. “When looked at as crystals of this social substance, common to them all, they are – Values” (Marx, 1867 [1954, p. 38]). This is Marx’s controversial “transition” from exchange value to labour value in *Capital*. This procedure was characterised by Böhm-Bawerk (1896) as a process of successive exclusions which proves nothing. It has also wrongly created a common view that use value plays no role in Marx’s Political Economy. This point in *Capital* is a divide between those who disregard the concept of labour value off hand and those who adopt a fundamentalist approach to the labour theory of value.

### 3.2.2. An Extrinsic Jump Rather Than an Immanent Transition

The transition that Marx (1867) makes from the analysis of exchange value to its underlying substance of labour value is actually not such. It is a discontinuous jump rather, where we are presented with the final result. Moreover, it is not a single jump but two. From the exchange value of a commodity, Marx concludes that there is something present in equal quantities in the two given commodities, which is a truism. However, from this it does not necessarily follow that this “something” is distinguishable from both commodities. Yet he takes another leap and states that the “something” is homogeneous human labour. A part of Marx’s attempted reply about the way work carried out privately and independently becomes part of

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9 Marx’s conclusion may even lead to the circular reasoning that the “something” common to both commodities is distinguishable from them because it is abstract human labour, and that the “something” is abstract human labour because it is the only feature which is distinguishable from any two commodities.
the social labour in an atomistic global system of production entails its becoming objective as a homogeneous social substance in the value of commodities. Marx’s gap in this analysis levels a blow to his theory of commodity almost at the outset of the same type as that received by Ricardo’s (1817). If labour cannot be established as the substance of value (a Ricardian problem), how can it then be shown that the money form is its necessary form of expression in commodity production (Marx’s (1867) original contribution to the theory of commodity)?

### 3.2.3. The Role of Use Value

Particularly controversial is Marx’s claim that exchange “is evidently an act characterised by a total abstraction from use value” (Marx, 1867 [1954, p. 37]), since this is denied by Marx himself in different passages. On page 41, he states, “Were these two objects [the objects being exchanged] not qualitatively different, not produced respectively by labour of different quality, they could not stand to each other in the relation of commodities. Coats are not exchanged for coats, one use value is not exchanged for another of the same kind”. This is not just one isolated contradiction, since on page 36 he states, “Exchange-value, at first sight, presents itself as a quantitative relation, as the proportion in which values in use of one sort are exchanged for those of another sort…” Furthermore, on page 85 he argues, “The owner [of a given commodity] makes up for this lack in the commodity of a sense of the concrete, by his own five and more senses.”

It is obvious that, literally speaking, the exchange of commodities is not an act characterised by a total abstraction from use value. Otherwise it would not take place. What Marx is trying to point out is that exchange as a social act implies exchanging “something” that does not concern commodities from their natural side. To back his point, Marx quotes Barbon, “one sort of wares are as good as another, if the values be equal. There is no difference or distinction in things of equal value…An hundred pounds’ worth of lead or iron, is of as great value as one hundred pounds’ worth of silver or gold” (Marx, 1867 [1954, p. 37]). In Marx’s
own words, “one use-value is just as good as another, provided only it be present in sufficient quantity…As use-values, commodities are, above all, of different qualities, but as exchange values they are merely different quantities, and consequently do not contain an atom of use-value” (Marx, 1867 [1954, pp. 37-38]). However, considering commodity exchange regardless of generic use value can only apply to individuals concerned solely about commodities’ exchange value. Thus, in its immediacy, Marx’s argument holds for sellers, who regard their commodities as a means of exchange, but not for buyers, who regard them as a means of consumption or production. This highlights that Marx did not exhaust the immediate analysis of commodity.

Marx states that use value becomes real by use or consumption. Therefore, in this form of production the utility that Marx refers to is enjoyed by the buyers of commodities. As Marx highlights, commodities have no immediate use value for sellers. Otherwise, they would not take them to the market. A commodity producer produces use values for others (and non-use values with regard to themselves), which they give up by means of a market exchange. However, if commodities did not have any type of use value or usefulness for sellers, they would not trade them in the market. Commodities have use value for sellers too: that of being depositories of exchange value (Marx, 1867), or in Smith’s (1776) terms, that of enabling their owners to command other people’s labour. This type of use value refers to commodity’s utility as a means of exchange (Marx, 1867). It is then the fact that commodity is exchange value, alongside use value, that reveals that it is useful as a means of exchange. This is put forward by Marx in Chapter II of Capital but is not elaborated upon as the two-fold character of the use value of commodity and its internal interplay, or the dialectic of use value. Thus, use value plays two distinct roles. As the utility provided by a commodity as a physical

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10 It is obvious that neither Marx nor Barbon is referring to the Neo-Classical concept of substitutability in consumption, where different good mixes yield the same utility, but to commodities’ substitutability as objects with the same market value.
object, it stems from its natural character. As the utility provided as a means of exchange, in contrast, it stems from its social character.

The utility of commodity as a direct means of consumption or production does not single it out from any other mode of production; the character of commodity as an object making up the material wealth of society is generic. It is a completely different story with commodity’s utility as a means of exchange. This is a historically specific feature of a mode of production based on indirect production relations taking place through direct material relations; i.e. through the generalised exchange of the objects of material wealth. Commodity’s use value as a means of exchange is termed “mercantile use value” by Levin (1997), reflecting the fact that it comes to existence because in commodity production the most general productive relation takes place through the market. At a given point in time, the mercantile use value of a commodity, or its utility as a means of exchange, depends not on its absolute quantity but on its relative scarcity. This facet of the use value of commodity puts a given commodity in a relation of competition against its peers and of exchange with the rest of the universe of commodities. Never before commodity production were the objects of material wealth put in relations of competition and mutual exchange. Consequently, a commodity’s mercantile use value, as opposed to its generic one, is materially abstract, though socially concrete. However, it is in dialectical relation with the concrete materiality of commodity. Since mercantile use value is given by the commodity’s relative scarcity, certain physical commodities in certain numbers will, at a given point in time, have more mercantile use value than others. Nevertheless, its determinant is relative scarcity independent of the material form taken by it.

The interplay between commodity’s generic use value and its mercantile counterpart is the world of utility maximisation and relative scarcity. Thus, it determines the behaviour of the

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11 The determinant of a commodity’s mercantile use value (its relative scarcity) is the same as that of its exchange values. Mercantile use value and exchange value, however, are not the same. The former is commodity’s utility as a means of exchange and the latter merely one of its many relative prices.
“homo-mercator” in Levin’s (1997) terms, or what is the same, the individual in the market. In other words, the dialectic between generic use value and mercantile use value determines for each individual which markets they will enter as buyers and which ones as sellers, and the quantities they will attempt to trade. This is the subject matter of Neo-Classical Economics. Figure 3.2 summarises this re-conceptualisation of the immediate dialectic of commodity.

**Figure 3.2: Re-conceptualised immediate dialectic of commodity and the homo-mercator.**

3.2.4. Shortcomings of Marx’s Labour Theory of Value

It is evident that exchange is not an act characterised by a total abstraction from use value. Furthermore, it involves use value not only from a generic natural viewpoint but also from a specific social one, to the point that their interplay actually determines exchange. Marx seeks to ground abstract labour as the substance of value through a process of analytical discarding instead. Therefore, his attempted transition from exchange value to labour value fails and the abstraction from the material features of commodities appears to be purely mental.

Marx argues that the abstraction from the modes of expenditure of human labour is not conscious but objective. As such, it takes place through the process of market exchange without producers being aware of it. However, even if the production relations take an
identity of their own and the actions of producers taken together lead to a result they are not aware of, let alone pursuing, an atomistic system can only be accounted for from the individual behaviour. Thus, the law of labour value can only be grounded by showing that the individual behaviour leads to that, even if it is an unintended result; i.e. it has to arise necessarily out of the dialectic between commodity’s generic and mercantile use values. The price that Marx pays for not exhausting the analysis of commodity in the market (hence, for not capturing commodity’s specificity in full) is to rob his theory of foundations. By relying on an analytical abstraction where the individual plays no part whatsoever, “Marx is a minor post-Ricardian” (Brewer, 1995).

3.3. The Dialectic of Use Value and Neo-Classical Economics

3.3.1. Reasons for Introducing Neo-Classical Economics to the Analysis

As we have seen, commodity first appears in the market. However, in Marx we can see only figments of the market. Though acknowledged as an integral moment of the whole production process, unlike Ricardo (1817), who treats different aspects of the market as appendices to the main argument of his Principles, the analysis is incomplete in Capital. This deprives his theory of fundamental links. If a labour theory of value is ever to be established in Economics, or if the market is ever to be understood as a moment of the whole process of commodity production, it is through the thorough development of commodity in the market. This means that it is through the development of the interplay between commodity’s generic use value and its mercantile counterpart since it fully determines the behaviour of the homo-mercator. The science whose subject-matter is the dialectic of the use value of commodity is Neo-Classical Economics. Considering Neo-Classical Economics (or Catalactics (Jevons, 1871) to be more precise) at this point is not ad-hoc. Despite its degree of sophistication, it rests on the same theoretical principles as Mercantilism and has the same subject-matter. Although Marx was not acquainted with Neo-Classical Economics since it appeared later, he
was well versed in Mercantilist theory. It is that approach that he refers to when criticising the unilateral supply and demand views. It is also based on that school of thought that he criticised Classical Political Economy when it did not consider the form in which labour value appears in capitalist production.

3.3.2. Patinkin: The Synthesis of the General Equilibrium School

I have decided to make use of Patinkin (1956) to complete the characterisation of commodity in the market for the following two reasons. First, Patinkin is a good synthesis of the General Equilibrium or Walrasian approach to Neo-Classical Economics.12 If we say that capitalist production is the differentiated unity of material production and the market moment, and that it is necessary to exhaust the analysis of commodity in the market to be able to grasp it, we want an approach which has in view the whole of the inter-relations in the market.

Second, Patinkin develops the General Equilibrium model from its very foundations. The beginning of his book does not assume the historically specific forms of capital but only that the objects of society’s material wealth have taken the form of commodity, focusing on the relational side of this form; i.e. the market. In his basic framework there are thus no firms, no money and no capital but atomistic individuals who are foreign to one another yet relate in an abstract general form: through the market, whose data they take as parameters. This relation occurs not because of the individuals’ social nature but out of their own interest. Through the exchange of commodities they only seek to fulfil their own wants the best. In this type of organisation, the material reproduction of society occurs through the material reproduction of its constituent individuals as individuals.

The focus being on the relational side of production, the initial endowment of commodities of each individual is given. Forced though it may sound, this is the way commodity first appears

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12 This tradition goes from Edgeworth (1881), Pareto (1906) and Hicks (1939) to Arrow (1983) and Debreu (1959).
to consciousness: as a useful object in the market or as a useful object for exchange. The individual is thus a simple “trader” or “homo-mercator” (Levin, 1997) who, given their preferences, their initial endowment of commodities and the commodities’ exchange values, goes to the market to exchange those commodities whose only utility to them is that of being a means of exchange for those that will directly satisfy their wants the best. Hence the restrictive meaning of the term “trader” in this context. Thus, Patinkin’s basic framework deals with commodity as a generic use value directly satisfying needs and as a means of exchange (a mercantile use value). From their interplay, the individual’s behaviour is depicted and exchange values arrived at. In this regard, nothing new or foreign is added to Marx’s analysis. I am only exhausting the analysis of the immediate features of commodity to set in motion the transition from exchange value to labour value.

Going into further detail, Patinkin’s model makes use of the Hicksian week device. Individuals begin Monday morning with an initial endowment of commodities which, “like the manna of the Children of Israel, has descended upon them ‘from the heavens’ the preceding night” (Patinkin, 1956, p. 8). With this endowment, each individual has to become an homo-mercator on Monday afternoon, the only trading time in the week. Given the market’s exchange values and each individual’s initial commodity endowment and tastes, Patinkin defines the individual’s excess demand functions. The individual’s excess demand function determines their behaviour as homo-mercator, or their behaviour in the market, since it is the difference between the quantity wanted of a given commodity and their initial endowment. If this quantity is positive, the individual has a positive excess demand (meaning that the commodity in question is a generic use value for the individual) and enters the given commodity market as a buyer. If the difference is negative, in contrast, the individual has a negative excess demand or, what is the same, a positive excess supply. In this case, the

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13 In Patinkin’s (1956) terms, their demand for it. In his framework, the utility-maximising demands of an individual (constrained by the individual’s budget; i.e. the individual’s initial commodity endowment and the market’s exchange values) will equalise the individual’s marginal rates of substitution between commodities to their respective exchange values, as is usual in Neo-Classical Economics.
commodity in question is not a direct use value for the individual but a means of exchange (a mercantile use value), and the individual enters the given commodity market as a seller. The sole purpose of exchange is to satisfy needs and wants, or in Neo-Classical terms, to maximise utility through consumption, which occurs in the ensuing week, so individuals sell in order to buy.

