



BRILL

HISTORICAL MATERIALISM 27.1 (2019) 55–91

historical materialism
research in critical marxist theory

brill.com/hima

Revisiting the Marxist Skilled-Labour Debate

Gastón Caligaris

Department of Economics and Administration, National University of
Quilmes, Argentina & National Council for Scientific and Technical Research
(CONICET)
gaston.caligaris@unq.edu.ar

Guido Starosta

Department of Economics and Administration, National University of
Quilmes, Argentina & National Council for Scientific and Technical Research
(CONICET)
guido.starosta@unq.edu.ar

Abstract

This article offers an overview of Marx's textual legacy on the subject of the multiplied value-positing powers of skilled labour, and undertakes a critical reconstruction of the history of the subsequent controversies over the so-called 'skilled-labour problem'. Critical examination of the different Marxist responses to the objections put forward by critics shows that they have failed to develop a solution that is consistent with the foundations of Marx's value-theory. Thus, the article finally offers an alternative solution grounded in the Marxian analysis of the determinations of value as laid out in *Capital*.

Keywords

skilled labour – simple labour – reduction problem – value theory – value of labour-power – Marxist debates

1 Introduction

Recent times have witnessed a veritable proliferation of works that attempt to re-examine the Marxian inquiry into the determinations of the value-form

taken by the product of labour in capitalism. The common thread running through this reconsideration of Marx's analysis of the commodity contained in *Capital* has been the critique of traditional readings which, along rather 'Ricardian' lines, were mainly preoccupied with the formal demonstration of the reduction of prices to their labour-content. By contrast, these recent approaches have tended to emphasise the historicity of capitalist economic forms as reified modes of existence of social relations of production. Thus, instead of being fundamentally concerned with the search for a formally consistent explanation of the reduction of values to quantities of labour, these novel 'form-analytical' approaches have focused on the question of 'why this content has assumed that particular form, that is to say, why labour is expressed in value, and why the measurement of labour by its duration is expressed in the magnitude of the value of the product'.¹

In this context, it is noteworthy that despite the wide scope and depth of this recent radical rethinking of the fundamental categories of the Marxian critique of political economy, there has been barely any effort to address, in the light of these novel perspectives, the question of the determinations of complex labour in value-production. This is all the more striking since, as we shall see, this issue has been one of the main targets of some of the most trenchant critics of Marx's works and, therefore, one of the most problematic obstacles that Marxists have confronted in their attempts to respond to those critiques.

The formulation of the 'complex labour' problem itself can be traced back to classical political economy. As Adam Smith already noted in the *Wealth of Nations*, it is evident that 'there may be more labour ... in an hour's application to a trade which it cost ten years' labour to learn, than in a month's industry at

1 Marx 1976a, p. 174. It should be noted that the 'value-form' perspective is not synonymous with what some critical commentators have labelled the 'circulationist approach' (Mavroudeas 2004). The latter is a *particular version* of the value-form approach, which hinges on the idea that abstract labour and value can only acquire reality through the actual exchange of products against money. However, the limitations of the 'circulationist' approach did not remain unnoticed by other Marxists and served as the basis for further developments in value-theory. The challenge for these alternatives was how to avoid both the 'Ricardian' reading of Marx's investigation of the value-form *and* the antinomies which arose from seeing value as existing only within circulation. Thus, a new variety of 'production-centred' value-form approaches emerged which, in their own idiosyncratic way, tried to re-establish the connection between value and the immediate process of production whilst still seeing the former as a specific social form. For a critical assessment of the main ideas in this debate (and for an extensive bibliographical source on this literature), see Kicillof and Starosta 2007a and 2007b.

an ordinary and obvious employment'.² This phenomenon can be illustrated by recourse to Böhm-Bawerk's 'canonical' example of the 'sculptor' and the 'stonebreaker'. Specifically, if, on the one hand, the statuette's (exchange) value is equal to a cart of stones and, on the other, 'as exchange-values, all commodities are merely definite quantities of *congealed labour-time*';³ then one should draw the conclusion that the sculptor and the stone-breaker must have expended the same amount of labour in the production of, respectively, the statuette and the cart of stones (assuming, in addition, that both work in socially normal circumstances, i.e. with the normal degree of intensity, skill and level of application of technology, and therefore expend only *socially necessary* labour). Yet, immediate appearances seem to contradict this conclusion. In effect, the sculptor seems to actually expend less labour-time than the stone-breaker in order to produce a statuette which, however, exchanges as equivalent against a cart of stones. In other words, seemingly *unequal* 'quantities of congealed labour-time' appear to be represented in the *same* amount of value. Certainly, and this is the gist of Adam Smith's passage just quoted above, in order to be a sculptor a long learning process is necessary, while a couple of hours of training and practice might suffice in order to be a stone-breaker. Still, this begs the question of how this difference in the learning-process is expressed in terms of value-positing.

As we will see, Marx's solution to this problem is extremely concise and, at first sight, very simple. Essentially, he considers the expenditure of labour-power that involves a prior 'certain level of development' as *'intensified*, or rather *multiplied* simple labour, so that a smaller quantity of complex labour is considered equal to a larger quantity of simple labour'.⁴ Yet, a century and a half after the publication of *Capital*, Marxists have not reached any consensus on the 'skilled-labour reduction problem' or, worse still, even on what Marx actually meant in those brief passages.

Against the backdrop of these debates, the purpose of this article is, on the one hand, to undertake a critical reconstruction of the history of the controversies over the Marxian solution to the 'skilled-labour problem' and, on the other, to present an alternative perspective which is consistent with the foundations of the critique of political economy. In order to do so, in the following section we offer a brief overview of Marx's textual legacy on this issue. The next two sections develop a reconstruction and critical examination of the debates that followed after the publication of *Capital*. In the fifth section,

² Smith 1982, p. 134.

³ Marx 1976a, p. 130.

⁴ Marx 1976a, p. 135.

we turn to the presentation of our own alternative solution grounded in the Marxian analysis of the determinations of the commodity-form. Finally, the concluding section brings together the main results of our discussion.

2 Marx on Skilled Labour

Marx made very few and rather succinct references in his works to the question of skilled labour in connection with the determination of value. Moreover, the occasional remarks that one can find in his writings are mostly incidental, that is, external to the systematic structure of his exposition. As acknowledged by most exegetical commentaries, the upshot of this is that the reconstruction of Marx's ideas on this subject is not free from difficulties.⁵ However, we think that it is possible to uncover a mostly unchanged view underlying and unifying all these scattered references to skilled labour that Marx made throughout his writings. On the basis of a close reading of available textual evidence, in the following points we summarise its most salient features:

- i. It is crystal clear that Marx thought that the determination of human labour as the substance of value implies the reduction of those qualitative differences in the diverse types of labour, derived from the special development of the labour-power of which they are an expenditure, to a 'common unit'. It follows that the explicit treatment of this reduction therefore pertains to the level of abstraction of the *simplest determinations of value*. Furthermore, this implies that as long as there exist labours of varying degrees of complexity, the 'reduction problem' persists and cannot be assumed away.⁶ However, it is also evident that insofar as Marx regarded it as a relatively 'minor' and unproblematic issue, it was not primordial to unfold the 'laws' that govern the reduction when the immediate object of the exposition was the commodity or the value-form of the product of labour.
- ii. The aforementioned 'common unit' is simple labour, which is defined as the expenditure of human labour-power possessed by the 'average individual', for which no prior 'special development' of productive attributes is needed.⁷ Although what constitutes simple labour varies according to

5 Cayatte 1984; Krätke 1997.

6 Marx 1976c, pp. 126–7; Marx 1973, pp. 561, 613, 846; Marx 1987, pp. 272–3; Marx 1989b, p. 322; Marx 1985, p. 122; Marx 1976a, pp. 135, 275–6; Marx 1872–5, p. 17.

7 Marx 1976c, pp. 126–7; Marx 1973, pp. 323–4, 612–13, 846; Marx 1987, pp. 272–3; Marx 1985, p. 122; Marx 1976a, p. 135; Marx 1872–5, p. 17.

the different 'epochs of civilisation' and in 'different countries', it is always given in a determinate society.⁸

- iii. Marx is adamant that the equivalence entailed by the 'value-objectivity' immanent in commodities self-evidently shows that the reduction of complex to simple labour is 'accomplished in practice' and, like all other reductions of qualitative differences in the varied commodity-producing labours, it operates 'behind the backs' of the producers.⁹
- iv. Moving to the level of abstraction of the capital-relation, Marx argues that labour-power of a greater degree of complexity has a higher magnitude of value because its production costs more socially-necessary labour.¹⁰ However, in other passages he does not only make this point but also invariably remarks that skilled labourers proportionally produce the same amount of surplus-value as simple labourers. In other words, the rate of surplus value is the same for all kinds of worker, regardless of the relative complexity of her labour-power.¹¹ In this context, Marx sometimes *appears* to be suggesting that there is some sort of connection between the value of skilled labour-power and the value of its product.
- v. Still, Marx tended to believe that simple labour constitutes the great bulk of labour performed in any society and that, at any rate, there is a dynamic tendency immanent in capitalist forms of technical change gradually leading to the elimination of complex forms of labour.¹²
- vi. Finally, it seems to us that Marx did not consider that Ricardo's treatment of the subject was quite simply 'wrong'. In our view, he thought that it was rather 'incomplete', insofar as Ricardo did not show how the relation between complex and simple labour is actually 'determined'.¹³

Now, as Krätke notes, there are other references to 'complex labour' in Marx's writings. However, these are usually *analogies* which Marx uses in order to shed light on *other* determinations of value-production and/or realisation.¹⁴ Thus, for instance, Marx points out that when in a special sphere of production

8 Marx 1987, pp. 272–3; Marx 1976a, p. 135; Marx 1872–5, p. 17.

9 Marx 1976c, pp. 126–7; Marx 1973, pp. 612–13, 846; Marx 1987, pp. 272–3; Marx 1976a, p. 135; Marx 1872–5, p. 17.

10 Marx 1973, pp. 323–4; Marx 1988, p. 48; Marx 1976b, p. 1032.

11 Marx 1988, pp. 81–2, 90, 231; Marx 1989a, pp. 72–3; Marx 1989b, p. 18; Marx 1989c, p. 309; Marx 2015, p. 250; Marx 1991, pp. 241–2; Marx 1976a, pp. 304–6; Marx 1872–5, p. 84.

12 Marx 1976c, p. 127; Marx 1977, p. 225; Marx 1973, pp. 612–13; Marx 1987, pp. 272–3; Marx 1988, pp. 231, 321, 331, 341; Marx 1989c, pp. 484ff., 499; Marx 1994, pp. 24, 148, 217; Marx 1976b, p. 1032; Marx 2015, p. 306; Marx 1976a, p. 470; Marx 1991, p. 298.