Adding up across individuals, Patinkin obtains the different markets’ excess demand functions, depending, too, on each individual’s tastes and initial commodity endowments, and on commodities’ exchange values in the same manner as above. Patinkin then establishes the existence of a single stable set of equilibrium exchange values given a set of individual tastes and initial commodity endowments. This equilibrium is attained through the Walrasian auctioneer, who cries out the exchange values, records purchasing and selling bids and prevents the bids from being binding until equilibrium is reached in each and every market (actually in n-1 markets). This device, though artificial, captures the essence that the individual trades with ‘the market’ instead of establishing direct relations with other individuals, and in so doing, commodity exchange bursts all local boundaries.

Patinkin’s model, though circumscribed to the market, captures the necessary interplay between the subjective and objective moments of commodity production. The market has an objective existence and determines with an iron hand the individuals’ environment and hence their decisions. In turn, their subjective decisions all together determine the market’s outcome. This fact, however, is of no significance to individuals since they have no bearing on the market outcome individually. At this point the usefulness of Patinkin’s framework ceases since he immediately proceeds to introduce money through the ad-hoc assumption that the exchange-associated payments are settled during the ensuing week, that they are due randomly and that they must be made in money. This aspect of commodity exchange falls out
of the immediate dialectic of commodity as a generic and a mercantile use value, which is the focus of the thesis at this stage.

3.4. Two Roles, One Actor: A Labour Theory of Value

From Patinkin’s basic framework, which renders market equilibrium (that is, which brings the social moment of commodity production to rest), the natural question is: what happens if commodities do not descend from heaven? In other words, what happens if we consider the material facet of production?

If Providence does not bestow commodities on the individuals, then they will have to be in charge of their material production since the collection of commodities with which they arrive at the market on Monday is their only means of exchange, or their sole source of income in Neo-Classical terms. Without a means of exchange, individuals cannot demand commodities and their wants and needs remain unfulfilled. Put differently, each individual will have to become an “homo-laborans” (Levin, 1997) or productive labourer during the week in order to be able to play the role of “homo-mercator” (Levin, 1997) or “trader” on Monday.

In the material production moment, unlike in consumption, individuals are completely indifferent regarding the material properties of the commodity or commodities they come up with. Their only concern is to attain the highest possible budget line given a certain level of labouring effort. It is only in this context that Barbon’s assertion holds in its immediacy: “one sort of wares are as good as another, if the [market] values be equal” (Marx, 1867 [1954, p. 37]). When talking about effort, it should not be understood that the inputs to commodity production other than labour are disregarded. The labour theory of value is not a single-factor production model. There is nothing like labour in the abstract or, what would be the same, in the void. In its immediacy labour always has a materially concrete form, it is applied to natural objects and is aided by both natural objects and forces. As Marx puts it,
The bodies of commodities are combination of two elements – matter and labour. If we take away the useful labour expended upon them, a material substratum is always left, which is furnished by Nature without the help of man. The latter can work only as Nature does, that is by changing the form of matter. Nay more, in this work of changing the form he is constantly helped by natural forces. We see, then, that labour is not the only source of material wealth, of [generic] use-values produced by labour. As William Petty puts it, labour is its father and the earth its mother (Marx, 1867 [1954, p. 43]).

Given the exchange value of a commodity, or to be accurate, the list of exchange values against the rest of the commodities, income\textsuperscript{14} increases as the quantity traded rises. Once the length of the workday is decided upon, the way inputs are combined will determine the level of output. Thus, individuals will be more than aware about the choice and mix of inputs, which includes the materially concrete form in which their labour power is exerted, since it will determine their income. In my setting, this gets translated as rational individuals seeking to maximise income given a certain duration of the workday. Since the commodities’ exchange values are parameters for each individual, the sought result can only be achieved through the maximisation of the output in the chosen commodity or commodities.

In the material production sphere, individuals are concerned only about quantities of labouring effort because procuring all the inputs cost them labour.\textsuperscript{15} This is why Marx says that when considered as exchange values, commodities do not contain an atom of use value. However, both aspects are not dissociated. They make up a differentiated unity. In their attempt to maximise income given a level of effort, individuals will use inputs in a way that maximises output, and will change the technical conditions of material production so that a given amount of effort takes them to ever-higher budget lines.

\textsuperscript{14} The word income is used here for ease of exposition. In the present setting it is not money income but income in kind, command over other commodities.

\textsuperscript{15} If individuals were by themselves, coming up with the required use values to ensure their survival would cost them only labour. So would be the case in my setting for the individual to come up with the required use values for exchange in the context of a vertical integration of production. But it would also be the case with commoditised means of production! The individual would have to come up with some use value to give in exchange for those means of production that they require for future production.
Contrary to all appearances, this setting considers the existence of relative scarcity. If a given input becomes scarcer, it will take more labour to procure. Therefore, ceteris paribus and given a length of the workday, it will lead to decreased individual output (and to a rise in the value of the affected commodities if scarcity in the given input hit the whole system alike). At the same time, this may trigger changes in the conditions of material production geared to overcoming the initial negative effect of the above on the individual’s income. The following section shows how individuals make their decisions and how this affects the system’s equilibrium.

3.4.1. Comparative Advantages

This section makes the following assumptions: the market closes in equilibrium every Monday through the process depicted by Patinkin (1956);\(^1\) the system is that of perfect competition with many different commodities; individuals have different technical abilities in different proportions and each individual’s technical domain comprises at least two commodities; commodities are only a means of exchange for the original owners, so that excess demand in Patinkin’s sense equals demand; there is no market for inputs but just for final commodities,\(^2\) so that the material production of commodities is vertically integrated; and individuals have expectations regarding commodities’ exchange values in the next market round. For simplicity, I assume that they expect the same equilibrium exchange values as last Monday’s, though other types of expectations, like rational or adaptive, could be assumed.

As noted above, individuals trade with the market, which has an objective existence and sway over their decisions, and only indirectly with each other. What determines the individual’s concrete boundaries of the interplay between generic and mercantile use value (and hence individuals’ decisions) is the only data that the market offers, namely the list of exchange

\(^1\) This assumption is made for the sole purpose of isolating the material from the social moment of production.

\(^2\) This would be a “thin” market in Lysandrou’s (2000) terms.
values. The effort that the material production of a given commodity requires is, in effect, the labour expended on it. As Marx (1867) points out, the amount of labour expended has its unit of measure in days, hours and minutes. Time and exchange value are incommensurable though. A rational individual, however, in order to decide what to produce, does not focus on the absolute effort that they have to put in making two given commodities but on the relative efforts. They would determine their individual relative values.\textsuperscript{18} Rational individuals would then compare the relevant expected exchange values with their individual relative values and specialise accordingly. In other words, they would behave according to the principle of comparative advantages introduced by Ricardo (1817) in Chapter VII of his *Principles*. This means that they would produce at that point where their individual material transformation curve is tangent to the highest possible expected budget line, whose slope is given by the respective expected exchange values. Given the length of the workday, the highest possible material transformation curve, in turn, is achieved through minimising the labour time per unit of output.

To give an example, if an individual can make tables and chairs, taking 2 hours to make a table and 1 hour to make a chair, so that the individual relative value (or opportunity cost in Neo-Classical terms) of tables in terms of chairs is 2 to them, and if last Monday’s exchange value of tables in terms of chairs was 3, this individual would specialise in making tables. If they forego a table, they can get 2 chairs instead. If they specialise in making tables, they can go to the market and get 3 chairs for a table instead of 2. The converse would be the case if an individual took 4 hours to make a table and 1 hour to make a chair with the same exchange value.

\textsuperscript{18} If value represents the amount of labour socially necessary to reproduce a given commodity (not shown yet), the amount of labour required by an individual would be their individual value. Relative value being the ratio between two values, individual relative value is defined in an analogous way.
values as in the previous example. This individual would specialise in making chairs and would exchange them in the market.  

The above argument explains only the subjective moment of the whole production process; that is, it explains the individual behaviour given the market data. The behaviour of the differentiated unity homo-mercator/homo-laborans is determined by the interplay of commodity’s generic use value and its mercantile counterpart in the same fashion as was depicted in figure 3.2. The exogenous variables are now the individual’s tastes and their technical abilities instead of their initial commodity endowment, meaning that the individuals’ income is not assumed anymore. Thus, I have so far accounted for only the commodity division of labour. Now we have to analyse the objective moment; that is, the system’s equilibrium, conceptualised in figure 3.3.

Figure 3.3: The dialectic of commodity as a generic and a mercantile use value on private and independent commodity producers and the system’s outcome.

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19 Because of the implicit assumption of constant opportunity cost, the example implies a total specialisation on behalf of individuals, unless their individual relative value is equal to the expected exchange value. In the latter case, they have to toss a coin.
If all the individuals behave following the principle of comparative advantages, the exchange values will tend to a social average of the individual relative values in the long-run. The average, however, will not be the mean.\textsuperscript{20} The system’s equilibrium exchange values will tend to an average in the following sense: in the above example, if the individual relative value or opportunity cost of tables in terms of chairs is 5 for the worst producer and 1 for the best one, this equilibrium exchange value will lie somewhere between 5 and 1. The exact point, given a structure of demand, will be given by the marginal individuals. In other words, the social relative values will be given by the individual relative values of those individuals necessary to be able to just meet long-run demand or, what is the same, who in the long-run equilibrium are indifferent between carrying on with their current activity and switching to a different branch.

The system’s equilibrium exchange values being affected by the structure of demand appears to be a contradiction to a labour theory of value but it is not. The socially necessary labour to reproduce a product\textsuperscript{21} is always affected by the consumption requirements. This, however, does not alter the fact that its value is given by the socially necessary labour to replace it, as is briefly discussed in appendix A.

Paradoxically, the setting of undifferentiated capitalism allows us to lay down a supply-side-determined theory of prices easily through the concept of constant returns to scale. Such an assumption, however, renders the system unstable within the framework of simple commodity production since it means that there is no dispersion of the technical abilities across individuals. This deprives the system from the buffering effect of the marginal producers.

\textsuperscript{20} The terms of trade are not the mean in Ricardo (1817) either. He only says, in his two country model, that they will lie somewhere in between both countries’ opportunity costs.

\textsuperscript{21} I have not written the word commodity because this feature is generic, and not specific to commodity production.
Aside from the effect of the structure of demand on value, there are also two main factors on the supply side preventing the system’s relative values from being the mean of the individual relative values. First, the technical domain of each individual covers but a couple of the whole universe of commodities. Second, the average depends on the different degrees of efficiency of individuals, which is not necessarily symmetrically distributed.

3.4.2. General Market Equilibrium vs. General System Equilibrium: Mercantile Comparative Advantages vs. Real Comparative Advantages

By assumption, the market closes every Monday in equilibrium but this is only a general market equilibrium. If the exchange values do not reflect the respective relative labour values, the system is not in equilibrium. Given the structure of demand, the equilibrium exchange values will keep changing round after round due to changes in supply caused by individuals switching specialisation according to the principle of comparative advantages. When the system reaches its resting position, the exchange values will reflect the relative labour values, or in other words, the social relative time needed to replace the respective commodities in the market. The equilibrium is reached when the re-switching process has ceased. If the technical conditions of production stay the same and, due to change in tastes, there is an increase in the demand for a commodity (hence a decrease in the demand for at least one other commodity), we will see the re-switching process start again. When the system reaches the new equilibrium, we will see that the exchange value of the commodity under consideration will have risen due to an increase in its relative value, or relative labour value in Neo-Classical parlance. This reflects increasing marginal opportunity cost or, what is the same, the fact that new individuals, relatively inefficient in the production of the commodity under consideration given the old structure of long-run demand, are now drawn to its production.