13 Marx 1976c, pp. 127ff.; Marx 1986, p. 327; Marx 1973, p. 561; Marx 1989b, p. 350.

14 Krätke 1997, pp. 102–3.

the *intensity* of labour is circumstantially higher, it counts socially as if it were more complex labour.¹⁵ Similarly, when an individual capital sets into motion a comparatively higher productivity of labour than its competitors, this circumstance is reflected in the value of its output as if it were the product of more complex labour.¹⁶ Lastly, Marx also uses the determinations of the multiplied value-positing powers of complex labour to explain by analogy the determinations of *international* value-relations when the low degree of capital mobility hinders the full operation of the 'law of value' on a world scale.¹⁷

Two general conclusions can be drawn from this reconstruction of Marx's thinking on the determinations of skilled labour in relation to value-production. In the first place, the problem itself seemed to be of relatively minor relevance for Marx's own explanation of the value of commodities. Moreover, at least as far as its simplest aspects are concerned, he tended to think that classical political economy (Ricardo in particular) had already offered the basic elements for the solution: working days of different complexities are equalised as 'multiples' of simple labour. In the second place, despite his repeated criticisms of Ricardo for not 'developing further' those elementary aspects of the solution, in no text does Marx himself actually complete the explanation. This would have involved the establishment of the principle that allows one to explain, in a rigorous and precise fashion, the specific reasons why complex labour posits more value than simple labour in the same time-period. But this full explanation is not only missing in Ricardo's text; unfortunately, it is also absent from Marx's own works. What is more, when one considers that according to Marx himself the explanation of the value of commodities 'is, therefore, a thing quite different from the tautological method of determining the values of commodities by the value of labour[-power], or by *wages*',¹⁸ the references that explicitly or implicitly correlate the higher wages of skilled labourers with the higher value of their product are intriguing to say the least. In sum, it must be admitted that Marx's own explanation of the multiplied value-producing powers of skilled labour is as underdeveloped as that of his predecessors and deserves closer critical scrutiny. Before doing that, we shall firstly examine the reactions that this aspect of the Marxian critique of political economy caused among both his critics and his followers.

15 Marx 1989b, p. 440.

16 Marx 1988, pp. 319–20, 329–30; Marx 1976a, pp. 435, 530.

17 Marx 1988, p. 338; Marx 1989b, p. 248.

18 Marx 1985, p. 123.

3 The Critiques of Marx's Perspective on the 'Reduction Problem' and the Response of Marxists

As we have seen, Marx was very far from leaving a systematic account of the determinations of the multiplied value-producing powers of complex labour. What is more, some of the brief, scarce and scattered passages on the subject that he did write were, at least at first glance, potentially inconsistent with his fundamental views on the determinations of value. It is hardly surprising, then, that this underdeveloped aspect of the Marxian critique of political economy soon drew the attention of Marx's critics, who made it a prime target of their objections to *Capital*. In turn, this led to a whole series of attempts by Marxists to respond by offering a very wide array of solutions to the alleged problem of the 'reduction of complex to simple labour' in the determination of the value of commodities.

In the rest of this section, we offer an overview of the main conceptual lines that have structured the debate since its beginnings. For reasons of space, and given the great number of repetitions in the arguments put forward by the different participants in the debate, we shall not present a detailed chronological account of each intervention in its development. Instead, we shall sketch out the main 'canonical' contributions which, in our view, represent the varied emblematic perspectives within the controversy.

3.1 *The Critique of the Marxian Solution*

The fundamental two lines of criticism of Marx's 'solution' can be found in the work of Eugen von Böhm-Bawerk. In his 1884 work *Capital and Interest*, this author initially pointed to what he considered an elementary flaw in Marx's value theory. According to Böhm-Bawerk, there was no clear explanation of the sense in which complex labour's working day could be said to 'condense' *more labour* than an equally-long working day of simple labour.¹⁹ Thus, in Böhm-Bawerk's view, that the product of complex labour's working day represents a higher amount of value than that of simple labour blatantly contradicts the economic law which postulates that value is determined by the amount of labour objectified in commodities. Consequently, Böhm-Bawerk concluded, the products of complex labour can only be (yet another) exception to the general rule in the Marxian explanation of value.²⁰

19 Böhm-Bawerk 1890, pp. 5–384.

20 Similar critical arguments that emerged around the same time can be found in the works of Block (Block 1884, p. 133), Adler (Adler 1887, pp. 81–5), Pareto (Pareto 1998, pp. 299ff.) and Flint (Flint 1906, pp. 147–9).

The second main line of Böhm-Bawerk's criticism appeared in his intervention in the debate triggered by the publication of Volume III of *Capital*.²¹ More specifically, in his *Karl Marx and the Close of his System* he further maintained that the Marxian explanation of the equalisation of qualitatively different labours fails because the argument unfolds 'in a complete circle': it starts out in search for an explanation of the exchange relation but, insofar as it is argued that 'the standard of reduction [of skilled to simple labour] is determined solely by the actual exchange relations themselves', it ends up accounting for the exchange relation... on the basis of that very same exchange relation!²²

Later critiques of Marx mostly reiterated or simply reformulated the foundational ideas already laid out by Böhm-Bawerk.²³ Those that did bring novel issues to light actually changed the very terms of the discussion, focusing on the difference between 'innate' and 'acquired' qualifications rather than on complex labour and simple labour as such. For instance, this is the case with Oppenheimer's objections.²⁴ Subsequently, this angle on the question reappeared in the works of both Schumpeter and Samuelson, for whom Marx failed to explain the 'natural' differences in the quality of labour.²⁵

3.2 *The 'Rise and Fall' of the Classic Hilferding-Bauer Response*

With the exception of a brief and rather inconsequential rejoinder to Block by Lafargue,²⁶ the first spate of responses to Böhm-Bawerk's criticisms did not come from Marxists but from Ricardians²⁷ or non-Marxist socialists.²⁸ In a nutshell, the essential point made in these first interventions to counter Böhm-Bawerk's objections anticipated the gist of what some years later would constitute the 'canonical Hilferding-Bauer' response by Marxists. Specifically, these works submitted that the reduction of complex to simple labour involved the addition, to the living labour of the skilled labourer, of *all* those past labours that had directly or indirectly contributed to the production of the productive attributes of the worker bearing a more complex labour-power.²⁹

21 Böhm-Bawerk 1949.

22 Böhm-Bawerk 1949, p. 83.

23 Sorel 1897, p. 230; Masaryk 1899, pp. 270ff.; Bortkiewicz 1952, pp. 90–2; Skelton 1911, pp. 117ff.; Mises 1990, pp. 20–1; Joseph 1923, pp. 87–96.

24 Oppenheimer 1916, pp. 63–4.

25 Schumpeter 2006, p. 24, n. 3; Samuelson 1971, pp. 404–5. As Rubin's early response to Oppenheimer rightly noted, this alternative line of criticism confused the complex and the 'socially necessary' character of value-producing labour (Rubin 1990, p. 161).

26 Lafargue 1884, pp. 283–4.

27 Dietzel 1895, pp. 248–61.

28 Grabski 1895.

29 On those first reactions to Böhm-Bawerk's objections, see Bortkiewicz 1952, p. 90, n. 140; Roncaglia 1974, p. 8, n. 10; Jorland 1995, pp. 149–50.

Still, the actual first reply by a Marxist came from Bernstein, and was along rather different lines. According to Bernstein, the greater value of the product of skilled labour was not explained by the exchange relation, as Böhm-Bawerk had thought, but by the greater value of more-complex labour-power. Thus, the higher the value of labour-power, the greater will be the magnitude of value that results from its objectification.³⁰ Bernstein's idiosyncratic solution did not, however, persuade all Marxists. Indeed, a first critical reaction almost immediately appeared in the work of Kautsky, who saw Bernstein's solution as 'eclectic'.³¹ Although he acknowledged that Marx's theory was 'incomplete' on this score, Kautsky offered no solution of his own.³²

An alternative Marxist approach to the 'reduction problem' eventually emerged some five years later, on the part of other scholars who took Bernstein's explanation to task for relapsing into a theory of value founded on 'costs of production'. This was the main thrust of Hilferding's criticism of Bernstein in his rejoinder to Böhm-Bawerk's 1896 article. As Hilferding puts it, Bernstein's explanation wanted 'to deduce the value of the product from the "value of labor"'.³³ By contrast, Hilferding and other authors proposed a procedure for the reduction of skilled to simple labour based on the addition of the quantities of simple labour that materialised in the production of skilled labour-power and which, indirectly, became 'condensed' in the actual expenditure of the latter. Those past formative labours, Hilferding states, 'are stored up in the person of the qualified laborer, and not until he begins to work are these formative labors made fluid on behalf of society'.³⁴ Specifically in Hilferding's case, these 'formative labours' came down to the work of the 'technical educator'.³⁵ However, drawing on Deutsch,³⁶ Bauer later argued that the labour of 'self-education' by the skilled labourer herself (in her capacity as student) should also be counted.³⁷

30 Bernstein 1899/1900, pp. 359–60. Bernstein draws upon a work by Buch (1896), who attempted to place value-theory on 'physiological' foundations by focusing on the *intensity* of labour and taking variations of wages as indices of the different degrees of intensity. Buch's contribution also influenced Liebknecht's proposed solution to the 'reduction problem', which consisted in the representation of complex labour as more intense, thus involving a greater expenditure of energy (Liebknecht 1902, pp. 102–3).

31 Kautsky 1899, p. 41.

32 Kautsky 1899, pp. 38–9.

33 Hilferding 1949, p. 141.

34 Hilferding 1949, p. 144.

35 *Ibid.*

36 Deutsch 1904, pp. 23ff.

37 Bauer 1906, pp. 649ff. Although Bauer drew on Deutsch on the 'reduction problem', he parted company with the latter's argument concerning the determination of the value of complex labour-power. Thus, Deutsch included the student's labour of 'self-education' in

Thus, the 'classic' Marxist view of the 'reduction problem' crystallised out of these contributions from the beginning of the twentieth century. In a nutshell, this 'Hilferding-Bauer' solution maintained that the higher value-positing powers of complex living labour derived from its 'condensation' of *all* the past labours which have been expended in the production of the respective skills of the wage-labourer, including both that of the 'technical educator' and the 'student'. During the greatest part of the twentieth century, the Hilferding-Bauer approach was widely accepted by Marxists of the most varied traditions as the definitive response to Böhm-Bawerk.³⁸ Moreover, this 'classic' solution tended to be endorsed not only by most Marxists, but also by Neo-Ricardian scholars as well.³⁹

However, by the mid-1970s some Marxists had started to express reservations concerning the alleged solution to the 'reduction problem'. In the first place, it was argued that the Hilferding-Bauer reduction procedure implied different rates of surplus value for skilled and simple labour which, it was claimed, contradicted the Marxist theory of exploitation.⁴⁰ Secondly, other scholars argued that in conceiving of the worker's skills as the material condensation of past labour that would subsequently be represented in the higher value of the product, the productive attributes of workers were being treated as constant capital.⁴¹ According to this second line of criticism, the 'classic' solution entailed a serious relapse into 'human capital' theory, which had been explicitly developed to undermine Marxist theory by denying the existence of

the cost of production of skilled labour-power and therefore concluded that the rate of surplus-value of the skilled labourer is necessarily lower than that of the simple labourer (Deutsch 1904, pp. 23ff.). By contrast, Bauer considered that the student's labour of 'self-education' does not enter into the determination of the value of her labour-power. As a consequence, the rate of surplus-value of the skilled labourer is actually *higher* than that of simple labour.