The two re-switching processes described in the previous paragraph are therefore different in nature. Whereas the first process is the adjustment of the productive structure towards the
long-run equilibrium, the second one is the adjustment towards a new long-run equilibrium. This allows us to distinguish between two types of comparative advantages: “mercantile comparative advantages” and “real comparative advantages” (Levin, 1997). Mercantile comparative advantages arise from the information provided by the market: the exchange values. Given the set of expected exchange values, individuals will specialise in the production of those commodities in which they have a comparative advantage. Real comparative advantages, in contrast, reflect the true comparative facility of production given the structure of long-run demand. This type of specialisation responds to the objective conditions of supply. Since the general productive relation takes place exclusively through the market, it follows that individuals always specialise according to their mercantile comparative advantages. The specialisation according to real comparative advantages occurs in an indirect fashion, through the long-run adjustment of the system. That is, in the long-run, the mercantile comparative advantages coincide with the real ones.

The interplay between mercantile and real comparative advantages allows us to see the polar and mutually dependent relationship between the objective and subjective moments of commodity production from a different perspective. Given the technical domain of each individual, the market exchange values determine the individual’s mercantile comparative advantages, and hence their productive behaviour. However, the decisions of the individuals taken together determine the equilibrium exchange values, making them converge on the relative labour values. This is the process which makes mercantile comparative advantages converge on the real ones. At the same time, exchange values reflecting relative labour values is what makes individuals specialise according to their real comparative advantages.

Let us now suppose that the productive conditions for making tables change, ceteris paribus, due to a technical improvement which diffuses over the system. This will bring about changes in the individual relative values leading to a change in mercantile comparative advantages,
which will trigger a re-specialisation process affecting relative supplies. The whole adjustment process will cease when the exchange values converge on the new social relative values, or in other words, when the mercantile comparative advantages reflect the new real ones. Thus, the concept of reproduction is central to the concept of value. Value does not reflect past labour, but labour socially necessary to produce a good or, what is the same, social labour involved in the reproduction of the goods, as Ricardo (1817) pointed out.

3.5. Significance of the Law of Labour Value

The law of labour value implied in section 3.4 differs from traditional versions. The market values do not directly converge on the respective labour values. They do so indirectly through the exchange values gravitating towards the respective relative labour values. The latter are determined by the socially necessary relative quantities of labour required to reproduce commodities given the structure of demand. This is given by the marginal individuals, on whom the stability of the system rests. The concept of labour value, in turn, is unmistakably linked with that of reproduction, not of past labour.

The approach under consideration does not need an invariable measure of value to operate like Ricardo’s (1817), it requires only that each individual should be able to measure their own labour requirements to replace those commodities which are in their technical domain; i.e. the individual measure of value. This is because it rests entirely on the immediate differentiated unity of commodity as a generic and as a mercantile use value, or as a direct means of consumption or production and as a means of exchange. Thus, it rests on the immediate consciousness of the private and independent producer. Given their technical conditions, the individual only needs the list of exchange values in order to be able to spot

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22 I have written market values instead of prices because prices and values are incommensurable. The former is given in units of money and the latter is determined by social labour (on the price form, see chapter 4). Thus, it cannot be by prices converging on labour values that the system adjusts.
their comparative advantage. This is the reason that the law of labour value can be accounted for as an unintended objective outcome.

It is individuals themselves who, by comparing their own individual relative values with the respective expected exchange values and acting rationally, bring about the reduction of the different kinds of labour, implying different skills, training and so on, and without even intending to. This is the process which gives materially abstract social labour an objective existence as the regulator of the productive structure. In this regard, Ricardo’s statement, “Possessing utility, commodities derive their exchangeable value from two sources: from their scarcity, and from the quantity of labour required to obtained them” (Ricardo, 1817 [1971, p. 56]), can be re-cast the following way: possessing utility, reproducible commodities derive their exchange value from contingent demand and supply in the short-run and their labour value in the long-run (mediated by the market).

The theory of labour value that I have put forward, though rendering relative prices determinate, is not a quantitative theory of price determination. It would not make any sense to have a quantitative theory of price at this point because capitalist production is not simple commodity production. It only seeks to understand the nature of market exchange as part of the answer to the riddle of how private and independent material production becomes socially recognised. The insight it offers is that commodity production is nothing but the organisation of society’s labour for its material reproduction, just as in any other previous mode of production. The introduction of commoditised means of production does not change the basic insight but only complicates the analysis. An example that the underpinning of the behaviour of the homo-laborans/homo-mercator does not change when the markets for means of production are introduced is offered in appendix B. So far, however, the answer is incomplete because it only offers an alternative understanding of the adjustment process of the productive system based on quantities of social labour, which does not manifest itself directly. In Smith’s
(1776) terms, this is a theory of the adjustment of the productive system hinging on both the short-run divergence between the social labour contained in commodity and that commanded by it through the market exchange and the long-run convergence of the latter on the former. The reason why the allocation of society’s labour occurs indirectly, taking the form of a direct allocation of material objects and through labour becoming reified in a materially abstract and autonomous substance is investigated in chapter 4. The step taken in this chapter, though absolutely necessary for my purpose, is not Marxian but Ricardian.

The theory so far cannot explain saving and borrowing. This is not a defect. Within the framework of simple commodity production, individuals can save only insofar as they save in non-perishable products. They cannot borrow against a future income stream. The commodity relation being a fleeting relation between strangers, who would give up part of their commodity endowment against the promise of an increased one in the future? At any rate, how could two qualitatively different commodity endowments be objectively compared at this stage of the analysis? My framework, however, does not imply that the whole of the individuals’ labour time is devoted to the reproduction of the given commodities. As already seen, there is an incentive for each individual to devote time trying to change their technical conditions of production to become more productive since, ceteris paribus, this will take them to higher budget lines. My framework does not mean either that all of the means of production have to be immediately consumed in the production of the final commodities. Indeed, there can be accumulated past production, such as a stock of tools for instance, but it is not from this that the form of capital arises. The accumulation of means of productions would either be a collection of dead things if not in use or exclusively affect the labour time necessary to reproduce commodities.

The concept of labour value in the context of commodity production merely means that given a set of individual tastes and technical abilities, the value of commodities will be given by the
socially necessary labour to reproduce them. This requires but a few very general assumptions. First, the system is made up of atomistic individuals. Second, individuals relate to one another productively in an abstract and general yet objective way: through the exchange of commodities in the market. These two assumptions try to accommodate the premise that commodity producers are free and independent yet not self-sufficient. Third, individuals regard labour only as a means to an end and seek to use it in a way that allows them to best meet their own needs and wants. That is, the system is based on the economy of effort and individuals behave rationally. And fourth, there is dispersion in the technical abilities of individuals. This accounts for the fact that individuals are different from one another.

The law of commodity exchange, in turn, argues that commodities’ exchange values will converge on their respective relative labour values. This hinges exclusively on keeping the unity of the two roles of homo-mercator and homo-laborans in the same actor (or in other words, on not simply assuming capitalist forms of production) and therefore does not require the particular Neo-Classical definitions of utility, utility maximisation, marginal benefit and so on. However, such a theory developed from its foundations to its ultimate consequences necessarily leads to a labour theory of value. The use of Neo-Classical Economics was mainly pedagogical. Its usefulness lies in its methodological individualism, in that it isolates the social moment of production, enabling a better understanding of the differentiated unity that commodity production is, and in that it allows us to greatly simplify the exposition. However, this also highlights the narrow scope of Neo-Classical Economics in a comprehensive theory of commodity.

3.6. Commodity and the Law of Labour Value in a Nutshell

Commodity appears in the market as a useful object for exchange. Therefore, commodity is in principle both a use value and an exchange value, as Marx (1867), Ricardo (1817), Smith
(1776) and even Neo-Classical Economics agree upon. At this juncture, Marx (1867) maintains that the study of commodity in the market should lead us to its underlying labour value. Marx was unable to complete this theoretical transition because the characterisation of commodity had not been exhausted. Commodity is not only a use value and an exchange value. The fact that it is an exchange value confers on it a utility of a purely social nature: it is a means of exchange, or a mercantile use value in Levin’s (1997) terms. Marx saw this in chapter II of *Capital*, devoted to exchange, but did not bring this to bear on the characterisation of commodity in the market, hence robbing his transition to the concept of labour value of theoretical foundations.

The failure of the traditional approach to the labour theory of value in the context of commodity production is that it does not account for the subjective moment in the determination of value. An atomistic system cannot be explained if the behaviour of the individuals and its effect on the system’s outcome are disregarded. However, the subjective moment in the determination of value cannot be accounted for without the development of the interplay between commodity’s generic use value and its mercantile counterpart, elements present in *Capital* though disjointed. This determines the behaviour of the private and independent commodity producer.

The theory of commodity that I have put forward rests on the dialectic between commodity’s generic use value and its mercantile counterpart. Thus, it is grounded on the atomistic behaviour of the individual, allowing us to understand the unity of the process of commodity production, while retaining the differentiation between its two moments – market and private material production. Furthermore, it recognises the in-built incentives for efficiency. Although individuals specialise according to their comparative advantages, the concept of absolute advantages definitely strikes a chord. Those individuals possessing absolute advantages will be better off since, through the market exchange, they will be able to attain a higher budget
line than would otherwise be possible. In other words, their private labour counts as enhanced social labour. The task ahead is to explain why social labour has to take an autonomous materially abstract form, how it becomes expressed in the money form of commodities and why it takes the form of a direct allocation of material objects and natural powers. This is the subject of chapter 4. For ease of reference, appendix C offers a summary of the different meanings of the word value in the context of commodity.
4.1. Review of Marx’s Solution

As seen in chapters 1 and 3, for Marx (1867) the riddle of the process through which material production becomes realised in an atomistic, global and de-centralised system of production is the riddle of the process through which work carried out privately and independently becomes socially recognised. His answer, as presented in the commodity section of Capital, is that private work objectifies itself as social labour as the substance of the value of commodities, and that the latter finds its necessary developed mercantile expression in the price form of commodities. The transition from labour value to the price form of commodity hinges on that from exchange value to labour value.

In chapter 3 I completed the first transition by filling the gaps in Marx’s analysis. This entailed integrating concepts which are essential to the characterisation of commodity and which are disjointed in Capital. Chapter 3 reminded us that production is but the organisation of society’s labour for its material reproduction, or in other words, it disclosed the generic aspect of commodity production. The first transition by itself, however, is of no use to Economics since it lands us in the ghostly private sphere of material production. The private sphere can only manifest itself in the market, where the social action takes place. The purpose of chapter 4 is to explain why society’s labour takes an autonomous and materially abstract entity of its own, and why and how its allocation takes the form of an allocation of objects. In other words, chapter 4 discloses the specific aspect of commodity production. Chapter 4 thus deals with the transition from the private material sphere back to the market sphere and in this way completes the answer to the main research question.
Marx argues that since commodities as the embodiment of labour value concern but their social facet (that is, commodities as the reification of the social relations of production), value can only manifest itself in the social relation of commodity to commodity. The value content of commodities in isolation tells us nothing since not an atom of matter enters into the composition of value (Marx, 1867). The study of the form of value thus provides the key.

As a starting point, Marx draws attention to the fact that commodities have a form of value common to them all which presents a marked contrast with their varied bodily forms: their money form. However, since this is the developed mercantile form of value already, the task is set to trace its origin, which has been overlooked in both Neo-Classical Economics and Classical Political Economy. Marx accurately points out that the riddle of the money form of commodities and the riddle of commodity production (the main research question of the thesis) are but two sides of the same coin.

Marx’s solution was as follows. The social relation of commodity to commodity is tantamount to the simplest value relation between two commodities: in Marx’s terms, their exchange value. According to Marx, this relation already contains the basic differentiation between commodity and money, or between the relative and equivalent forms of value. Only one commodity can express its value as something distinct from its bodily form. It does so by taking the relative form of value; that is, it equates itself to a second commodity, or it expresses the fact that its value is unrelated to its bodily shape by stating that it takes the bodily form of the second commodity. By this very act, it confers on the latter the equivalent form of value. The latter cannot express its value actively, but the fact that it is value stands out in that it is equivalent to the former, or directly exchangeable with it. Thus, the second commodity picks up the most basic trait of money: direct exchangeability.
From the elementary or accidental form of value, Marx derives the total or expanded form, where a commodity equates its own value to that of the rest of the universe of commodities by means of an endless chain of relative expressions of value. From this, he derives the general form of value, where all the commodities express their value in the elementary form and in the same commodity, set aside spontaneously by the rest of the universe of commodities, and which finally renders the values of all the commodities commensurable. The commodity set aside cannot express its value actively in relative form but is directly exchangeable with the rest of them. Once gold becomes this commodity, Marx calls it the money form of value. For the first time the feature of direct exchangeability becomes fixed in a single commodity. Thus, the universal character of commodity production gains an objective existence.