38 Rubin 1990, pp. 159ff.; Lapidus and Ostrovitianov 1929, pp. 32–5; Sweezy 1970, pp. 42–3; Meek 1973, pp. 168ff.; Mandel 1976, pp. 72–3; Rosdolsky 1977, pp. 506ff.; Rowthorn 1974.

39 Okisio 1963; Bródy 1970, pp. 86–8; Roncaglia 1974. An exception to this broad consensus from the Neo-Ricardian camp is the contribution by Bowles and Gintis (1977), who sidestepped the reduction problem through a mathematical model which determined the rate of profit and the prices of commodities by expressing the different skill requirements in the diversity of wages for each type of labourer. However, as Itoh argued (Itoh 1987, p. 46), this approach solved the reduction problem by simply making redundant the very concept of labour. Be that as it may, Bowles and Gintis's intervention generated a lively debate among Neo-Ricardians (Morishima 1978; Bowles and Gintis 1978; Cataphores 1981; McKenna 1981; Bowles and Gintis 1981; Krause 1981).

40 Morishima 1973, p. 193; Morris and Lewis 1973/4, pp. 457–8.

41 Tortajada 1977; Harvey 2006, p. 58; Bidet 2007, p. 26. This critique had actually been pioneered by Schlesinger (Schlesinger 1950, p. 129).

antagonistic social classes.⁴² In sum, these critics concluded, the Hilferding-Bauer solution must be abandoned.

3.3 *The More Recent Proliferation of Novel Solutions to the 'Reduction Problem'*

In the face of the shortcomings of the traditional reduction procedure, new alternative approaches appeared that changed considerably the very terms of the problem without, however, achieving any consensus. Let us briefly consider these more recent perspectives on the reduction of complex to simple labour in turn.

In the first place, some scholars proposed that the reduction of skilled to simple labour should be regarded as a *real and observable process of de-skilling of labour-power resulting from capital's transformation of the labour process*.⁴³ From this standpoint, the solution to the reduction problem does not belong in the simplest level of abstraction of the commodity-form but pertains to a dynamic tendency of the production process subsumed under capital, namely: the actual homogenisation of the productive attributes of all wage-workers resulting from the forms of technical change in the capitalist mode of production. As a result of this historical process, these authors conclude, 'the reduction problem disappears into insignificance'.⁴⁴

In the second place, some authors have argued that the key to the solution resides in treating more complex labour as more *productive*.⁴⁵ Note that insofar as this refers to an augmented capacity to produce *use-values* per unit of time, this kind of approach must explain how this greater *physical productivity* of skilled labour translates into multiplied *value-producing* powers. Here each author provides their own, highly idiosyncratic argument. Thus, P. Harvey simply *assumes axiomatically* that skilled labour is 'labour-saving' (that is, physically more productive), and extends this assumption to *more intensive*

42 Tortajada 1977, p. 109.

43 Uno 1980, p. 26, n. 2; Kay 1976; Harvey 2006, pp. 57–61; Itoh 1987; Carchedi 1991, pp. 130–4; Sekine 1997, p. 39. This solution clearly resonates with the so-called 'deskilling thesis' formulated in the seminal work by Braverman (1998). As we comment below, this thesis is a one-sided reduction of the two-fold movement of degradation *and* expansion of the productive subjectivity of the collective labourer required by the system of machinery to one of its moments. See Iñigo Carrera 2013, p. 42. One of the immediate reasons behind such a unilateral account lies, as Tony Smith points out, in its very restricted definition of 'skill', very much referring to manufacturing skills. See Smith 2000, p. 39.

44 Harvey 2006, p. 61.

45 Harvey 1985; Bidet 2007; Saad-Filho 2002. The consideration of more-complex labour as more productive is actually quite old and was pioneered by Boudin (Boudin 1920, pp. 113–17).

labour, further postulating that the latter's greater value-creating capacities are grounded in its higher physical productivity.⁴⁶ By analogy to labour intensity, he thereby explains the multiplied value-creating power of skilled labour. For his part, Bidet claims that since commodity- and value-production is actually the fruit of *collective* labour, it makes no sense to assign differential value-creating powers to certain individual types of labour-power.⁴⁷ However, he also maintains that the incidence of what he calls 'specialised' labour-power in a determinate collective labourer does improve its overall productivity. And through a peculiar interpretation of Marx's argument concerning the individual capital's production of an extra surplus-value from innovation in Chapter 12 of *Capital* Volume I, he concludes that the higher productivity resulting from a greater level of 'specialisation' in a collective labourer is expressed in greater value-production per unit of time.⁴⁸

Finally, there has been a number of rather disparate, singular attempts at a solution which cannot be lumped together into any discernible common approach.⁴⁹ Among them, the one by Himmelweit stands out for the critical reactions that it provoked among other Marxists.⁵⁰ In a nutshell, Himmelweit argues that, under the assumption of equal organic compositions of capital, the mobility of capital in the process of equalisation of the rate of profit ensures the corresponding equalisation of the different rates of surplus value, so that 'if one group of workers [is] employed at a higher rate of pay than another, they will also produce more value'.⁵¹

4 Critical Assessment of the Complex-Labour Debate

Let us now take stock of the discussion so far, through a closer critical examination of the debate on complex labour that we have just sketched out in the previous section. As we have seen, the debate was triggered in 1884 by Böhm-Bawerk's critical comments in *Capital and Interest*, which centred on an alleged qualitative irreducibility of complex to simple labour. Here it is interesting to note that in his 1896 work Böhm-Bawerk revisits this first line

46 Harvey 1985, p. 90.

47 This train of thought had already been developed by Kidron 1968. More recently, it has been advanced by Choonara 2018.

48 Bidet 2007, pp. 29–30. We examine Bidet's 'circulationist' explanation of extra surplus-value in the next section.

49 Ekeland 2007; Devine 1989; Himmelweit 1984.

50 Morris 1985; Itoh 1987, pp. 51ff.; Lee 1990, pp. 117ff.; Fine 1998, pp. 191ff.

51 Himmelweit 1984, p. 335.

of argument in the face of Grabski's 1895 response and actually seems to think that the latter is, at least in broad terms, theoretically consistent, and hence a plausible way to avoid the circularity objection that he presents in this later text.⁵² However, Böhm-Bawerk declares Grabski's explanation 'inadequate', but now on *empirical* grounds: even if we accepted 'that to labor in actual operation should be added the quota due to the acquirement of the power to labour',⁵³ it would be doubtful that the exchange relation between the product of complex labour and the product of simple labour reflects exactly the proportion of preparatory labour or learning that went into each hour of the actual practising of a 'profession'.⁵⁴ Although Böhm-Bawerk himself does not adduce a single shred of positive evidence or support for his claims, he nonetheless concludes that 'no one will maintain that such a proportion or anything approaching to it is actually found to exist'.⁵⁵ Thus, Böhm-Bawerk very quickly dismisses the response of the 'disciple' (Grabski) and turns to the 'master himself' in order to 'bring out the fault in Marx's mode of reasoning'.⁵⁶

As already mentioned, in the 1896 text the main objection to Marx's argument in *Capital* focuses on the circularity involved in maintaining that 'experience shows' that 'value' and the 'social process' (which Böhm-Bawerk equates with 'exchange') accomplish the reduction, while simultaneously presupposing the reduction in order to explain the exchange relation itself. But this is not the only objection. Additionally, Böhm-Bawerk accuses Marx of explaining away the irreducible qualitative difference between two 'different *kinds of labor* in *different amounts*' by resorting to a scientifically flawed procedure consisting in the substitution of 'to count as' for 'to be' in the consideration of skilled labour as multiplied unskilled labour.⁵⁷ According to Böhm-Bawerk, this train of thought is theoretically illegitimate since 'to "count as" is not "to be", and the theory deals with the being of things'.⁵⁸

Now, a proper full response to these further two objections would require a wider discussion of Böhm-Bawerk's more general critique of Marx's value-theory, a task which evidently exceeds the narrower scope of this article on the skilled-labour reduction problem and which, moreover, we have undertaken elsewhere.⁵⁹ Here we can only offer a few pointers on the underlying weakness

52 Böhm-Bawerk 1949, p. 84.

53 Ibid.

54 Böhm-Bawerk 1949, pp. 5–84.

55 Ibid.

56 Böhm-Bawerk 1949, p. 85.

57 Böhm-Bawerk 1949, p. 82.

58 Ibid.

59 Starosta 2008; Starosta 2016, pp. 119ff.

of Böhm-Bawerk's critique. In a nutshell, the issue comes down to Böhm-Bawerk's failure to grasp the fetish-like character of the 'value-objectivity' which constitutes the essential 'form determination' that stamps the product of labour as a generally-exchangeable thing and hence as a commodity.⁶⁰ In other words, Böhm-Bawerk overlooks the fact that, as the *historically-specific* property of *general exchangeability*, value is an objective attribute that is *immanent* in the commodity, and is distinguishable from both exchange value, which is its necessary form of appearance, and (privately-performed socially necessary) abstract labour, which constitutes its substance. By contrast, as Elson notes,⁶¹ in his (mis)reading of Marx's argument Böhm-Bawerk *unmediatedly* passes over from the exchange relation to labour. Relatedly, he misses the crucial point that Marx is not analysing the commodity 'in general', but a *capitalist* commodity, that is, one existing in a society in which commodity production has become the *general* social relation and whose exchange therefore does involve *equivalence* (hence *qualitative identity* and *quantitative necessity*).⁶² Thus, he fails to understand that it is the purely social, yet practically real, reified objectivity of value that makes different commodities 'count as' qualitatively identical, and which, as a consequence, negates in practice all qualitative differences intrinsic to the materiality of the varied kinds of labours that produce them. Therefore, it is this historically-specific form of the social life process that 'reduces' individual products of labour to their most general remaining common determination, namely: that of being materialisations of abstract, socially-necessary simple labour.⁶³ In other words, the actual 'proof' that the reduction of complex to simple labour does take place is synonymous with the exposition of the determinations underlying the social constitution of the fetish-like 'objectivity of value', and is a different matter from the analysis of the quantitative proportion in which complex labour 'counts as' multiplied simple labour. In his 'asocial' misreading of Marx's critique of political economy, Böhm-Bawerk conflated these two clearly distinct issues.⁶⁴

60 Starosta 2017.

61 Elson 1979, p. 157.

62 Arthur 1979, p. 71.

63 Starosta 2016, pp. 141ff.

64 A similar point was already suggested by Rubin's intervention in the debate (Rubin 1990, pp. 167–9). However, his insights are somewhat weakened by his 'circulationist' conception of value, which makes it liable to Böhm-Bawerk's accusation of circular reasoning. For an in-depth critical assessment of Rubin's circulationist value-form theory, see Kicillof and Starosta 2007a. Incidentally, it should be added at this stage that at stake here is a more general methodological issue which sets apart the Marxian *critique of political economy* from his critics' *economics*. Specifically, from Marx's dialectical perspective, the fundamental aspect in the explanation of social phenomena lies in the unfolding of their

Furthermore, the 'social process' that according to Marx 'accomplishes' such reduction 'behind the back of the producers' is not, *pace* Böhm-Bawerk, the 'exchange process'. That social process actually is the *indirect* mode through which the social character of human productive activity attains its immanent unity when each production process is organised in the form of *private and independent labours*.⁶⁵ Under these circumstances, the social character of individual labours that comprise the global labour of society is not consciously established on the basis of their concrete or useful character and before they are actually exerted. Instead, it is recognised only '*post-festum*', and on the basis of their intrinsic *material* identity as qualitatively homogeneous productive expenditures of sheer human corporeality (brain, nerves, muscles, etc.), which, once objectified in the product, become *socially* represented as the thing-like attribute of the product that allows it to enter the exchange relation and manifest indirectly the human subject's immanent determination as an individual organ of social labour: the form of general exchangeability or the value-form.⁶⁶ As Marx himself acknowledges, the scientific description of this social process and its practically-determined elimination of all material qualitative differences in the concrete commodity-producing labours might sound like an absurdity, and certainly it did so to someone like Böhm-Bawerk. Still, as Marx continues, this 'absurd form' is exactly the way in which the relation between the different private labours and the collective labour of society appears to the producers themselves when the human life process takes this historically-specific social form.⁶⁷ Thus it is not Marx's 'dialectical

qualitative determination, in the immanent unity of its inner *content* and the latter's more developed *forms of existence*. The 'proof' or 'demonstration' is thus not accomplished by means of construction of mathematical models but through 'systematic-dialectical' unfolding of the sequence of necessary determinations. Note that this does not mean that the quantitative issue is entirely irrelevant. However, the exactitude of its resolution depends on the clarity over the underlying qualitative determination. In other words, only once the quality of a certain phenomenon has been uncovered can one proceed to investigate its quantitative expression through relations of measure. Indeed, this is precisely the way in which Marx structured his exposition in *Capital*. Thus, for instance, Chapter 11 on the 'Rate and Mass of Surplus-Value' and Chapter 17 on the 'Changes of Magnitude in the Price of Labour-Power and in Surplus-Value' are located towards the *end*, respectively, of the sections on Absolute Surplus-Value and on Relative Surplus-Value, i.e. only once their qualitative determinations have been 'dialectically' unfolded. Evidently, the original general methodological argument for this aspect of dialectical thought lies in Hegel's *Science of Logic*, which demonstrates the necessity for the process of cognition to proceed from 'quality' to 'quantity'.

65 Marx 1976a, pp. 163ff.

66 Kicillof and Starosta 2011.

67 Marx 1976a, p. 169.

skill' that, through word play, substitutes 'count as' for 'to be', but the fetishised social form of capitalist production which, in a particularly violent manner, accomplishes the said 'substitution' which reduces all qualitative differences in human labour to quantitative ones.

Lastly, this means that there is no circularity in Marx's argument. For the social constitution of the value-objectivity of the product labour takes place within the immediate process of production and is therefore *presupposed* by the establishment of the exchange relation which only manifests, in a 'roundabout' way, the social determinations of individual labour already posited in the labour process.

In this sense, this means that Böhm-Bawerk misconstrues Marx's actual reasoning on the *general ground* for the reduction of complex labour in Chapter 1 of *Capital*. However, this by itself does not mean that Marx *fully* unfolds such an explanation. As we have acknowledged above, while not necessarily wrong, Marx's explanation for the multiplied value-producing powers of skilled labour is admittedly underdeveloped. More concretely, Marx did not offer a detailed exposition of the determinations which would allow the clear and unequivocal *qualitative* identification of which specific simple labours become 'condensed' in complex labour. As a consequence, he could not provide an account of the *quantitative* determination of the degree in which skilled labour 'counts as' multiplied unskilled labour, in a way which is consistent with the determination of the value of commodities by the socially-necessary abstract labour objectified in them in the production process. As we have seen, this is exactly what most of the participants in the 'classic' debate attempted to develop in their response to Böhm-Bawerk's criticisms, along broad lines which, as the latter admitted, appeared to avoid his accusations of theoretical inconsistency. Let us now therefore turn to the critical assessment of those post-Marxian contributions, in order to see whether they effectively succeeded in solving the so-called reduction problem.

This first attempt at a solution was that of Bernstein,⁶⁸ which, similarly to Himmelweit's more recent contribution,⁶⁹ essentially comes down to grounding the higher value of the product of complex labour in the greater value of skilled labour-power. However, as other Marxists noted very early on in the debate, this explanation cannot but relapse into a theory of value founded on 'costs of production' instead of explaining the value of commodities on the basis of the living labour objectified in their production. Moreover, insofar as it revolves around the process of formation of the general rate of profit in the

68 Bernstein 1899/1900.

69 Himmelweit 1984.

circulation process, Himmelweit's approach in particular certainly falls prey to Böhm-Bawerk's accusation of circular reasoning.

In their response, Hilferding-Bauer and their followers obviously thought that their reduction procedure avoided Bernstein's error of grounding the value of the product of skilled labour in the value of skilled labour-power. However, as hinted at by the aforementioned critics of the 'classic' solution,⁷⁰ it seems to us that by including in the value of the product of skilled labour the socially necessary labours required for the production of skilled labour-power, they end up relapsing into a similar elementary mistake, namely: the conflation of the value of labour-power (the 'past labour' objectified in it) and its use-value (the value-positing capacity of living labour in action). In effect, regardless of the degree of complexity embodied in the worker's labour-power, there can be no trace of the past labour required for the production of skilled labour-power in the 'multiplied' value-positing powers of skilled living labour in action. In this sense, the labour of the 'technical educator' or the labour objectified in a textbook is hardly different from those labours objectified in the most prosaic of commodities that the worker consumes during her lunchtime.⁷¹ Assuming that they have the commodity-form, they are all part of the privately-undertaken socially necessary labour required for the production of the commodity labour-power and, in that condition, they are absolutely independent of the labour that the worker will perform when setting her labour-power into motion in the capitalist labour process.⁷²

Let us now consider the main solutions that have proliferated following the demise of the 'classic' paradigm as reviewed above, starting with those that treat the greater complexity of labour as involving a higher *productivity*. The first critical point to make in this regard is that these solutions tend to conflate different determinations of labour which are clearly distinguished in the Marxian explanation of value. This conflation is particularly pronounced in the case of P. Harvey,⁷³ whose argument, as we have seen, adds the *intensity* of labour to the mix: his explanation of the multiplied value-creating powers

70 Tortajada 1977; Harvey 2006; Bidet 2007.

71 Failure to grasp this elementary point led some Marxists to consider that the solution to the complex-labour problem required the prior elucidation of the admittedly thorny issue of whether state-provided education was productive of value and surplus-value (e.g. Rowthorn 1974). But this viewpoint overlooks the fact that, as happens with *any* other use-value consumed by the wage-worker, education may enter the determination of the *value of 'skilled' labour-power*, but it can never determine the *value of the product* of skilled labour.

72 Marx 1976a, pp. 300–1.

73 Harvey 1985.

of skilled labour is simply based on an analogy with more intensive labour. However, it seems to us that such an analogy does not withstand close scrutiny. It is self-evident that a 'sculptor' could engage in a (socially-necessary) extensive and intensive expenditure of her bodily productive powers identical to that of a 'stone-breaker', but her labour would nonetheless still involve a greater complexity: the former's labour-power would still need a longer period of learning before it could be expended productively, which would thus need to be reflected in a higher magnitude of value of its product of labour. Things get onto even shakier ground with the explanation of the augmented value-creating powers of more-skilled labour on the basis of their alleged greater physical productivity. In the first place, more productive labour involves, in its very definition, that 'it provides more product in the same time-period', and given that 'a definite quantity of labour time continues to be represented in the same magnitude of value', 'it lessens the value of the commodity' since 'it curtails the labour time during which the same commodity can be produced'.⁷⁴ By contrast, as we shall see in more detail below, and as even Böhm-Bawerk was (reluctantly) ready to admit to Grabski, skilled labour involves a *greater* expenditure of labour for the production of a commodity. In the second place, the association between complexity and *physical* productivity of labour is also rather problematic. For while comparative analysis of the latter always refers to the production of the *same* use-value, at stake in the former is the comparison between labours that produce *different* use-values. In this sense, as Rubin already noted in his intervention in the debate in the 1920s, this kind of solution confounds the question of the reduction of complex to simple labour with that of individual to socially-necessary labour for the production of a determinate commodity.⁷⁵

This latter confusion can be also found in Bidet's own association of greater complexity of labour with higher productivity, although for another reason.⁷⁶ In the case of this author, the confusion comes up in the first step of his idiosyncratic solution to the reduction problem, which, as we have seen, consists in drastically 'delinking' the special productive qualities of complex labour-power and its multiplied value-positing capacity. In turn, this connection is severed by arguing that in the context of the subsumption of labour under capital, value-positing is the product of the collective labourer of the workshop as a whole. Therefore, Bidet concludes that it is meaningless to 'individualise the

74 Marx 1988, p. 334.

75 Rubin 1990, p. 160.

76 Bidet 2007.

incidence of specialised labour on the increase in value'.⁷⁷ Now, while it is true that at the systematic level of the *real* subsumption of labour to capital the commodity proves to be the result of the combined productive activity of the collective worker, we think that Bidet's conclusion regarding the vanishing of the incidence of skilled labour is too hasty, and actually does not follow from the said premise. Certainly, in Chapter 13 of *Capital* on 'Co-operation', Marx remarks that with the determination of individual wage-workers as members of a directly collective productive body within the workshop, the value they produce comes to be the *organic* result of their collective working day, so that 'each individual man's day is an aliquot part' of the latter.⁷⁸ Thus, 'whenever a certain minimum number of workers are employed together', individual qualitative differences from the average worker 'compensate each other and vanish'.⁷⁹ The point is therefore that the consequence of the determination of the collective labourer as the material subject of value-positing is the practically-objective constitution of commodity-producing labour as *average social labour*. However, the kind of qualitative divergence in the individual productive attributes of wage-workers that Marx refers to in these pages is *not* the one that derives from '*acquired*' skills (which are those that count for the determination of complex labour). Rather, he clearly refers to the cancelling out of individual differences in '*natural*' skills, and therefore to one of the aspects of the reduction of *individual* to *socially-necessary* labour. But there are no reasons why the formation of the collective labourer would make the incidence of 'specialised labour' on value-production vanish. Here it is important to remember that at stake in the complex-labour reduction problem is the production of two *different use-values*. And even if each commodity is now considered as the immanent product of a collective labourer, what happens is simply the practically-objective constitution of an *average degree of complexity* or *skill-level* for each 'workshop as a whole', out of their respective compositions of the individual ('acquired') skills of its members. The greater the average degree of complexity of a certain collective labourer, the (proportionally) greater the magnitude of value produced. In sum, qualitative differences derived from divergences in 'acquired' skills do not vanish with the formation of the collective labourer as the material subject of capitalist commodity-production. The complex labour 'reduction problem' therefore still stands unsolved.⁸⁰

77 Bidet 2007, p. 29.

78 Marx 1976a, pp. 440–1.

79 Ibid.

80 The second step in Bidet's argument is to submit that a collective labourer with a higher composition of skilled labourers does experience an increase in the 'overall productivity of the workshop'. And since in his particular take on the source of extra surplus-value,