This chapter shows that Marx’s transition from the material production sphere back to the market is correct, but flawed. The main flaw concerns the fact that Marx’s theory of the form of value refers exclusively to long-run equilibrium. This is not just a technical subtlety since it hinders the development of the dialectic between short-run contingent phenomena and long-run trends, thereby rubbing out the specificity of commodity production. To mention but one problem, if money is the developed form of expression of value, how can we account for the existence of irreproducible commodities which, despite not having value, still command a price? What is the place of short-run equilibrium prices, in general different from their long-run counterparts, in a labour theory of value?

4.2. Generic and Specific Features of Commodity

For Marx, understanding commodity production lies in understanding its features as a historically specific form of production. Marx characterises commodity as the differentiated unity of use value and exchange value. However, exchange value is only the phenomenal form of appearance of value for Marx. Thus, commodity is the differentiated unity of use value and value. There is nothing historically specific in the concept of use value put forward
by Marx. In every society production involves the provision of useful goods capable of satisfying needs and wants. According to Marx, the specific feature of commodity is that of being a value. He argues that commodity is the first form of production where the character of goods as being the products of labour appears stamped in the object of utility as its value. However, in pages 76 through 79 of *Capital* Marx (1867 [1954]) makes crystal clear that there is nothing historically specific about the content and determination of value, its content being materially abstract social labour and its determination being given by the quantity of this content. To illustrate his point, Marx refers to four different types of examples: Robinson Crusoe, a relation of personal dependency in the middle ages, the patriarchal industries of a peasant family, and a hypothetical society of freely associated individuals.

Marx takes the example of Robinson’s experiences because they “are a favourite theme with political economists” (Marx, 1867 [1954, p.76]). However, he points out that they do not involve social relations of production. Yet, the relationship between Robinson and the objects of the wealth of his own creation contains all that is essential to the determination of value.

Moderate though he [Robinson] be, yet some few wants he has to satisfy, and must do a little useful work of various sorts…In spite of the variety of his work, he knows that his labour, whatever its form, is the activity of one and the same Robinson…Necessity itself compels him to apportion his time accurately between his different kinds of work. Whether one kind occupies a greater space in his general activity than another, depends on the difficulties, greater or less as the case may be, to be overcome in attaining the useful effect aimed at…His stock-book contains a list of the objects of utility that belong to him, of the operations necessary for their [re]production; and lastly, of the labour-time that definite quantities of those objects have, on an average, cost him (Marx, 1867 [1954, pp. 76-77]).

The quotation shows the intimate connection between the concepts of generic use value and that of value. It is the pursuit of use value that determines the kinds of useful labours that
Robinson will engage himself into, the way he will apportion his labour time. However, as a final result, the value of the different objects of his own wealth depends exclusively on the labour time necessary to reproduce the goods (see appendix A).

By way of contrast, Marx’s recourse to the middle ages refers to social relations of production. The main productive relation characterising the middle ages is that of personal dependence. Nevertheless, “Compulsory labour is just as properly measured by time, as commodity-producing labour; but every serf knows that what he expends in the service of his lord, is a definite quantity of his own personal labour-power” (Marx, 1867 [1954, p.77]).

The example about the patriarchal industries of a peasant family concerns directly associated labour. In this regard, it overlaps the example of freely associated individuals, the main difference being that in the latter case, value plays also a conscious role in the distribution of wealth. The different articles that the family produces are, as regards the family itself, different products of its own labour, but not commodities between the members.

The different kinds of labour…, which result in the various products, are in themselves…direct social functions, because functions of the family, which, just as much as a society based on the production of commodities, possesses a spontaneously developed system of division of labour. The distribution of the work within the family, and the regulation of the labour-time of the several members, depend as well upon differences of sex and age as upon natural conditions varying with the seasons. The labour-power of each individual, by its very nature, operates in this case merely as a definite portion of the whole labour-power of the family, and therefore, the measure of the expenditure of individual labour-power by its duration, appears here by its very nature as a social character of their labour (Marx, 1867 [1954, pp. 77-78]).

In the examples considered, the relationship between these individuals’ labours and the objects of their wealth is direct and with this “there is no necessity for labour and its
products to assume a fantastic form different from their reality...Here the particular and
natural form of labour, and not, as in a society based on production of commodities, its
general abstract form is the immediate social form of labour” (Marx, 1867 [1954, p. 77]). If
value can take forms other than the mercantile, it is because, as Marx himself points out, there
is nothing historically specific either in the content or the determination of value. But this is
what defines the concept of value. Therefore, value is as generic a determinant of commodity
as its character of plain use value. This should not be surprising. Though circumscribed to the
analysis of commodity, chapter 3 showed that the concept of labour value is inextricably
related to those of opportunity cost and comparative advantages. Both concepts are amongst
the most generic in the whole of Economics. They do not refer specifically to commodity
production but to the basic problem of choice and minimisation of effort. Thus, the concept of
labour value is central to any economy based on effort, and only expresses the relationship
between the articles of wealth and the sum total of society’s labour.

If commodity is characterised as the differentiated unity of use value and value, what is the
historical specificity of commodity production? Moreover, if the analysis of exchange value
should necessarily lead us to the labour value of commodities and this is a generic concept,
how can we possibly make our way back from the ghostly private material production sphere
to the market? Marx argues that the specific character of commodity is to posses exchange
value; that is, the specificity of commodity lies with the form of value itself (Marx, 1867
[1954, p. 72]). However, as Levin (1997) argues, the form is always the form of a content.
Therefore, no specific form can be necessarily derived from a generic content, in the same
way as the physiognomy of apes cannot be necessarily derived from the concept of mammal.
Furthermore, the concept of form of value as the form in which labour value directly
expresses itself cannot account for short-run prices, which tend to differ from the long-run
equilibrium ones. The divergence is acknowledged by Marx himself and highlighted as a
necessary feature of an atomistic system of production.
Magnitude of value expresses a relation of social production, it expresses the connection that necessarily exists between a certain article and the portion of the total labour-time of society required to produce it. As soon as magnitude of value is converted into price, the above necessary relation takes the shape of a more or less accidental exchange-ratio between a single commodity and another, the money-commodity. But this exchange-ratio may express either the real magnitude of that commodity’s value, or the quantity of gold deviating from that value, for which, according to circumstances, it may be parted with. The possibility, therefore, of quantitative incongruity between price and magnitude of value, or the deviation of the former from the latter, is inherent in the price-form itself. This is no defect, but, on the contrary, admirably adapts the price-form to a mode of production whose inherent laws impose themselves only as the means of apparently lawless irregularities that compensate one another (Marx, 1867 [1954, p. 102]).

There is thus a serious problem regarding Marx’s transition from the private sphere back to the market. If value is a generic feature of commodities, how can it express itself necessarily in the money form of commodities?

### 4.3. The Mercantile Form of Value

My argument is that Marx’s transition from the private sphere of commodity production back to the market is flawed because the characterisation of commodity has not been completed, just as in the transition from exchange value to labour value. In agreement with Levin (1997), I propose that the key is the development of the dialectic between the market value and the labour value of commodity. In Smith’s (1776) terminology, it is the dialectic between the labour commanded by commodity through its market exchange and the labour contained in it.

In order to explain how work carried out privately and independently gains an objective existence as social labour, the most basic issue concerning commodity production has to be understood. Marx (1867) put this forward superbly in chapter II of *Capital*.

Every owner of a commodity wishes to part with it in exchange only for those commodities whose [generic] use-value satisfies some want of his. Looked at in this way, exchange is for him simply a private transaction. On the other hand, he desires to realise the value of his commodity,
to convert it into any other suitable commodity of equal [market] value irrespective of whether his own commodity has or has not any [generic] use-value for the owner of the other. From this point of view, exchange is for him a social transaction of a general character. But one and the same set of transactions cannot be simultaneously for all owners of commodities both exclusively private and exclusively social and general (Marx, 1867 [1954, pp. 85-86]).

The solution to the above contradiction provides the first step back to the market sphere and by the same token, the first step towards understanding the origin and nature of money. In a global and atomistic system of production (i.e. in commodity production), the owner of a commodity wanting to part with it for a generic use value can do nothing but quote a “price” or prospective exchange value for their commodity; for example, “my table is worth two chairs.” In so doing, the commodity producer gives birth to the simplest commodity relation: that of one commodity to some particular other, making the two commodities in question play two opposite yet inter-related roles. Thus, contrary to Marx’s claim, it is not the value relation between two commodities that provides the elementary form of value but the social validation of the commodity producer. 25 This takes the appearance of a single fleeting exchange relation, which Marx calls elementary or accidental form of value. He rightly goes on to say, “The whole mystery of the form of value lies hidden in this elementary form. Its analysis, therefore, is our real difficulty” (Marx, 1867 [1954, p. 48]).

4.4. Elementary or Accidental Form of Value

The elementary or accidental form of value takes the following shape: \[ x \text{ commodity } A = y \text{ commodity } B \], or \[ x \text{ commodity } A \] is worth \[ y \text{ commodity } B \]. In Marx’s (1867 [1954, p. 48]) example, 20 yards of linen are worth 1 coat. As Marx points out, the two different commodities play two different roles, mutually dependent and inseparable but at the same time, mutually exclusive and polar opposites. The linen plays an active role, expressing its value in the coat, and the coat plays a passive part, serving as the material in which the value

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25 Value being a generic content of commodities, it does not immediately assert itself in the form of exchange value.
of the linen is expressed. The value of the linen, then, appears in relative form; i.e. relative to the coat, and that of the coat in equivalent form; i.e. 1 coat is made the equivalent of 20 yards of linen.

Contrary to appearance, the two distinct roles befalling either commodity are not a product of the whim of the author. The elementary form of value looked at merely as an exchange value does not disclose its nature, though. It could just as well be read the other way around and then we would say that the coat appears in relative form and the 20 yards of linen in equivalent form. Hence its delusory character, and the appearance that the concept of form of value is but a fancy way of referring to the more earthly exchange value. However, the elementary form of value arises necessarily from the two-fold character of commodity production (private and social). It is actually by the private and independent linen producer quoting the worth of their 20 yards of linen to be 1 coat (the only way in which they can establish the general productive relation; that is, by offering their commodity in a general abstract way: to the market) that the 20 yards of linen acquire their relative form; its value is given existence relative to the coat. It is also this act that confers the coat its equivalent form. By equating the 20 yards of linen to the coat, the coat is made directly exchangeable with the 20 yards of linen. This mutates the nature of the commodity relation right from the outset.

Commodity exchange is a conditional fleeting relation between two equal free wills, who are indifferent and strangers to each other. The relation is conditional because a commodity is always on offer, and is fleeting because it only takes place through the act of exchange. However, from the moment a commodity goes on offer, the commodity in which the first one expresses its value becomes, by that very act, unconditionally exchangeable. Thus, commodity exchange turns into a relationship between two unequal wills. In our example exchange is conditional only for the owner of the 20 yards of linen. For the owner of the coat, it is unconditional. The coat owner says yes or no and determines the course of exchange.
The equality implied in an exchange value is thus misleading. It is an equality ex-post; that is, if exchange actually takes place. However, focussing on the ex-post result makes us lose sight of the fact that the two commodities are not equal, and not because they are two different articles but because one is conditionally exchangeable and the other one is unconditionally exchangeable. This is but the objective manifestation of the contradiction implied in exchange; it is both a private act and a general social act. If exchange takes place, the fact that 20 yards of linen are worth 1 coat undoubtedly implies that 1 coat is worth 20 yards of linen, as Marx points out. Contrary to his belief, however, the latter does not imply ex-ante a reversal of the original equation but a completely new exchange relation arising from a new accidental expression of value, or in other words, from a new accidental production relation. The new relation, though it keeps the proportion in which both commodities stand to each other, allocates to either of them a different role, making the exchange of the 20 yards of linen unconditional and that of the coat, conditional.

In Marx’s understanding, to discover the elementary expression of value in the simplest form of commodity relation, we have to analyse the latter abstracting from its quantitative aspect. Usually, the converse is the procedure and value is only seen in relative terms, as the proportion in which two sorts of articles are exchanged.

It is apt to be forgotten that the magnitudes of different things can be compared quantitatively, only when those magnitudes are expressed in terms of the same unit. It is only as expressions of such a unit that they are of the same denomination, and therefore commensurable (Marx, 1867 [1954, p. 49]).

However, by not elaborating at this point upon the reason why only the quantitative side of value is usually seen, Marx prevents himself from developing the whole specificity of commodity. Marx himself points out that value takes the form of accidental and ever-fluctuating exchange ratios between commodities, and that this is not a defect but superbly
adapts itself to a mode of production based on material production taking place privately and independently. Thus, the notion of an intrinsic absolute value is completely anti-intuitive.