The remaining contributions to examine are those which approach the skilled-labour reduction problem by resorting to capital's tendency towards the universal and absolute deskilling of human labour in its search for relative surplus-value.⁸¹ There are at least three issues which undermine this attempt at a solution. In the first place, as we have already seen (and will discuss further below), according to Marx the treatment of this reduction pertains to the level of abstraction of the *simplest determinations of value* (a fact that his critics like Böhm-Bawerk perceptively and duly noted). Without solid grounds for the value-form already established at that systematic level, the whole subsequent systematic development of form-determinations cannot but rest on shaky foundations. But this is precisely what happens if, as these scholars propose, the explanation of the reduction is deferred to the systematic level of the capital-form. One could of course decide, for presentational reasons, to postpone the full exposition of a certain determination until a more concrete level of abstraction is reached. But such an explanation must surely be *possible* to be developed at the more abstract systematic level, which certainly cannot be done if based on capital's tendency for deskilling. In the second place, even at a theoretical level, the tendency for the degradation of the productive attributes of wage-labourers is not the only one presiding over the transformations of the capitalist labour process brought about by the increasing automation process of large-scale industry (although the former is admittedly the one that captured Marx's focus in *Capital*). As a matter of fact, large-scale industry also involves another tendency for the *expansion* of the productive attributes of the part of the collective labourer responsible for the advance in the conscious control of the movement of natural forces (that is,

which Marx discusses in Chapter 12 of *Capital*, exceptionally productive labour is seen as creating in equal periods of time greater values than average social labour of the same kind (Bidet 2007, pp. 20–1), a greater incidence of 'specialised labour' in a collective worker leads to a concomitant increase in the amount of value produced. In our view, that an increase in the productivity of labour allows the respective individual capital to temporarily appropriate an extra surplus-value does not change the fact that 'a definite quantity of labour time continues to be represented in the same magnitude of value' (Marx 1988, p. 334). In effect, if value-positing is a process taking place in production and not in circulation, and provided that the total extensive and intensive expenditure of labour-power does not change as a result of the introduction of a technical innovation, it follows that the total mass of value produced remains the same before and after the productivity increase. Besides, we have seen that explanations based on the association of complexity and productivity conflate determinations pertaining to the production of different use-values with those pertaining to use-values of the same kind.

81 Uno 1980, p. 26, n. 2; Kay 1976; Harvey 2006, pp. 57–61; Itoh 1987; Carchedi 1991, pp. 130–4, Sekine 1997, p. 39.

science) and its technological applications in the directly social organisation of the immediate production process. Although not explicitly addressed by Marx in *Capital*,⁸² it is clear that the production of relative surplus-value requires from these workers ever more *complex* forms of labour. As much as those discussed in *Capital*, these are also ‘immediate effects of machine production on the worker’.⁸³ Finally, even if we disregard this other tendency, the fact remains that as for all tendencies, that which deskills labour-power is only realised gradually or by degrees. Thus, special skills are not eroded overnight but through a long-drawn-out historical process. And as long as differences in the degree of complexity of different labours persist ‘empirically’, the question of the determination of the value of the products of skilled labour still stands in need of a solution. In the next section, we therefore sketch out an alternative manner of approaching the reduction problem which, while going somewhat beyond what Marx explicitly said on the subject, is in line with his explanation of the simplest determinations of both value and surplus-value that he did unfold in *Capital* Volume 1.

5 The Determination of Complex Labour in Value-production

As argued above, a key insight in Marx’s *analysis of the commodity* that needs to be recovered for the purpose of addressing the skilled-labour problem is that it is the fetish-like value-objectivity that socially makes different commodities count as qualitatively identical and which, therefore, negates ‘in practice’ all qualitative differences intrinsic to the materiality of the varied kinds of labours that produce them. The *analysis of commodity-producing labour* must therefore consist in finding an underlying material qualitative identity behind its apparently varied concrete forms. Specifically, Marx identifies in Chapter 1 of *Capital* three kinds of qualitative differences which appear at first sight to negate the role of labour as the homogeneous substance of value.

In the first place, there is the diversity in the individual expenditures of labour for the production of the same use-value. According to Marx, these derive both from the differences in the dispositions and ‘natural’ abilities of commodity-producers and, more fundamentally, from the technical conditions of production.⁸⁴ In this respect, Marx argues that these differences are transcended by the value-form insofar as it is only the amount of individual

82 But see Marx 1976b, pp. 1039–40.

83 See Starosta 2016, pp. 233ff.

84 Marx 1976a, p. 129.

labour-time that accords with the *normal* conditions of production, and the average degree of skill and intensity, that counts for the determination of the magnitude of value.⁸⁵ In other words, only insofar as it is socially necessary does the abstract character of individual private labour become socially represented in the form of value.

The second difference pertains to the determinate character of each concrete labour. Evidently, 'tailoring and weaving are qualitatively different forms of labour'.⁸⁶ In the analysis of the commodity as such (Section 1 of Chapter 1 of *Capital*), this difference had already been overcome only 'negatively', that is, simply by *leaving aside* 'the determinate quality of productive activity'.⁸⁷ Thus, in the consideration of *objectified* labour, this difference had been resolved by considering the substance of value as 'homogeneous human labour, i.e. of human labour-power without regard to the form of its expenditure'.⁸⁸ By contrast, in the analysis of commodity-producing labour (Section 2), hence of labour as *activity*, the exposition now progresses to the discovery of the underlying *positive material quality* of the substance of value as 'a productive expenditure of human brains, muscles, nerves, hands, etc.', which Marx terms *abstract labour*.⁸⁹ The qualitative difference immanent in the different forms of labour thereby becomes transcended in the determination of value-positing labour as a sheer expenditure of human labour-power, with those varied useful labours determined as 'merely two different forms' of that expenditure.

85 Ibid.

86 Marx 1976a, p. 134.

87 Ibid.

88 Marx 1976a, p. 128.

89 Marx 1976a, p. 134. As a reaction to the ahistorical, Ricardian reading of Marx's account of the value-form, the 'new consensus' tends to see abstract labour as a purely historical, specific social form. See, among others, De Angelis 1995; Postone 1996; Reuten 1993; Arthur 2001; Saad-Filho 1997; Bellofiore 2009; Heinrich 2009; Mavroudeas 2004; McGlone and Kliman 2004. We have developed a more extended critique of this new consensus in Kicillof and Starosta 2007a and 2007b. Here we can only offer some very brief remarks on this issue. Abstract labour is a generic material form, a productive expenditure of human corporeality. What is specific to capitalist society is the role it plays by being determined as the substance of the most abstract form of objectified social mediation, namely: value. In other words, at stake here is the *movement of the contradiction* between the generic, physiological materiality of abstract labour and its historically-specific *social* determination as the substance of value deriving from the *private* character of labour in capitalism. See also Carchedi 2009 and 2011a, pp. 60–74, and Robles Báez 2004, for a similar argument. Murray 2000 comes very close to recognising this through the distinction between 'physiological' abstract labour and 'practically abstract' labour, thus shifting his thinking from the earlier perspective adopted in Murray 1988. The debate on the nature of abstract labour has not been settled and has continued in more recent times. See Bonefeld 2010 and 2011; Carchedi 2011b; Kicillof and Starosta 2011.

The third qualitative difference that comes up in the analysis of commodity-producing labour is precisely that which characterises complex labour, which we will therefore examine more closely. Marx notes here that ‘human labour-power must itself have attained a certain level of development before it can be expended in this or that form’.⁹⁰ The analysis of labour as *actuality* now passes over to the analysis of labour-power as the human *potentiality* for that productive activity. Thus, the different labours which had been reduced to their common quality as mere productive expenditure of human corporeality now turn out to be further differentiated qualitatively on the basis of the varying degrees of complexity of the respective labour-powers of which they are an expenditure. In the face of this distinction, Marx firstly reminds the reader of the *lack of qualitative difference* with which ‘objectified labour’ appeared when it was discovered as the substance of the value. In effect, in the discovery of the content of the ‘ghostly objectivity’ of value, labour did not appear as the actualisation of a labour-power that has attained more or less development but as mere ‘homogeneous human labour’. Similarly to the previous two cases, the need to transcend this difference must consist in revealing the specific way in which the value-form extinguishes ‘in practice’ those different qualities in commodity-producing labour. In this case, Marx concludes that the labour represented in the value of commodities is ‘*simple average labour*’, i.e. ‘the expenditure ... of the labour-power possessed in his bodily organism by every ordinary man, on the average, without being developed in any special way’.⁹¹ Therefore, *through the value-form* all those labours whose performance requires a more complex labour-power are *socially* represented as a quantitative sum (or multiple) of units of simple labour, which results from the consequent *practical* reduction of the production of skilled labour-power itself to an accumulated expenditure of simple labour-power.

As we have seen, this explanation does not suffice to *qualitatively* specify the simple labours that must be considered in the production of more complex labour-power and, *therefore*, to be able to *quantitatively* establish the degree in which the value-positing powers of complex labour become multiplied. We have also seen that the subsequent Marxist debate also failed to approach the question in a manner which is consistent with the analysis of the commodity that Marx did provide in *Capital*. Let us therefore elaborate further on the value-positing powers of skilled labour on the basis of the simplest determinations of the value-form.

90 Marx 1976a, pp. 134–5.

91 Marx 1976a, p. 135.

Following Marx's analysis of the commodity, we have argued that only privately-undertaken social labour is value-producing. A first corollary of this is that only those simple labours which have been privately organised vis-à-vis the consumer of the product of complex labour must be considered as being socially represented in the latter's value. The crucial question that follows is: when does the private production of 'complex commodities' actually start? Under a mode of production in which social labour is privately-undertaken, the actual starting point of the organisation of any productive activity is the recognition by the private producer of a potentially solvent social need for a determinate use-value. Now, if the production of the latter actually requires the expenditure of a 'specially developed' labour-power, the private organisation of social labour actually commences with an earlier step, namely, the production of a labour-power with the requisite determinate quality (hence complexity). Thus, the commodity-producer must firstly expend privately her simple labour-power with a view to developing the productive attributes that must be set into motion in order to produce the said 'complex commodity'. In other words, she must *learn* to make that potentially needed use-value. Note that this latter privately-undertaken expenditure of simple labour-power is exerted solely with the purpose of producing the 'complex' use-value under consideration. In this sense, it can hardly be distinguished from the expenditure of simple labour-power entailed by the production of the most 'prosaic' commodities. More concretely, it is part of the conscious expenditure of the bodily productive powers of the human being, which is organised in a private manner, and which, therefore, is an equally constitutive part of the socially-necessary labour time that becomes objectified as the value of its product. Thus, as Iñigo Carrera puts it, 'complex labour is a simple expenditure of human labour power whose initial purpose is not the production of a use-value which is external to the subject who is performing it, but the development of this very working subject's aptitude to produce such more "complex" use-values.'⁹²

Now, the discussion so far might seem just to reinstate, maybe with greater precision, the classic 'Hilferding-Bauer' solution. But let us examine more closely the part of the production process that corresponds to the development of complex labour-power. At the start of the process, the commodity-producer is, as 'every ordinary human being', evidently endowed with a *simple* labour-power. No prior expenditure of labour-power is needed to undertake the special development of her own labour-power. However, during the time in which she is learning her complex 'trade', the commodity-producer must obviously reconstitute the simple labour-power which has been expended

92 Iñigo Carrera 2007, p. 235.

in the learning process. And this means that she must consume certain use-values which, for the sake of simplicity, we shall assume are all the product of privately-performed social labour, that is, commodities. What is more, the special development of her complex labour-power might entail the consumption of certain specific commodities beyond those necessary for the reconstitution of simple labour-power; for instance, the services of a 'technical educator', as usually exemplified in the classic Marxist discussion. It might then seem that all the social labour materialised in those commodities which reconstitute or further develop the labour-power of the complex commodity-producer during the learning process must be included in the determination of the value of the product of skilled labour. Indeed, those labours appear to have no purpose other than the production of a skilled labour-power and, through this mediation, the production of the 'complex commodity' under consideration. As a matter of fact, this is the conclusion drawn by the classic solution. However, we think that this conclusion is faulty and is the source of the aforementioned confusion of constant and variable capital rightly highlighted by critics of the classic solution.

In effect, as follows from Marx's theory of the value-form, the labour objectified in the commodities consumed by the private owner of labour-power for the sake of her personal material reproduction does not enter the formation of the value of the commodity that she produces. The reasons for this are quite straightforward. At the level of abstraction of the simple circulation of commodities, the final goal of the social metabolic process is the 'consumption, the satisfaction of needs, in short use-value'.⁹³ It thereby follows that when those commodities needed for the production of labour-power are consumed by the commodity-producer, the transformation of the materiality of those means of subsistence into productive attributes of the human subject brings this particular cycle of social reproduction to a close. The labour objectified in them, which had been privately-undertaken, thus achieves final recognition as socially useful and so do their products as social use-values which, through the consumptive appropriation of their materiality, are eventually realised.⁹⁴ And as these commodities' social use-value is definitively extinguished through their use or consumption, so is the value of which they were 'material bearers'. Thus, when the commodity-producer in question undertakes the organisation of the private production of a use-value which she deems socially useful (whether simple or complex), no trace of the value of the commodities she had consumed to produce her labour-power

93 Marx 1976a, p. 135.

94 Marx 1976a, p. 126.

actually exists. In fact, a *new* cycle of social reproduction starts afresh, which might (or might not) yield a social use-value, whose consumption by another member of society will bring the former to a close.

In brief, our point is that the only simple labour that becomes condensed in the 'direct' labour that produces use-values external to the working subject, and which thereby turns into complex labour, is that privately performed by the commodity producer in order to develop the productive attributes of her labour-power that were subsequently set into motion in the direct production process of the respective use-value. To put it in the terms of the classic debate, the only labour that enters into the determination of the multiplied value-positing powers of complex labour is that of the 'student'. Hilferding's and Bauer's respective mistake, uncritically reproduced by all those other Marxists who followed their flawed solution, was to lump the student's labour together with that of the 'technical educator', thus overlooking the fact that the latter and the former play entirely different parts in the social-production process.

All this discussion allows us to draw two fundamental preliminary conclusions. In the first place, the differences in complexity of the varying commodity-producing labours are overcome 'in practice' by the value-form through the social representation of all objectified labour as an accumulation of simple labour. In the second place, the higher value of the product of skilled labour is actually explained by the same determinations as in the case of any other commodity: by the privately-performed socially necessary abstract labour required for its production. The key, however, resides in being absolutely clear and precise about which private labours are socially necessary *just* for the production of the *product of skilled labour*. And these come down to the living labour of the skilled worker, the 'dead' labour objectified in the means of production utilised by living labour in the production process and, crucially, the labour expended *by the skilled labourer herself* (and *not that expended by the 'technical educator'*) with a view to acquiring the skills which are *socially necessary for the production of the said 'complex commodity'*.

Now, as should be methodologically evident, this latter conclusion cannot be altered when we consider value-production as a moment of the production of capital. Under the command of capital, commodity-production is mediated by the determination of labour-power as a commodity.⁹⁵ Consequently, what we previously considered as a single private production process becomes split into two separate processes: one which produces the commodity 'complex labour-power' and another that produces a 'complex commodity'. Furthermore, when subsumed under capital, the goal of social production is

95 Marx 1976a, p. 271.

no longer the satisfaction of needs but the 'valorization of value'.⁹⁶ Hence, in capitalist society the process of individual consumption does not bring each cycle of the process of metabolism to a close. The latter moment is reached in the sphere where labour-power is consumed for the production of more value than its reproduction costs, which is the phase of *productive* consumption or the labour process.⁹⁷ The process of value-production of the product of complex labour must be reconsidered in the light of these more concrete determinations.

As argued above, this process starts with the development of skilled labour-power by the labourer herself.⁹⁸ But now the material unity between this phase

96 Marx 1976a, p. 253.

97 Starosta and Caligaris 2016.

98 As far as the determination of the value-positing powers of complex labour is concerned, it is completely immaterial whether the development of the special skills of the labourer takes place through a collective and cooperative learning process, such as that which characterises formal education (whether provided by the state or by an individual capital), or through a purely individual process (say, in the form of home schooling). As we argue in this paper, the student's 'learning labour' is a moment of the socially-necessary simple abstract labour that is privately undertaken in order to produce a certain 'complex' use-value (insofar as it develops the special attributes of labour-power that are required to produce the latter). It follows that all the determinations of commodity-producing 'direct labour' are equally valid for 'learning labour'. In this sense, Marx's discussion in *Capital* of the *systematic* passage from the formal subsumption of labour to capital (at whose level of abstraction labour was *materially* considered as a 'purely individual process', albeit already under the supervision of the capitalist), to its real subsumption (which materially transforms the product 'into a social product, the joint product of a collective labourer, i.e. a combination of workers') (Marx 1976a, p. 643), applies to 'learning labour' as well. The fact that the immediate purpose and outcome of this labour is skilled labour-power and not a use-value external to the working subject makes no difference. On the one hand, as far as *use value-positing* is concerned, with '... the co-operative character of the labour process, there necessarily occurs a progressive extension of the concept of that labour, the productive worker', so that 'the definition of productive labour [...] remains correct for the collective labourer, considered as a whole. But it no longer holds good for each member taken individually' (Marx 1976a, pp. 643–4) (although in the case of learning, this collective nature of the labour process does not tend to go beyond the figure of what Marx called 'simple co-operation'). On the other hand, as far as *value-positing* is concerned, although this portion of social labour is thereby organised in a directly social manner, it does so only within the confines of a particular node of the social division of labour, whose *general social unity is still established indirectly through the exchange of the products of labour as commodities*. In other words, even when organised co-operatively, the learning process is, as an inner moment of complex labour, privately-undertaken *vis-à-vis* the consumer of its final product, which is the *complex commodity*. It is therefore value-producing and therefore 'potentiates' the value-positing powers of 'direct' complex labour. To put it simply, whether purely individual or collective, the learning process of, say, the software programmer is part of the privately-performed simple abstract labour which

of the production process and the actual making of the ‘complex commodity’ is formally mediated by capital’s purchase of (skilled) labour-power as a specific commodity ‘whose use-value possesses the peculiar property of being a source of value’ and which, ‘like all other commodities ... has a value’.⁹⁹ The latter is the value of the commodities that the wage-worker has consumed for her own material reproduction which, insofar as the cycle of social reproduction no longer ends with individual consumption but with the valorisation of capital, reappears as the value of the commodity labour-power, instead of being annihilated through the consumption of means of subsistence, as happened with the simple commodity producer.¹⁰⁰ Thus, capital purchases complex labour-power alongside the requisite means of production to set the valorisation process into motion. In this process, the concrete living labour of the wage-worker transfers (hence preserves) the value of means of production onto the product.¹⁰¹ But things are different with the value of labour-power. As (skilled) labour-power is effectively consumed (and thereby exploited) by capital in the immediate production process as a specific commodity which is capable of producing surplus-value, its use-value suffers final appropriation and, with that, its value is definitively extinguished. On the other hand, that very consumption of labour-power by capital privately produces new ‘complex commodities’ and, hence, new value (which reproduces variable capital and yields surplus-value). Crucially, note that in this process *absolutely no trace of the privately-performed past social labour required for the production of skilled labour-power remains in need of recognition of its social usefulness. Hence, not an ‘atom’ of that part of social labour must be represented as the value of the product of skilled labour.* As happened at the level of abstraction of simple commodity production, the value of the product of skilled labour is solely formed by the simple individual labour expended by the wage-worker in the production of her skills, the new living labour she performs to make the ‘complex commodity’ and the value of means of production (that she preserves at no cost for capital).

is socially necessary for the production of software as a social use-value. Note, finally, that in all this it should always be borne in mind that at stake here is the consideration of the student’s *learning* labour only and not the ‘technical educator’s *teaching* labour’. The use-value under examination is ‘software’ and not the ‘degree in software programming’, i.e. not ‘educational services’ as a use-value which is consumed by the student in producing *her labour-power as a commodity*, but the student’s own conscious and voluntary expenditure of her labour-power in order to make it more *skilled*.

99 Marx 1976a, pp. 270, 274.

100 See Starosta and Caligaris 2016 for a more extended discussion of this.

101 Marx 1976a, p. 274.

Now, at first sight, this discussion seems to clash with Marx's repeated remarks that skilled wage-labourers produce more value per unit of time than simple labourers in a ratio that reflects the higher value of their labour-power, so that the rate of surplus-value remains identical in both cases (see Section 1 above for references). However, we think that it is possible to render both arguments consistent. In our view, Marx was probably assuming that the use-values needed for the daily reproduction of each type of labour-power are quantitatively and qualitatively identical (and that their respective 'retirement ages' are equal). Thus, for each day that the skilled labourer spends on the acquisition of her skills, there will be an equally proportional increase in both the value of her labour-power and her multiplied value-positing powers. Although this identity of 'consumption norms' could sound problematic from a contemporary viewpoint, it might have been reasonable for Marx to make that assumption in a historical period when he observed a high degree of, and growing tendency towards, homogeneity in the conditions of material reproduction of wage-workers. Thus, rather than postulating a *causal link* between the higher value of skilled labour-power and its multiplied value-positing powers, we think that Marx was simply taking the former as a relatively accurate '*observable*' indicator of the latter. Nevertheless, this does mean that any qualitative or quantitative difference in the respective daily consumption-requirements of skilled and simple wage-labourers necessarily implies the existence of different rates of surplus-value. But, as argued elsewhere, this implication does not compromise the validity of Marx's explanation of the source of surplus-value in the exploitation of the wage-worker.¹⁰²

In effect, under the command of capital the wage-worker performs as much (surplus-)labour as the preservation of her productive attributes in the conditions determined by the valorisation of the total social capital allows, i.e. she works for a *normal* working day.¹⁰³ In exchange, she receives a sum of money that represents an equivalent of the socially-necessary labour time which is necessary for the continued reproduction of those productive attributes throughout her lifetime. In other words, in its simplest and most general determination, she is paid the full value of labour-power.¹⁰⁴ Consequently, the fact that one type of worker (e.g. more or less skilled) yields more or less surplus-value than the other can only *quantitatively* modify the *degree* in which capital appropriates her surplus-labour. But it does not change the fact of the wage-worker's exploitation by capital as the source of