Chapter 3 showed that labour value asserts itself without individuals intending to, just as Marx argues. Chapter 3, however, instead of being a statement, actually derives the result from the characterisation of commodity as the differentiated unity of generic and mercantile use value, or in other words, as a relatively scarce useful good exchanged in the market. Thus, the concept of labour value is grounded on the immediate consciousness of the private and independent commodity producer despite the concept itself falling out of their immediate consciousness. The elementary form of value arising out of the way a commodity producer must of necessity relate socially, it cannot be plain value that the form of value expresses. Only by chance would this occur. As Levin (1997) argues, the mercantile form of value expresses the “mercantile value” of a commodity; that is, it does not directly express the labour value of commodities but their realisation value. Using Smith’s (1776) terminology, the mercantile form of value expresses directly the social labour commanded by commodity through its market exchange, and only indirectly the labour contained in it.

Mercantile value is specific to commodity production. Never before commodity production did the products of labour represent a different amount of social labour than they contained. Production being then consciously organised, the products did not need to represent any quantity of social labour other than they immediately contained. In commodity production, in contrast, the divergence between the social labour realised by commodity and that contained in it is what brings about the adjustment of the productive structure and ensures the stability of the system. This adjustment is based on the unawareness of individuals that it is but social labour that is being re-allocated. As Levin (1997) highlights, the historically specific mercantile form of value is the form of the historically specific mercantile value. With this, the basic characterisation of commodity is completed, as depicted in Figure 4.1. Accurately
speaking, then, and contrary to Marx’s belief, the form under consideration is not the accidental or elementary form of value but the elementary or accidental form of mercantile value.

**Figure 4.1: Second or objective dialectic of commodity and the productive structure**

Commodity is not just the differentiated unity of use value and labour value, both generic features, but the differentiated unity of use value and mercantile use value, of value and mercantile value. The former dialectic rules the behaviour of the private and independent commodity producers since it determines what commodities they will sell and buy and in what amounts. The latter dialectic determines the objective adjustment of the productive system since in the context of simple commodity production, their divergence is what triggers the process of re-specialisation. Finally, the nature of commodity production implies that the mercantile form of value resolves as the dialectic between commodity as a useful natural article and as the objective carrier of the social relations of production, as shown in figure 4.2 below.
4.4.1. The Relative Form of Mercantile Value and Its Inseparable Connection with the Equivalent Form

Considered as mercantile values in themselves, we reduce commodities to the abstraction that they represent mere congelations of homogeneous social labour. This content, however, has no form of existence. As Marx points out, it is otherwise in the relationship between two commodities. In this case, “the one stands forth in its character of [mercantile] value by reason of its relation to the other” (Marx, 1867 [1954, p. 50]). The reduction of the different sorts of materially concrete labours to homogeneous social labour is pre-supposed in the mercantile form of value itself. The linen and the coat are the products of two qualitatively different types of material labours. However, by making the coat the equivalent of the linen, tailoring is equated to weaving. As regards the social character of labour, there is a turn of tables, though. The realisation of exchange makes weaving, still potential social labour, concrete social labour.

Private and independent work is abstract labour from a social standpoint; it is social labour only in potency. The market will decide whether a certain type of private and independent work is effectively part of the social labour or it has made a useless commodity. If the commodity is realised, so is the labour embodied in it, becoming socially concrete or recognised labour. Thus, it is the struggle of private and independent work to become
concrete social labour that gives rise to the mercantile form of value and, in turn, reduces the materially concrete and qualitatively different types of labour to materially abstract homogenous social labour.

The relative character of the 20 yards of linen stands out in that they express their mercantile value by making the coat their equivalent. In the position of equivalent, “the coat ranks qualitatively as the equal of the linen, as something of the same kind, because it is [mercantile] value” (Marx, 1867 [1954, p. 54]); that is, because it is the objective form, nay more, the bodily form of appearance of social labour. However, the coat itself is a mere generic use value and as such it no more tells us that it is a mercantile value than do the 20 yards of linen. When put in a commodity relation with the linen, the coat signifies more than out of the relation. The equation 20 yards of linen = 20 yards of linen merely says that 20 yards of linen is a definite quantity of the natural article linen (Marx, 1867).

In sum, through the accidental exchange relation the bodily form of commodity B becomes the value form of commodity A, or the body of commodity B acts as a mirror to the mercantile value of commodity A. By putting itself in relation with commodity B as the form of appearance of social labour, commodity A converts the body of commodity B into the substance in which to express its own mercantile value, and the former takes the relative form.

4.4.2. The Enigmatical Character of the Equivalent Form of Mercantile Value

As Marx argues, the commodity allocated the role of equivalent in a relation of exchange between two commodities manifests its quality of having mercantile value by the fact that without assuming any value form other than its bodily form it is equated to and therefore directly exchangeable with the relative commodity. Therefore, one of the peculiarities of the

26 “A, for instance, cannot be “your majesty” to B, unless at the same time majesty in B’s eyes assumes the bodily form of A, and, what is more, with every new father of the people, changes its features, hair, and many other things besides” (Marx, 1867 [1954, pp. 51-52]).
equivalent form of mercantile value is that “the labour of private individuals takes the form of its opposite, labour directly social in its form” (Marx, 1867 [1954, p. 59]). The coat is the material product of work carried out privately and independently just as the 20 yards of linen. However, whereas the realisation of the 20 yards of linen is conditional, that of the coat is unconditional; i.e. the coat is already consecrated as part of the social product. Thus, the labour that made it is already socially recognised from a qualitative standpoint.\footnote{It may not be quantitatively recognised since the adjustment of the productive structure occurs through the divergences between the labour values of commodities and their respective mercantile values.} By the same token, materially concrete labour “becomes the form under which its opposite, [materially] abstract human labour, manifests itself” (Marx, 1867 [1954, p. 58]). In this case it is realised, as opposed to contained, since the concept of mercantile value concerns the conditions of realisation of commodities (Levin, 1997). When the commodity producer offers their commodity, they put their labour on an equal footing with that of the producer of the equivalent commodity. In so doing, they do not only make the labour of the equivalent commodity’s producer directly social but by the same process, abstract from the material particularities of the labour making the equivalent commodity.

Another peculiarity of the equivalent form of mercantile value is that the mercantile value of the equivalent commodity has, unlike that of the relative commodity, no quantitative expression; the equivalent commodity figures as a definite quantity of some article. This is what according to Marx (1867) has mislead many economists into seeing merely a quantitative relation in the expression of mercantile value.

The bodily form of the commodity becomes its value-form. But mark well, that this \textit{quid pro quo} exists in the case of any commodity B, only when some other commodity A enters into a value-relation [an exchange relation proper] with it, and then only within the limits of this relation. Since no commodity can stand in the relation of equivalent to itself, and thus turn its own bodily shape into the expression of its own [mercantile] value, every commodity is compelled to choose some other commodity for its equivalent, and to accept the use-value, that
is to say, the bodily shape of that other commodity as the form of its own [mercantile] value (Marx, 1867 [1954, p. 56]).

The fact that a commodity cannot express its mercantile value in itself is but the outcome of a global mode of production where material production takes place privately and independently. Every producer has to realise their commodity, that is, to make their commodity acknowledged as part of the social product, in order to be able to satisfy a need of theirs. This brings forth the contradictory character of commodity exchange as the differentiated unity of a private and a general social transaction.

The commodity producer could be accidentally lucky and their commodity put in the position of equivalent, in which case it would be already mercantile value and their work already social in character. Providing commodity A is a generic use value to them, exchange will take place but the decision lies unilaterally with them. The reason is that within this exchange relation, the private character of exchange for commodity B’s producer is realised on the premise of the social character of their material production. This position cannot be taken for granted, however, which every commodity producer realises every time they want to convert their material production into generic use values for them. 1 coat is 20 yards of linen but 20 yards of linen are not necessarily 1 coat; that depends on the will of the coat producer.

The relative form of mercantile value allows us to intuitively grasp the idea that “some social relation lies at the bottom of it” (Marx, 1867 [1954, p. 57]) because the relative commodity expresses its mercantile value as something very different from its own substance and properties, as something having the appearance of the equivalent commodity. It is the converse in the case of the equivalent commodity. “The very essence of this form is that the material commodity itself…just as it is, expresses [mercantile] value” (Marx, 1867 [1954, p. 57]). This holds only within the limits of the accidental exchange relation; in our example, the coat expresses mercantile value only in relation to the 20 yards of linen. Indeed, Marx
makes a very enlightening observation about the nature of the equivalent form of mercantile value, or money in its developed form, in a footnote.

Such expressions of relations in general, called by Hegel reflex-categories, form a very curious class. For instance, one man is king only because other men stand in the relation of subjects to him. They, on the contrary, imagine that they are subjects because he is king (Marx, 1867 [1954, p. 57]).

Economics fails to notice the above feature until confronted with the developed money form.

4.4.3. The Elementary Form of Mercantile Value in a Nutshell

Following my re-interpretation of Marx’s analysis of commodity production, we can say that the elementary form of mercantile value arises out of the exchange relation of one particular commodity to some other one differing in kind. This stems directly from the two-fold character of commodity exchange (private and social) for each individual. The mercantile value of commodity A is qualitatively expressed by the fact that commodity B is directly exchangeable with it, and quantitatively expressed in that a definite quantity of B is exchangeable with a definite quantity of A. The mercantile value of B (the equivalent commodity) has no objective form of expression since commodity B merely appears as a definite quantity of an article. However, its character as mercantile value is reflected in that that commodity A expresses its mercantile value in the body of commodity B. Commodity B thus takes the appearance of being directly exchangeable by nature.

4.4.4. Defects of the Elementary Form of Mercantile Value

When the commodity 20 yards of linen expresses its mercantile value in the body of the commodity coat, it merely distinguishes its mercantile value from its own bodily form. By accidentally expressing its equality with the coat, the commodity 20 yards of linen is far from expressing its qualitative equality with and quantitative proportionality to the rest of the
universe of commodities. Something alike applies to the equivalent commodity. The coat is
directly exchangeable only with a single commodity: the 20 yards of linen. This represents a
serious deficiency in a system which operates on a global scale.

Every commodity producer has to make generic use values for others; that is, social generic
use values. However, in commodity production making a generic use value for others means
making a generic use value for some other random private and independent producer facing
the same problem as any commodity producer. They want to realise the mercantile value of
their commodity in those commodities whose generic use value satisfies some want of theirs,
realisation being an objective pre-condition to be able to acquire commodities. The
implication of the elementary form of mercantile value is that the two-fold character of
commodity exchange has to be met simultaneously by both producers brought into relation
and over the same two commodities. Thus, it hardly allows distinguishing the private from the
general social character of commodity exchange. As Marx points out, exchange cannot be
simultaneously and for every producer both a private and a general social transaction. Marx
therefore argues that this is the primitive form under which a product of labour appears
historically as a commodity.

In order to find out how the money form of commodity arises, we have to bear in mind that
the development of the form of mercantile value proceeds alongside the transformation of the
products of labour into commodities. By the same token, the reach of trade, and hence of
production, broadens and eventually breaks all local boundaries. As commodity production
takes root, the range of equivalent commodities necessarily narrows down, giving birth to the
general form of mercantile value. Contrary to Marx’s belief, there is no logical stage of a total
or expanded form leading to the general form of mercantile value (see section 4.7).
4.5. The General Form of Mercantile Value

The general form of mercantile value has the following shape (Marx, 1867 [1954, p. 65]).

\[
\begin{align*}
1 \text{ coat} & \\
10 \text{ lbs. of tea} & \\
40 \text{ lbs. of coffee} & \\
1 \text{ quarter of corn} & \\
2 \text{ ounces of gold} & \\
\frac{1}{2} \text{ a ton of iron} & \\
x \text{ com. A., etc.} & = 20 \text{ yards of linen}
\end{align*}
\]

All commodities now express their [mercantile] value (1) in an elementary form, because in a single commodity; (2) with unity, because in one and the same commodity. This form of [mercantile] value is elementary and the same for all, therefore general (Marx, 1867 [1954, p. 65]).

In the example under consideration, the commodity set apart for that purpose is the linen. However, it is not set apart exogenously but by the very nature of the mercantile form of value. The differentiation between a relative and an equivalent commodity is already present in the elementary form of mercantile value. As Marx highlights, every commodity needs to find an expression for its own mercantile value. It does so by actively seeking another one, which plays the passive role of equivalent. Thus, the general form of mercantile value arises from the joint action of the whole world of commodities.\(^{28}\)

It is because commodity production is atomistic and operates on a global scale that commodities have a social facet as the reification of the relations of production or as mercantile values. “[T]his social existence can be expressed by the totality of their social

\(^{28}\) “A commodity can acquire a general expression of its [mercantile] value only by all other commodities, simultaneously with it, expressing their [mercantile] values in the same equivalent; and every new commodity must follow suit” (Marx, 1867 [1954, p. 66]).
relations alone, and consequently...the form of their [mercantile] value must be a socially recognised form” (Marx, 1867 [1954, p. 66]).

The differentiation between the relative and the equivalent forms of mercantile value has not become fixed yet in the elementary form of mercantile value. This form provides exchange relations such as: 1 coat is worth 20 yards of linen, or 10 lbs. of tea are worth ½ a ton of iron. As Marx argues, the natural aspect of a commodity is barely distinguished from its social facet; the latter appears only negatively, for instance, by the coat signifying that it is not just a coat but 20 yards of linen. “But to be equated to linen, and again to iron, is to be as different as are linen and iron” (Marx, 1867 [1954, p. 65]).

In the general form of mercantile value, in contrast, the whole world of commodities is brought into relation because they are commensurable for the first time. This occurs because they single out a commodity (the linen in our example), which is excluded from the rest, and make it play the role of equivalent. Commodities, thus, “now appear not only as qualitatively equal as [mercantile] values generally, but also as [mercantile] values whose magnitudes are capable of comparison” (Marx, 1867 [1954, p. 66]). In other words, commodities effectively appear as exchange values for the first time. The social facet of commodity, in turn, appears this time in its positive aspect. The general form of mercantile value not only distinguishes the social facet of a commodity from its own natural body but also from the natural body of the rest of the commodities.

4.5.1. Implications of the General Form of Mercantile Value

As Marx points out, the equivalent commodity becomes directly exchangeable with each and every commodity because its bodily form is the form taken by the mercantile values of each and every one of them. In other words, every commodity producer quotes the “price” of their

29 “For instance, 10 lbs. of tea = 20 yards of linen, and 40 lbs. of coffee = 20 yards of linen. Therefore, 10 lbs. of tea = 40 lbs. of coffee” (Marx, 1867 [1954, p. 66]).
commodity in terms of the general equivalent. Thus, in the general form of mercantile value the equivalent commodity is production straightaway, without mediations, and in its case the distinction between the material sphere of production and the relational moment vanishes. In the example considered the substance linen becomes the “social chrysalis state” (Marx, 1867 [1954, p. 67]) of socially concrete labour, and hence of materially abstract homogeneous labour. This makes weaving, a materially concrete type of labour carried out privately and independently, acquire a social character as the manifestation of realised labour in general. It should not be understood, though, that being directly exchangeable, it is now convenient to produce linen. The mercantile value of linen is determined by the conditions of demand and supply, and its value by its conditions of reproduction given the long-run structure of demand, just as every other commodity. It is not 10 or 15 yards of linen that are directly exchangeable with 1 coat but 20. If there was a general shift towards linen production, its mercantile value would fall, triggering a process of re-specialisation away from it.

The general form of mercantile value is the first form bringing all of the different types of concrete labours worldwide on an equal footing. It thus arises from and at the same time enables the establishment of social labour as an objectified autonomous substance regulating the adjustment of the productive system. In other words, the general form of mercantile value is Smith’s (1776) invisible hand. Given the behaviour of the private and independent commodity producers, explained in chapter 3, the general form of mercantile value permits the imbalances of the productive system to acquire an objective existence, and the correction process to be triggered. It does this by making the whole world of commodities commensurable, so that their relative mercantile values can be compared. When the system is not in equilibrium, these will differ from the respective relative labour values, and a re-specialisation process will start.
4.5.2. The Interdependent Development of the Relative and the Equivalent Forms of Mercantile Value

The degree of development of the relative form of [mercantile] value corresponds to that of the equivalent form. But we must bear in mind that the development of the latter is only the expression and result of the development of the former...[A] particular kind of commodity acquires the character of universal equivalent, because all other commodities make it the material in which they uniformly express their [mercantile] value (Marx, 1867 [1954, p. 67]).

The general form of mercantile value is the mode of existence of the antagonism between the two poles of commodity exchange: the relative and the equivalent forms of mercantile value, these poles arising from the two-fold character of commodity exchange. The antagonism is already present in the elementary form of mercantile value but it has to develop. The general form of mercantile value

...gives to the world of commodities a general social relative form of [mercantile] value, because, and in so far as, thereby all commodities, with the exception of one, are excluded from the equivalent form. A single commodity, the linen, appears therefore to have acquired the character of direct exchangeability with every other commodity because, and in so far as, this character is denied to every other commodity (Marx, 1867 [1954, p. 68]).

In the general form of mercantile value the antagonism between the relative and the equivalent forms of mercantile value has developed, fixing the two poles of the expression of mercantile value. Now it is only linen that acquires the role of equivalent while the rest of the commodities play only the relative role, nay more, they play the relative role only with respect to linen. If new commodities follow suit, it takes the appearance that commodities are commensurable because there is linen, and that linen is directly exchangeable with every commodity because of its properties. The fact is that linen has become the measure of mercantile value because all of the commodities express their mercantile value in linen, making it unconditionally exchangeable – the general equivalent. Becoming the equivalent
commodity is a matter of chance. Because of the private and independent character of commodity production all commodities are in principle relative or common commodities.

The two-fold character of commodity exchange, in turn, takes an external form of existence, either facet becoming a distinct act. Commodity producers have first to realise their own commodities in the general equivalent in order to be able to acquire those commodities satisfying their wants and needs the best. The reason is that realisation is the only way for producers to procure themselves income and in that way be able to acquire the commodities they desire.\(^{30}\) The fulfilment of the social side of commodity exchange comes thus before that of its private side, taking the form of a necessary pre-requisite, and exchange becomes split into two acts: sale and purchase. Commodity producers have to sell in order to be able to buy. By the same token, the coincidence of needs and wants between two commodity producers is not needed anymore, rendering commodity production the first global mode of production.

4.6. The Money Form of Mercantile Value

Marx argues that unlike in the transition from the elementary to the general form of mercantile value, there is almost no difference between the latter and the money form.

The universal equivalent form is a form of [mercantile] value in general. It can, therefore, be assumed by any commodity. On the other hand, if a commodity be found to have assumed the universal equivalent form…, this is only because and in so far as it has been excluded from the rest of all other commodities as their equivalent, and that by their own act. And from the moment that this exclusion becomes finally restricted to one particular commodity, from that moment only, the general form of relative [mercantile] value of the world of commodities obtains real consistence and general social validity.

The particular commodity, with whose bodily form the equivalent form is thus socially identified, now becomes the money commodity, or serves as money. It becomes the special

\(^{30}\) The exception is with linen producers. They only have to fulfil the private side of exchange because the social one is fulfilled ex-ante. However, this does not mean that the production of linen is more attractive than that of any other commodity, since as seen above, neither mercantile value nor value are determined by the pole taken by a commodity in an exchange relation.
In Marx’s scheme the only difference between the general form of mercantile value and the money form is that the role of general equivalent becomes the monopoly of the commodity gold. If gold becomes money, though, it is because it was previously just another simple commodity, in principle as suitable as any other to serve as an equivalent. However, it was gold that gradually began to serve as universal equivalent. “So soon as it monopolises this position in the expression of [mercantile] value for the world of commodities, it becomes the money commodity” (Marx, 1867 [1954, p. 70]). In turn, the elementary expression of the mercantile value of a simple commodity in terms of the money commodity gives rise to the price form of commodities. In Marx’s example the 20 yards of linen are now worth 2 ounces of gold. Assuming that 2 ounces of gold when coined are £2, 20 yards of linen are worth £2, presenting the price form in traditional terms.

When the previous sections noted that the commodity producer had to quote a price for their commodity, this was, accurately speaking, wrong; this is why it was put between inverted commas. Price is the expression of a commodity’s mercantile value in money form. It implies that it is expressed in the equivalent form socially consecrated, putting the commodity on an equal footing with the rest of the universe of commodities. In the first stages of commodity production, the commodity producer actually quotes a prospective mercantile or realisation value for their commodity in terms of another particular commodity. However, only the degree of development of the form of mercantile value distinguishes the general from the particular equivalent, both arising from the same mechanism of realisation of commodity

31 The passive character of the equivalent form of mercantile value can be seen in the shift from silver to gold as the universal equivalent in Britain and France in the 1700s. In a more developed setting, it can also be seen in the worst monetary crises in Argentina in the late 1980s and 2001, where the Argentinean currency lost its equivalent character and became merely a means of circulation of the American Dollar.
production. As Marx argues, quoting Aristotle, “5 beds = 1 house is not to be distinguished from 5 beds = so much money” (Marx, 1867 [1954, p. 59]).

The difficulty in understanding the concept of the form of money lies in thoroughly grasping the universal equivalent form of commodity and the general form of mercantile value. The riddle presented by the latter concerns the polar relation between the relative and the equivalent forms of mercantile value, already present in the elementary form of mercantile value. The differentiation of commodity into relative and equivalent forms arises necessarily from the way commodity producers are forced to establish the general productive nexus. The elementary form of mercantile value is thus the germ of the money form. It then stands out that the process giving rise to money and that of the realisation of material production as part of the social product are one and the same.

Marx argues that when he originally characterised commodity as being both a use value and an exchange value, he was, accurately speaking, wrong. Exchange value being only the phenomenal form of expression of *value* for Marx, commodity is for him the differentiated unity of use value and value, but this characterisation is incomplete. Commodity is a generic use value (an object of utility as a means of consumption or production) and a mercantile use value (an object of utility as a means of exchange). Commodity is also a value (the embodiment of the social labour necessary to reproduce it) and a mercantile value (the embodiment of command over social labour). A commodity, however, manifests itself as this many-fold and contradictory thing when its mercantile value takes an independent form (the form of exchange value), never in isolation. Hence the fundamental importance of fully understanding the mercantile form of value. The analysis of this form allows us to understand the necessary interplay between the objective and subjective moments of production.
A commodity expresses its mercantile value in the body of a different commodity. Its mercantile value determines, in turn, the commodity’s mercantile use value. The interplay between commodities’ mercantile use values and their respective generic use values determines the individual behaviour of commodity producers. However, the behaviour of all the commodity producers taken together feedbacks on the commodities’ mercantile values.

The individual behaviour of commodity producers as the differentiated unity of homo mercator and homo laborans determines, in turn, the social character of the market as allocator of social labour and causes the relative mercantile values of commodities to converge, ceteris paribus, on their relative labour values. The form of value in commodity production, therefore, is not direct as Marx posits but indirect. Value asserts itself not directly in the equivalent commodity but indirectly through the adjustment of the productive system. A form of value directly expressing value would be an oxymoron in an atomistic and global system of production. Since the notion of labour value vanishes of necessity from the consciousness of individual commodity producers, such a form of expression of value would render the system unstable, preventing altogether its adjustment.

4.7. Critique of the Total or Expanded Form of Mercantile Value

Only a developed money form of mercantile value allows putting the mercantile value of a given commodity in terms of an endless chain of other commodities. This occurs because all the commodities express their mercantile values with respect to one particular commodity, the money commodity. The chain, however, is merely the reflection of the commensurability of the whole world of commodities once the money form has been established, the objective reflection that from a social viewpoint commodities are nothing but the representation of social labour. Contrary to Marx’s belief, this is no expression of mercantile value but merely a chain of exchange values (or relative prices), and cannot therefore be the conceptual link between the elementary and the general forms of mercantile value.
According to Marx, the isolated or accidental expression of a commodity’s mercantile value is convertible into a series of expressions, prolonged to any length, where the commodities with which the first one is compared play the role of particular equivalents. A particular equivalent form, however, contradicts the feature of direct exchangeability, which is the essence of the equivalent form of mercantile value. In effect, if the commodity 20 yards of linen expresses its value in an assorted range of commodities, it implies that these “equivalents” compete with one another, losing their character of being directly exchangeable, and hence of being as such, the embodiment of mercantile value. In fact, the exchange relation put forward by Marx implies that the situation is just the converse; that the commodity 20 yards of linen is the equivalent commodity and the rest just relative commodities. If the commodities listed compete to exchange with the 20 yards of linen, then it is the 20 yards of linen that are directly exchangeable.