102 Starosta and Caligaris 2016.

103 Marx 1976a, Chapter 10; Starosta 2016, Chapter 7.

104 Marx 1976a, pp. 343–4.

the latter's valorisation. Furthermore, note that this circumstance would be entirely immaterial from the viewpoint of the individual capital, insofar as the existence of such differences in the rate of surplus-value would enter into the process of formation of the general rate of profit and therefore be averaged out in the sphere of circulation, as formally happens with all qualitative differences in the material conditions of production and rotation of individual capitals such as those springing from the organic composition of capital and/or turnover times (which are the ones explicitly addressed by Marx).¹⁰⁵ In this way, individual capitals would still realise their inner determination as aliquot parts of the total social capital, i.e. as 'hostile brothers' valorised to an equal degree through the collective exploitation of the working class as a whole.¹⁰⁶

6 Conclusion

This article has critically examined the controversies over the determination of complex labour in value-production and offered an alternative solution which is consistent with the Marxian critique of political economy. Key to this endeavour has been the recognition that Marx's own treatment of the question is at the very least incomplete. Thus, although we showed that the critiques of the Marxian solution do not rest on solid foundations, Marx certainly does not spell out (or at least not systematically enough in light of subsequent controversies) the *qualitative* determination that specifies the simple labours that

¹⁰⁵ In his exposition of the formation of the general rate of profit, Marx points out that the analytic assumption that 'the rate of surplus-value [...] is the same in all the spheres of production' expresses the more general methodological tenet according to which, at this level of abstraction of the dialectical presentation, it must always be considered 'that actual conditions correspond to their concept, or, and this amounts to the same thing, actual conditions are depicted only in so far as they express their own general type' (Marx 2015, p. 250; Marx 1991, pp. 241–2). In our view, this means that the equality of rates of surplus-value among individual capitals does not necessarily reflect the immediate concrete forms taken by the capitalistic process of production in the course of every stage of capitalist development, but expresses the *historical tendency of capitalist accumulation* (Marx 1976a, pp. 928–9) as determined by its *general law* (Marx 1976a, pp. 798–9). As we have seen, Marx considered that, as a result of the development of large-scale industry (i.e. of the most developed material form of the capitalist production process), there was a tendency for a growing *universalisation* or *homogenisation* of the productive attributes of wage-workers (albeit one-sidedly grasped by Marx as deriving from the degradation of their productive subjectivity) (Marx 1976a, p. 545). But this necessarily meant that, under *normal* circumstances (i.e. according to its 'norm' or 'concept'), there would be a tendency for the equalisation of rates of surplus-value.

¹⁰⁶ Marx 2015, pp. 306–7; Marx 1991, pp. 298–9.

constitute complex labour, and whose *quantitative expression* is manifested in the degree in which its value-positing powers become multiplied.

In our reconstruction of the history of the ‘skilled labour’ debate, we have critically reviewed the different solutions put forward by Marxists and showed that none of them manages to remain consistent with the foundations of the Marxian critique of political economy. By contrast, we have offered an alternative approach that is grounded in a rigorous reading of the ‘analysis of the commodity’ presented in the opening pages of *Capital*. In the first place, we argued that the differences in the complexity of labour are eliminated in practice through the value-objectivity characterising the commodity-form of the product of labour. In effect, the labour objectified in the commodity becomes *socially* determined as simple labour as far as its historically-specific role as substance of value is concerned. In the second place, we argued that the degree in which complex labour counts as a multiple of simple labour in value-production is solely determined by the expenditure of simple labour-power that the complex labourer needs to undertake in order to produce her own specially-developed labour-power.

References

- Adler, Georg 1887, *Die Grundlagen der Karl Marxschen Kritik der bestehenden Volkswirtschaft*, Tübingen: H. Laupp.
- Arthur, Chris 1979, ‘Dialectic of the Value-Form’, in *Value: The Representation of Labour in Capitalism*, edited by Diane Elson, London: CSE Books.
- Arthur, Chris 2001, ‘Value, Labour and Negativity’, *Capital & Class*, 25, 1: 15–39.
- Bauer, Otto 1906, ‘Qualifizierte Arbeit und Kapitalismus’, *Die neue Zeit: Wochenschrift der deutschen Sozialdemokratie*, 24: 644–57.
- Bellofiore, Riccardo 2009, ‘A Ghost Turning into a Vampire: The Concept of Capital and Living Labour’, in Bellofiore and Fineschi (eds.) 2009.
- Bellofiore, Riccardo and Roberto Fineschi (eds.) 2009, *Re-Reading Marx: New Perspectives after the Critical Edition*, Basingstoke: Palgrave Macmillan.
- Bernstein, Eduard 1899/1900, ‘Zur Theorie des Arbeitswerths’, *Die neue Zeit: Revue des geistigen und öffentlichen Lebens*, XVIII: 356–63.
- Bidet, Jacques 2007 [1985], *Exploring Marx’s Capital: Philosophical, Economic, and Political Dimensions*, Historical Materialism Book Series, Leiden: Brill.
- Block, Maurice 1884, ‘Le Capital, de Karl Marx, à propos d’une anticritique’, *Journal des Économistes*, 28: 130–6.
- Böhm-Bawerk, Eugen von 1890 [1884], *Capital and Interest: A Critical History of Economical Theory*, translated by William A. Smart, London: Macmillan.

- Böhm-Bawerk, Eugen von 1949 [1896], 'Karl Marx and the Close of His System', in *Karl Marx and the Close of His System by Eugen von Böhm-Bawerk and Böhm-Bawerk's Criticism of Karl Marx by Rudolf Hilferding*, edited by Paul M. Sweezy, New York: Augustus M. Kelley.
- Bonefeld, Werner 2010, 'Abstract Labour: Against its Nature and on its Time', *Capital & Class*, 34, 2: 257–76.
- Bonefeld, Werner 2011, 'Debating Abstract Labour', *Capital & Class*, 35, 3: 475–9.
- Bortkiewicz, Ladislaus 1952 [1907], 'Value and Price in the Marxian System', *International Economic Papers*, 2: 5–60.
- Boudin, Louis B. 1920 [1907], *The Theoretical System of Karl Marx in the Light of Recent Criticism*, Chicago: Charles H. Kerr & Company.
- Bowles, Samuel and Herbert Gintis 1977, 'The Marxian Theory of Value and Heterogeneous Labour: A Critique and Reformulation', *Cambridge Journal of Economics*, 1, 2: 173–92.
- Bowles, Samuel and Herbert Gintis 1978, 'Professor Morishima on Heterogeneous Labour and Marxian Value Theory', *Cambridge Journal of Economics*, 2, 3: 311–14.
- Bowles, Samuel and Herbert Gintis 1981, 'Labour Heterogeneity and the Labour Theory of Value: A Reply', *Cambridge Journal of Economics*, 5, 3: 285–8.
- Braverman, Harry 1998, *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*, New York: Monthly Review Press.
- Bródy, András 1970, *Proportions, Prices and Planning: A Mathematical Restatement of the Labor Theory of Value*, Budapest: Akadémiei Kiadó.
- Buch, Leo von 1896, *Intensität der Arbeit, Wert und Preis der Waren*, Leipzig: Duncker & Humblot.
- Carchedi, Guglielmo 1991, *Frontiers of Political Economy*, London: Verso.
- Carchedi, Guglielmo 2009, 'The Fallacies of "New Dialectics" and Value-Form Theory', *Historical Materialism*, 17, 1: 145–69.
- Carchedi, Guglielmo 2011a, *Behind the Crisis: Marx's Dialectics of Value and Knowledge*, *Historical Materialism Book Series*, Leiden: Brill.
- Carchedi, Guglielmo 2011b, 'A Comment on Bonefeld's "Abstract Labour: Against its Nature and on its Time"', *Capital & Class*, 35, 2: 307–9.
- Catephores, George 1981, 'On Heterogeneous Labour and the Labour Theory of Value', *Cambridge Journal of Economics*, 5, 3: 273–80.
- Cayatte, Jean-Louis 1984, 'Travail simple et travail complexe chez Marx', *Revue économique*, 35, 2: 221–46.
- Choonara, Joseph 2018, 'Complex Labor, Value and the Reduction Problem', *Science & Society*, 82, 2: 234–47.
- De Angelis, Massimo 1995, 'Beyond the Technological and Social Paradigms: A Political Reading of Abstract Labour as the Substance of Value', *Capital & Class*, 19, 3: 107–34.

- Deutsch, Hanns 1904, *Qualifizierte Arbeit und Kapitalismus: Werttheorie und Entwicklungstendenzen*, Vienna: Stern.
- Devine, James 1989, 'What Is "Simple Labour"? A Re-examination of the Value-creating Capacity of Skilled Labour', *Capital & Class*, 13, 3: 113–31.
- Dietzel, Heinrich 1895, *Theoretische Sozialökonomik*, Leipzig: Winter'sche Verlags-handlung.
- Ekeland, Anders 2007, 'Marx's Four Solutions to the Problem of Heterogeneous Labour', The 9th Annual Conference of the Association for Heterodox Economics, Bristol.
- Elson, Diane 1979, 'The Value Theory of Labour', in *The Representation of Labour in Capitalism*, edited by Diane Elson, London: CSE Books.
- Fine, Ben 1998, *Labour Market Theory: A Constructive Reassessment*, London: Routledge.
- Flint, Robert 1906 [1894], *Socialism*, London: Isaac Pitman and Sons.
- Freeman, Alan, Andrew Kliman and Julian Wells (eds.) 2004, *The New Value Controversy and the Foundations of Economics*, Aldershot: Edward Elgar Publishing.
- Grabski, Stanisław 1895, 'Böhm-Bawerk als Kritik der Karl Marxens', *Deutsche Worte*, xv: 149–69.
- Harvey, David 2006 [1982], *The Limits to Capital*, London: Verso.
- Harvey, Philip 1985, 'The Value-creating Capacity of Skilled Labor in Marxian Economics', *Review of Radical Political Economics*, 17, 1/2: 83–102.
- Heinrich, Michael 2009, 'Reconstruction or Deconstruction? Methodological Controversies about Value and Capital, and New Insights from the Critical Edition', in Bellofiore and Fineschi (eds.) 2009.
- Hilferding, Rudolf 1949 [1904], 'Böhm-Bawerk's Criticism of Marx', in *Karl Marx and the Close of His System by Eugen von Böhm-Bawerk and Böhm-Bawerk's Criticism of Karl Marx by Rudolf Hilferding*, edited by Paul M. Sweezy, New York: Augustus M. Kelley.
- Himmelweit, Susan 1984, 'Value Relations and Divisions within the Working Class', *Science & Society*, 48, 3: 323–43.
- Iñigo Carrera, Juan 2007, *Conocer el capital hoy. Usar críticamente El Capital*, Buenos Aires: Imago Mundi.
- Iñigo Carrera, Juan 2013 [2003], *El Capital: Razón Histórica, Sujeto Revolucionario y Conciencia*, Buenos Aires: Imago Mundi.
- Itoh, Makoto 1987, 'Skilled Labour in Value Theory', *Capital and Class*, 11, 1: 39–58.
- Jorland, Gérard 1995, *Les Paradoxes du Capital*, Paris: Odile Jacob.
- Joseph, Horace William Brindley 1923, *The Labour Theory of Value in Karl Marx*, London: Oxford University Press.
- Kautsky, Karl 1899, *Bernstein und das Sozialdemokratische Programm: Eine Antikritik*, Stuttgart: Verlag von J.H.W. Dietz Nachf. (G.m.b.H.).
- Kay, Geoffrey 1976, 'A Note on Abstract Labour', *Bulletin of the Conference of Socialist Economists*, v, 1, 13: 82–6.