4.8. Why Does Society’s Labour Take the Form of Reified Abstract Labour? Why Does Its Allocation Take the Form of an Allocation of Objects?

Chapter 3 provides a basic insight. It reminds us that production is nothing but the organisation of society’s labour for its material reproduction. The organisation is geared to meeting society’s needs and wants, and is constrained by the natural conditions in which society’s labour is applied. This is the generic aspect of commodity production. Chapter 4 has shown that in commodity production society’s labour takes an autonomous materially abstract form which regulates the adjustment of the productive system. Furthermore, it has shown its necessary developed expression in the money form of commodities, taking the “fetishist” (Marx, 1867) appearance of an allocation of objects. This is the historically specific aspect of commodity production. The sequence explaining the process of social recognition of private and independent material production is not an alternative account but follows necessarily from the development of the concept of commodity. However, we cannot content ourselves
with this. We have to understand why society’s labour takes an autonomous materially abstract form and why it expresses itself in such a convoluted way if we are to understand commodity production and start thinking about crucial issues such as sustainability and monetary phenomena.

Commodity production being atomistic and global means that commodity producers are free and independent individuals. As such, nobody can tell them what to do, how to apply their productive powers. Moreover, their atomistic behaviour prevents any conscious form of organisation of society. Then, how can production take place at all? How can society’s labour be organised? Money both propounds the riddle and offers the solution. Commodity production organises society’s labour through its recognition (or not) as social labour in the realisation of commodities into money. Therefore, it cannot be plain value that commodities directly express in their exchange but mercantile value. The mercantile form of value is the roundabout way for commodity production to organise society’s labour since it is what allows commodities to realise a different amount of social labour than they contain. The quantitative divergence between mercantile value and value implies different degrees of recognition of individual private and independent labours in the conversion of commodities into money. This triggers the adjustment of the productive system, or in other words, the re-allocation of society’s labour in a way that meets society’s reproduction needs. At a conscious level, the process operates exclusively through the dialectic of commodity as both a generic and a mercantile use value. The system’s objective outcome, in turn, comes about through the dialectic of commodity as a value and a mercantile value, though this falls out of the individual’s consciousness. The mercantile form of value is thus what confers to society’s labour its autonomous and materially abstract character, and what causes this substance to fall out of individuals’ consciousness.
In the aggregate, mercantile value and value coincide for the simple reason that the useful labour realised for society’s material reproduction cannot differ from that exerted. It is thus an identity. In direct pre-capitalist forms of production the social labour represented by an individual product is immediately identical to that contained. Because commodity production is indirect, they have to differ a priori. Thus, the substance of short-run individual prices is materially abstract social labour, but realised instead of contained by commodities. However, if a simple commodity production system is to be stable, value and mercantile value have to coincide in the long-run on an individual commodity basis as well.

Even if one comes to grips with the fact that society’s labour takes an autonomous materially abstract form, one may still wonder why it takes such a convoluted way of expressing itself. If the price system allocates but social labour, why does its allocation take the form of an allocation of objects? Why do commodities express their mercantile value in the form of money instead of social labour vouchers? This type of reasoning was scorned by Marx. Commodity producers being free and independent, production cannot be organised either on a conscious or a coercive basis. However, they have to somehow find out what materially concrete way they should apply their productive powers. Otherwise, though outside individuals’ immediate consciousness, the system is unstable and society collapses. The system offers signals in the form of relative prices, which provide material incentives for individuals to engage in certain productive activities. This way an objective non-coercive guidance appears for society’s labour to be expended a certain way. Realising commodities in social labour vouchers implies a conscious organisation of production and therefore contradicts the very foundation of commodity production.

Once the mercantile form of value has developed in its money form, it becomes autonomous. The footwear-maker will quote the price of their shoes in money regardless of whether they have made the shoes themselves or there has been an army of dwarves working freely for the
footwear-maker at night or the shoes have landed from heaven.\textsuperscript{32} The same would be the case if a commodity was irreproducible or imperfectly reproduci\textsuperscript{33} ble. The indirect way that the general productive nexus is established in commodity production rubs out all traces of social labour. It is because of the atomistic and global character of commodity production that every object of utility has to command a price (or have mercantile value) irrespective of whether they have value, or what is the same, whether they are reproducible, and of the way they were obtained. The mercantile form of value therefore inherently allows for not only short-run but also long-run divergences between commodities’ mercantile values and their respective labour values.

The incongruity between long-run equilibrium relative mercantile values and the respective relative labour values takes place not only when there is exchange in irreproducible commodities but also when the two roles of homo-mercator and homo-laborans are played by different actors. The money form of commodities allows the accumulation of realised social labour in a general materially abstract way and with this, that of general command over social labour or purchasing power, thus spawning the most general form of capital. With the appearance of undifferentiated capital, the tendency towards the equalisation of the different capitals’ rates of profit becomes the over-riding force regulating the adjustment of the productive structure. The long-run incongruity between mercantile values and labour values poses the potential danger that society might engage in unsustainable practices since the equilibrium relative prices no longer accurately reflect the conditions of reproduction of commodities.

\textsuperscript{32} The last two cases are examples of commodities which, though they do not contain social labour, nevertheless command social labour through their market exchange.

\textsuperscript{33} Note that in the tricky example of the shoes, unlike the case of irreproducible commodities, they would have a value regardless of the way they were obtained. This is because value reflects the amount of social labour necessary to reproduce a commodity, not the amount of past labour used in making the commodity.
4.9. Conclusion

The answer to the two research questions set out at the beginning of this thesis is thus identical to Marx’s. The process through which material production becomes socially recognised in commodity production and the process giving rise to money are one and the same. Furthermore, this is but the material manifestation of the process of realisation of private and independent work as social labour. Money both propounds the riddle and offers the solution. Private and independent work becomes recognised as social labour through its product being realised as a certain amount of money.

The explanation offered in this thesis differs from Marx’s in that it consistently hinges on the behaviour of the private and independent commodity producer and therefore completes the characterisation of commodity. This is no subtlety since it grounds the fundamental and oft-overlooked concept of mercantile form of value. My re-interpretation of Marx’s theory of commodity breaks the false immediate link between production and supply, and in so doing it also breaks the false link between the labour theory of value and both the supply-side-determined theory of price and the single-factor theory of production. It also highlights the theoretical significance of short-run deviations from long-run equilibrium, and accommodates long-run deviations between mercantile values and labour values. This, in turn, links with relevant issues such as sustainability and offers a consistent theory of the origin of money.

The appearance of money is already implicit in the most general productive relation: commodity exchange. Commodity exchange is the differentiated unity of a private and a general social act, or of consumption and production. Once a commodity producer has made a prospective article of utility, they can do nothing but quote a “price” for it in the form of a commodity differing in kind. This way, they try to fulfil the private character of commodity exchange. However, this occurs on condition that they fulfil its general social character; i.e. that they realise their commodity. This way of relating contains the germ of money. The
commodity in whose body the “price” of the former is quoted becomes thus unconditionally exchangeable and as such, the visible incarnation of realised production, or of socially concrete, though materially abstract, labour.

The elementary form of mercantile value puts two commodities on an equal footing, making them commensurable. It is only on the basis of commensurability and comparability that commodities can be exchanged. Marx argues that it is their character as the materialisation of homogeneous social labour that makes commodities commensurable but his argument does not necessarily follow. However, it obtains from private and independent commodity producers acting within the boundaries of the dialectic between the generic and the mercantile use values of commodities despite their not thinking in terms of social labour time.

Thus, commodities do not directly express their labour values in exchange but their mercantile values (see appendix C). Mercantile value is determined by the amount of social labour realised by commodity (as opposed to the one contained in it) through its market exchange. This distinction gives rise to a second and objective dialectic of commodity as the differentiated unity of mercantile value and value. This dialectic is what brings about the adjustment of the productive system with the former converging on the latter.

The elementary form of mercantile value is defective in a global system of production. It does not bring the whole world of commodities on an equal footing, and barely distinguishes the social from the private side of commodity exchange. With the development of commodity production, a general form of mercantile value emerges, where the equivalent form of mercantile value is allocated to a single commodity. Once this function becomes fixed, the commodity becomes money.

The money commodity becomes thus the common denominator of the mercantile values of the whole world of commodities, making them commensurable for the first time. In the right
quantity, it is directly exchangeable with each and every commodity; i.e. money is the general form of appearance of social labour or of realised production and is therefore purchasing power. Turning a commodity into money is the proof that the process of material transformation was indeed production. The quantity of money into which a commodity is turned determines the degree of recognition a certain type of labour gets, triggering re-specialisations until the required productive structure obtains. When this happens commodities are realised at their respective values. However, the possibility of a permanent incongruity between commodities’ mercantile values and their respective labour values is presupposed in the mercantile form of value itself.

The money commodity being the incarnation of realised social labour, its main function is that of measure of mercantile value. The other functions are derived from this one. It is because its bodily appearance is mercantile value that it serves both as the means of payment and the medium of circulation or it is hoarded. The main feature of money arises from and at the same time allows the two-fold character of commodity exchange. The social facet takes the form of the requirement that commodities have to be converted into money. Once they have been converted into money or realised, the fulfilment of the private facet (that is, the satisfaction of a want or need through the acquisition of some other commodities) is just a matter of course.

Finally, regarding Marx’s theory of money merely as a theory of a money commodity discloses a misreading of Marx, and especially a misunderstanding of the mercantile form of value. Marx’s theory of money explains why money was originally a commodity but is not a theory of a money commodity. Marx emphasises that to stamp an object of utility as a mercantile value is as much a social product as language. Commodities as mercantile values are thus symbols, yet symbols with objective social existence.
Marx takes pains to make clear that the equivalent form of mercantile value and the forms of mercantile value in general are unrelated altogether to the natural characteristics of commodities. They assert themselves through the products of labour because the most general productive relation in an atomistic and global system of production takes place indirectly through the products of labour. As Marx argues, gold was the money commodity not because it was gold but because it was the incarnation of the equivalent form of mercantile value. Therefore, there is no reason why the measure of mercantile values should not be fiat money or a Wicksellian abstract unit of account. Indeed, the history of money shows a gradual shift away from a commodity as the measure of mercantile values. The sequence appears to be: convertible notes, unconvertible notes and credit money.34

34 The history of notes appears to be that of exogenous money, which is in agreement with Marx’s (1867) discussion on the symbols of value. This suggests that the ghost of the money commodity still lurks at the background. Contemporary monetary history, in contrast, appears to be that of endogenous money. This suggests that the money commodity has vanished, rendering the materially abstract character of mercantile value more evident.
Chapter 5 – Summary And Implications

5.1. Summary

The present thesis dealt with the problem of how material production, carried out privately and independently, becomes recognised as part of the social product in capitalist production. In a nutshell the main contributions have been the following. First, it reminded us that it is the most fundamental question underlying capitalist production and that this question is none other than inquiring into the nature, significance and working of Smith’s (1776) invisible hand.

Second, it showed that Marx (1867) addresses the question, though with gaps, in the commodity section of Capital; i.e. chapters I through III. Thus, my thesis re-interprets the purpose of the commodity section of Capital.

Third, it completed Marx’s answer by fully characterising the historicity of commodity as a mode of production. This was achieved through a novel integration of the key concepts and notions present in the commodity section of Capital and their development. The unconceptualised notions, in turn, were integrated as concepts through the introduction of terminology used by more recent Marxian writers. Therefore, the novelty of this thesis with regard to this point lies not with the concepts but with the way they were integrated.

Fourth, it showed that an updated theory of commodity offers a consistent answer, which is fully in line with Marx’s (1867) original answer: the process through which material production, carried out privately and independently, becomes socially recognised and the process giving rise to money are one and the same. Furthermore, they are but the objective manifestation of the process through which work carried out privately and independently becomes realised as social labour. However, the new way of presenting the answer makes the
linkages with relevant topics in Economics (see the next two sections) much clearer than the original version.

Fifth, the way the problem was tackled allowed us to re-conceptualise production as the differentiated unity of a material and a social moment, or as the differentiated unity of material production and market. This breaks the false immediate link between production and supply. Being the organisation of society’s productive powers for its material reproduction, production encompasses the whole process and becomes translated into the provision of socially useful goods. By the same token, the false immediate links between the law of labour value and the theory of supply-side-determined prices, that of a single-factor of production and the assumption of constant returns to scale are broken as well.

5.2. The Transformation of Labour Values into Prices of Production

The re-conceptualisation offered in this thesis implies that the transformation problem revolves around understanding the price and income configuration in the more concrete setting of capital accumulation. In other words, it implies understanding a specific type of concretisation of the mercantile form of value when both the organic compositions and the turnover periods of the different capitals in the system differ.

The equality sum of prices = sum of labour values is a tautology, since it was shown that the price system is but the material way of allocating and distributing society’s labour. The equality is incorrectly posed though, since prices and labour values are incommensurable. It should read instead that the sum of mercantile values is equal to the sum of labour values.

The second equality aggregate surplus value = aggregate profit is a tautology too, though incorrectly posed as the first one. The mercantile form of value being but the way to allocate society’s labour, the source of surplus value (which is not the equivalent of surplus product,
the former being a specific capitalist form and the latter generic) is that portion of realised social labour which does not return to the workers. Then, sum of surplus value = sum of the mercantile value of gross non-labour income. If it is argued, as is traditionally the case, that surplus value should be calculated as what is left after a subsistence wage is paid, so that workers take part in the distribution of surplus value, the equality should read: sum of surplus value = sum of the mercantile value of the difference between real wages and subsistence wages + sum of the mercantile value of gross non-wage income. The mercantile form of value easily accommodates the mercantile value of labour power not coinciding with the labour value of the workers’ consumption bundle.

5.3. Implications for Future Research

As seen in the thesis, in an indirect mode of production like capitalism, all of the objects of utility have to have a price. However, production being the organisation of society’s labour for its material reproduction, the mercantile form of value is but the roundabout way in this system to allocate and distribute society’s labour. Therefore, within this framework a theory which considers all of the inputs to production to be sources of value implies, for example, that when extrapolated to direct pre-capitalist modes of production, a table is not a table only because somebody wanted to make a table out of the wood used for it, but also because the tree itself wanted to become a table. This is ridiculous and shows from a different angle the inconsistency of the mainstream theory of value. The thesis, however, confirms the fact that the sources of material wealth, in contrast, are all of the inputs to production, like in any other system.

The theory presented in this thesis also breaks the immediate identity between capital and means of production. Productive means of production may or may not take the form of capital. Capital in this framework is accumulated purchasing power, or of command over social labour in general form, expanding itself. This definition stems from the development of
the mercantile form of value. It therefore offers alternative foundations for the study of the
different concrete configurations of capital which do not rely on the narrow dichotomy perfect
competition versus non-perfect competition. The aim should be the explanation of non-
competitive structures of capital intrinsically from its laws of accumulation. Levin (1997) has
pioneered the theory of capital subsystems, where capital operates in hierarchical structures
with the ones at the top of the structure regulating the conditions of accumulation of a whole
productive sub-system. His theory, fully reliant on Marx’s commodity, seeks to understand
the planning capabilities of what he calls “enhanced capital” and has yielded the tool “Profit
Impact Simulator”. It also offers interesting insights into the analysis of equilibrium in a
system of technologically differentiated capital operating in heterogeneous sub-systems,
where the law of equalisation of the different rates of profit as the main driving force in the
adjustment of the productive system vanishes. This area of research is still nascent within
Marxism.

Another avenue of future research could be the re-assessment of monetary theory. An updated
Marxian theory of commodity has the potential to reconcile the endogenous and exogenous
theories of money as different moments, both theoretical and historical, in the development of
the functions of money. It would also offer a unified and comprehensive framework for the
analysis of money as a commodity, as convertible notes, as fiat paper and as an abstract unit
of account or credit money (Dalziel, 2000). In conjunction with an updated Marxian theory of
capital, it could throw new light over the analysis of monetary crises, inflation and financial
volatility.

The framework presented in this thesis also has implications with regard to sustainable
development. The thesis showed that the mercantile form of value, when fully developed,
takes an autonomous entity of its own. Therefore, the relative prices do not necessarily reflect
the reproduction requirements of commodities. This is the case when the roles of homo-
mercator and homo-laborans are played by different actors and when there is trade in irreproducible or imperfectly reproducible commodities. Both circumstances are features of capitalist production. The question soon arises: to what extent do the material signals provided by the market lead to unsustainable practices such as resource depletion (for instance, the oil industry)? Put more generally: to what extent does our mode of organising production jeopardise our future survival? Interestingly, in the framework of the thesis the question arises even under the assumption of perfect information and a full structure of property rights. The presence of externalities and uncertainty naturally compounds the problem.

The thesis calls for a critique within Marxian ranks too. To give one example, it implies a new view on the theories of dependency. These theories claim that because of the coercive power of the central countries, the peripheral countries end up specialising in the production of commodities whose terms of trade are adverse. This contradicts Lysandrou’s (2000) idea of exploitation through distancing, meaning that the capitalist class does not act as a unified class. However, the idea of the dependency theorists can be re-cast at a sub-system level, though not at a general national level. The mercantile form of value allows commodities to realise a different value than they contain. At a sub-system level, it might mean that some sectors realise their commodities below their value and some others above their value even in the long run. This result would stem exclusively from the nature of the mercantile form of value.

Last but not least, the framework introduced by this thesis allows re-casting the problem of the accumulation of skills, so-called human capital, in terms of enhanced labour with different degrees of enhancement. Relatively more skilled labour will create more value than the relatively less skilled one.
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The errors of this thesis are solely due to the stubbornness of the author.
References


APPENDIX A – The Effect Of Changes In Consumption Requirements On The Socially Necessary Labour To Reproduce Products

The following example briefly discusses why consumption requirements affecting the socially necessary labour to reproduce a product does not alter the fact that a product’s value is given by the socially necessary labour to replace it.

The peasant family considered by Marx (1867 [1954, pp. 77-78]) has a spontaneously developed system of division of labour just as commodity production. However, the articles of the family’s industries do not take the form of commodities between the members: production is neither atomistic nor market-geared. Given a structure of the family’s consumption requirements, the different family members will devote their labour time to those activities in which they are relatively more efficient. The value of the different products for the family will be then given by the family labour necessary to reproduce them.

An application of Ricardo’s (1951) example about the producer of jackets and hats will provide praxiological evidence of why value, though affected by consumption requirements, is given exclusively by labour requirements. If it took the family twice as much labour to replace a cake of soap as to replace a candle and their place was burgled, they had rather a candle was taken than a cake of soap, though they would be indifferent between two candles and a cake of soap. This means that a cake of soap has twice the value of a candle for the family. The result would be different if the family had only one candle and night was rising. But this would be pure short-run contingency.

Any other change in the value of candles for the family would be due to either a change in the technical conditions of reproduction of candles or to a new structure of consumption requirements reallocating the family labour in such a way that it modifies the family labour
necessary to replace candles. For example, an increase in the need for candles would change the value of candles if it meant reallocating the family labour in a way that affects the unit labour requirements to replace candles. The value would rise if it meant that new members of the family, relatively inefficient in making candles given the previous consumption requirements, are added to the production of candles. Or it would drop if it increased dexterity in the production of candles due to further specialisation. Thus, the value of candles for the family would be as much given by the family labour requirements to reproduce them as before the change in consumption requirements. This implies that the concept of labour value does not depend on value being unaffected by consumption requirements, or, in a mercantile setting, by the structure of demand, but on both producers regarding their labour as a means to an end and their organising production in a way to minimise labouring effort given a structure of output.
APPENDIX B – Commodityisation Of The Means Of Production

Within the framework of simple commodity production, the assumption was that the production of the different commodities is vertically integrated, or what is the same, that the only commodities exchanged in the market are final ones. Such a stance agrees with what Lysandrou (2000) calls a “thin” market. For all its simplicity, this framework provides the basic insight: the market allocates but quantities of materially abstract social labour. This result rests on the unity of the process of production. Though keeping the autonomy of the two spheres of commodity production (market and private), the whole process is completed by the same actor, who at one point plays the role of homo-laborans and at another one, that of homo-mercator (Levin, 1997). This does not imply a single-factor production model but that money and the form of capital are not simply assumed.

This appendix shows that the commoditisation of the means of production only complicates the analysis of chapter 3 but does not change the underpinning of the behaviour of the differentiated unity homo-laborans/homo-mercator. If the model under consideration is that of generalised commodity production, there is no reason why the means of production should not take the form of commodity. In other words, my argument is that the commodity division of labour does not invalidate the labour theory of value. The framework will now be that of a “thick” market (Lysandrou, 2000).

The assumptions are those of chapter 3. I consider a very simple example: an individual who can make nails, chairs and tables. I further assume that nails are a means of production for both chairs and tables. Two nails are needed to make a chair and four to make a table. The

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35 However, there is no reason why the different roles should not be played by different actors. This is indeed the case in capitalist production.
technical data of this individual are offered in the chart below together with two assumed sets of expected exchange values.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Labour Requirements</th>
<th>Individual Relative Values</th>
<th>Expected Exchange Values 1</th>
<th>Expected Exchange Values 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nails</td>
<td>1 hr.</td>
<td>N/Ch = 1/4</td>
<td>N/Ch = ½</td>
<td>N/Ch = 1/6</td>
</tr>
<tr>
<td>Chairs</td>
<td>4 hrs. (2 hrs. of nails and 2 hrs. direct labour)</td>
<td>N/T = 1/6</td>
<td>N/T = ¼</td>
<td>N/T = 1/10</td>
</tr>
<tr>
<td>Tables</td>
<td>6 hrs. (4 hrs. of nails and 2 hrs. direct labour)</td>
<td>Ch/T = 2/3</td>
<td>Ch/T = ½</td>
<td>Ch/T = 3/5</td>
</tr>
</tbody>
</table>

Given the first set of expected exchange values, the individual will specialise in making nails because their relative values (or opportunity costs) for the individual in terms of both chairs and tables is lower than their respective exchange values. The individual will acquire the desired chairs and tables by means of exchange. Given the second set of expected exchange values, the individual would specialise in making tables because their relative values in terms of both nails and chairs would be lower than their respective exchange values. However, with this set of expected exchange values, the relative values of tables for the individual would be lower than the ones on the chart above. It would make no sense for the table producer to make the necessary nails when they could acquire them for less effort in the market by exchanging part of their table production. If the exchange value of nails with respect to tables is 1/10 and a table requires 4 nails, then the producer can get the 4 necessary nails by giving up 40% of
their table production through market exchange. Since the direct labour on the table is 2 hours, given this set of exchange values it would take 2.8 hours for the table maker to come up with a table instead of 6 hours as if their productive process was vertically integrated.

Given that the behaviour of the individual as the differentiated unity homo-laborans/homo-mercator agrees with that depicted in chapter 3, and providing that individuals’ expectations do not lead to a permanent non-corrective disequilibrium result, the system would reach the equilibrium when the set of exchange values converges on the set of social relative values. These relative values would be determined by the marginal producers given the structure of demand. This is exactly in the same fashion as in chapter 3 with production being vertically integrated.

In this basic framework of generalised commodity production without transaction costs, when there is room for one stage of a commodity’s material production to become the special trade of certain individuals, then this stage becomes automatically outsourced by the producers of the final commodity. This holds if expected exchange values become realised. Thus, the social division of labour develops in the fashion described by Smith (1776), leading to the productivity gains that he mentions. If uncertainty obtains, then there will be frictional elements to the de-integration of production.

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36 This, however, suppresses the inherent uncertainty of commodity production.
APPENDIX C – The Different Meanings Of The Word Value In The Context Of Commodity

<table>
<thead>
<tr>
<th>Generic use value</th>
<th>Commodity’s usefulness as a direct means of consumption or production.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercantile use value (Levín, 1997)</td>
<td>Commodity’s usefulness as a means of exchange or depository of exchange value.</td>
</tr>
<tr>
<td>Exchange value</td>
<td>Relative price = relative mercantile value. Proportion in which two given commodities can be exchanged in the market.</td>
</tr>
<tr>
<td>Value</td>
<td>Representation in commodities of the socially necessary labour to reproduce them or replace them in the market; labour value.</td>
</tr>
<tr>
<td>Mercantile value (Levín, 1997)</td>
<td>Realisation value. Representation in commodities of the quantity of social labour they realise through their market exchange.</td>
</tr>
<tr>
<td>Relative value</td>
<td>Opportunity cost. Ratio between two commodities’ values.</td>
</tr>
<tr>
<td>Individual value</td>
<td>Representation in a given individual’s commodity of the individual’s necessary labour to reproduce it or replace it in the market.</td>
</tr>
<tr>
<td>Individual relative value</td>
<td>Individual opportunity cost. Ratio between two commodities’ individual values for a given individual.</td>
</tr>
</tbody>
</table>