- Kicillof, Axel and Guido Starosta 2007a, 'On Materiality and Social Form: A Political Critique of Rubin's Value-Form Theory', *Historical Materialism*, 15, 3: 9–43.
- Kicillof, Axel and Guido Starosta 2007b, 'Value Form and Class Struggle: A Critique of the Autonomist Theory of Value', *Capital & Class*, 31, 2: 13–40.
- Kicillof, Axel and Guido Starosta 2011, 'On Value and Abstract Labour: A Reply to Werner Bonefeld', *Capital & Class*, 35, 2: 295–305.
- Kidron, Michael 1968, 'Marx's Theory of Value', *International Socialism*, 1, 32: 8–12.
- Krätke, Michael 1997, 'Einfache/komplizierte Arbeit', in *Historisch-kritisches Wörterbuch des Marxismus, Band 3*, edited by Wolfgang Fritz Haug, Hamburg: Argument.
- Krause, Ulrich 1981, 'Heterogeneous Labour and the Fundamental Marxian Theorem', *The Review of Economic Studies*, 48, 1: 173–8.
- Lafargue, Paul 1884, 'Le Capital de Karl Marx et la critique de M. Block', *Journal des Économistes*, 28: 278–87.
- Lapidus, Iosif and Konstantin Ostrovitianov 1929, *An Outline of Political Economy: Political Economy and Soviet Economics*, London: Martin Lawrence.
- Lee, Chai-on 1990, *On the Three Problems of Abstraction, Reduction and Transformation in Marx's Labour Theory of Value*, PhD Thesis, Birkbeck, University of London.
- Liebkecht, Wilhelm 1902, *Zur Geschichte der Werttheorie in England*, Jena: Gustav Fischer.
- Mandel, Ernest 1976, 'Introduction', in Marx 1976a.
- Marx, Karl 1872–5, *Le capital*, Paris: Maurice Lachatre et Cie.
- Marx, Karl 1973 [1857–8], *Grundrisse: Foundations of the Critique of Political Economy*, translated by Martin Nicolaus, Harmondsworth: Penguin.
- Marx, Karl 1976a [1867], *Capital: A Critique of Political Economy. Volume One*, translated by Ben Fowkes, Harmondsworth: Penguin.
- Marx, Karl 1976b [1864], 'Results of the Immediate Process of Production', in Marx 1976a.
- Marx, Karl 1976c [1847], 'The Poverty of Philosophy: Answer to the Philosophy of Poverty by M. Proudhon', in *Marx and Engels Collected Works*, Volume 6, London: Lawrence and Wishart.
- Marx, Karl 1977 [1849], 'Wage Labour and Capital', in *Marx and Engels Collected Works*, Volume 9, London: Lawrence and Wishart.
- Marx, Karl 1985 [1865], 'Value, Price and Profit', in *Marx and Engels Collected Works*, Volume 20, London: Lawrence and Wishart.
- Marx, Karl 1986 [1851], 'Exzerpte aus David Ricardo: On the Principles of Political Economy', in *Marx Engels Gesamtausgabe (MEGA²)*, Volume IV/8, *Karl Marx Exzerpte und Notizen, März bis Juni 1851*, Berlin: Dietz Verlag.
- Marx, Karl 1987 [1859], 'Contribution to the Critique of Political Economy', in *Marx and Engels Collected Works*, Volume 29, London: Lawrence and Wishart.

- Marx, Karl 1988 [1861–3a], ‘Economic Manuscript of 1861–63’, in *Marx and Engels Collected Works*, Volume 30, London: Lawrence and Wishart.
- Marx, Karl 1989a [1861–3b], ‘Economic Manuscript of 1861–63’, in *Marx and Engels Collected Works*, Volume 31, London: Lawrence and Wishart.
- Marx, Karl 1989b [1861–3c], ‘Economic Manuscript of 1861–63’, in *Marx and Engels Collected Works*, Volume 32, London: Lawrence and Wishart.
- Marx, Karl 1989c [1861–3d], ‘Economic Manuscript of 1861–63’, in *Marx and Engels Collected Works*, Volume 33, London: Lawrence and Wishart.
- Marx, Karl 1991 [1894], *Capital: A Critique of Political Economy. Volume Three*, translated by David Fernbach, Harmondsworth: Penguin.
- Marx, Karl 1994 [1861–3e], ‘Economic Manuscript of 1861–63’, in *Marx and Engels Collected Works*, Volume 34, London: Lawrence and Wishart.
- Marx, Karl 2015 [1864–5], *Marx’s Economic Manuscript of 1864–1865*, edited by Fred Moseley, *Historical Materialism Book Series*, Leiden: Brill.
- Masaryk, Tomáš Garrigue 1899, *Die philosophischen und soziologischen Grundlagen des Marxismus*, Vienna: Verlag von Carl Konegen.
- Mavroudeas, Stravos 2004, ‘Forms of Existence of Abstract Labour and Value-form’, in Freeman, Kliman and Wells (eds.) 2004.
- McGlone, Ted and Andrew Kliman 2004, ‘The Duality of Labour’, in Freeman, Kliman and Wells (eds.) 2004.
- McKenna, Edward 1981, ‘A Comment on Bowles and Gintis’ Marxian Theory of Value’, *Cambridge Journal of Economics*, 3, 5: 281–4.
- Meek, Ronald L. 1973 [1956], *Studies in the Labour Theory of Value*, Second Edition, London: Lawrence and Wishart.
- Mises, Ludwig von 1990 [1920], *Economic Calculation in the Socialist Commonwealth*, Auburn: Ludwig von Mises Institute.
- Morishima, Michio 1973, *Marx’s Economics: A Dual Theory of Value and Growth*, Cambridge: Cambridge University Press.
- Morishima, Michio 1978, ‘S. Bowles and H. Gintis on the Marxian Theory of Value and Heterogeneous Labour’, *Cambridge Journal of Economics*, 2, 3: 305–9.
- Morris, Jacob 1985, ‘Value Relations and Divisions within the Working Class: A Comment’, *Science & Society*, 49, 2: 214–20.
- Morris, Jacob and Haskell Lewis 1973/4, ‘The Skilled Labor Reduction Problem’, *Science & Society*, 37, 4: 454–72.
- Murray, Patrick 1988, *Marx’s Theory of Scientific Knowledge*, Atlantic Highlands, NJ: Humanities Press.
- Murray, Patrick 2000, ‘Marx’s “Truly Social” Labour Theory of Value: Part I, Abstract Labour in Marxian Value Theory’, *Historical Materialism*, 6, 1: 27–66.
- Okisio, Nobuo 1963, ‘A Mathematical Note on Marxian Theorems’, *Weltwirtschaftliches Archiv*, 91: 287–99.

- Oppenheimer, Franz 1916, *Wert und Kapitalprofit. Neubegründung der objektiven Wertlehre*, Jena: Gustav Fischer.
- Pareto, Vilfredo 1998 [1893], 'Introduction à K. Marx, *Le Capital*. Extrait fait par M.P. Lafargue', in *Karl Marx: Critical Responses*, edited by Roberto Marchionatti, London: Routledge.
- Postone, Moishe 1996, *Time, Labor, and Social Domination: A Reinterpretation of Marx's Critical Theory*, Cambridge: Cambridge University Press.
- Reuten, Geert 1993, 'The Difficult Labor of a Theory of Social Value: Metaphors and Systematic Dialectics at the Beginning of Marx's "Capital"', in *Marx's Method in Capital: A Reexamination*, edited by Fred Moseley, Atlantic Highlands, NJ: Humanities Press.
- Robles Báez, Mario L. 2004, 'On the Abstraction of Labour as a Social Determination', in Freeman, Kliman and Wells (eds.) 2004.
- Roncaglia, Alessandro 1974, 'The Reduction of Complex Labour to Simple Labour', *Bulletin of the Conference of Socialist Economists*, 9: 1–12.
- Rosdolsky, Roman 1977 [1968], *The Making of Marx's 'Capital'*, London: Pluto Press.
- Rowthorn, Bob 1974, 'Skilled Labour in the Marxist System', *Bulletin of the Conference of Socialist Economists*, 8: 25–45.
- Rubin, Isaak Illich 1990 [1928], *Essays on Marx's Theory of Value*, translated by Miloš Samardžija and Fredy Perlman, New York: Black Rose Books.
- Saad-Filho, Alfredo 1997, 'Concrete and Abstract Labour in Marx's Theory of Value', *Review of Political Economy*, 9, 4: 457–77.
- Saad-Filho, Alfredo 2002, *The Value of Marx: Political Economy for Contemporary Capitalism*, London: Routledge.
- Samuelson, Paul A. 1971, 'Understanding the Marxian Notion of Exploitation: A Summary of the so-called Transformation Problem between Marxian Values and Competitive Prices', *Journal of Economic Literature (American Economic Association)*, 9, 2: 399–431.
- Schlesinger, Rudolf 1950, *Marx: His Times and Ours*, London: Routledge.
- Schumpeter, Joseph A. 2006 [1942], *Capitalism, Socialism and Democracy*, London: Routledge.
- Sekine, Thomas T. 1997, *An Outline of the Dialectic of Capital: Volume 2*, Basingstoke: Palgrave Macmillan.
- Skelton, Oscar Douglas 1911, *Socialism: A Critical Analysis*, New York: Houghton Mifflin.
- Smith, Adam 1982 [1776], *The Wealth of Nations. Books I–III*, edited by Andrew Skinner, Harmondsworth: Penguin.
- Smith, Tony 2000, *Technology and Capital in the Age of Lean Production: A Marxian Critique of the 'New Economy'*, Albany, NY: SUNY Press.
- Sorel, Georges 1897, 'Sur la Theorie Marxiste de la Valeur', *Journal des Économistes*, 30: 222–31.

- Starosta, Guido 2008, 'The Commodity-Form and the Dialectical Method: On the Structure of Marx's Exposition in Chapter 1 of *Capital*', *Science & Society*, 72, 3: 295–318.
- Starosta, Guido 2016, *Marx's 'Capital': Method and Revolutionary Subjectivity*, *Historical Materialism* Book Series, Leiden: Brill.
- Starosta, Guido 2017, 'The Role and Place of "Commodity Fetishism" in Marx's Systematic-dialectical Exposition in *Capital*', *Historical Materialism*, 25, 3: 101–39.
- Starosta, Guido and Gastón Caligaris 2016, 'The Commodity Nature of Labor-Power', *Science & Society*, 80, 3: 319–45.
- Sweezy, Paul M. 1970 [1942], *The Theory of Capitalist Development: Principles of Marxian Political Economy*, London: Dennis Dobson Limited.
- Tortajada, Ramón 1977, 'A Note on the Reduction of Complex Labour to Simple Labour', *Capital and Class*, 1, 1: 106–16.
- Uno, Kōzō 1980 [1964], *Principles of Political Economy: Theory of a Purely Capitalist Society*, translated by Thomas T. Sekine, Brighton: Harvester.