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Hegel's Theory of Finite Cognition and Marx's Critique of Political Economy

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Abstract

The article examines the role of Hegel's theory of finite cognition in Marx's critique of classical political economy. I argue that Hegel's distinction of finite cognition between analytic and synthetic in the *Science of Logic* constitutes the methodological framework through which Marx delineates the different stages of the development of political economy. Focusing on the *Grundrisse*, I reveal the Hegelian influence behind Marx's statements on previous political economists' methods. Thus, Marx's immanent critique of the classical political economy is construed as undertaken from the level of the systematic dialectical method of *Capital*, and is modelled on Hegel's immanent critique of analytic and synthetic cognition from the perspective of absolute cognition. In this context, and focusing on Marx's critique of Ricardo's method, I argue that the latter's limitations are associated with the deficiencies of synthetic cognition as presented by Hegel. Therefore, the article sheds light on an important yet underexplored topic of the Hegel-Marx relationship. By indicating the centrality of Hegel's theory of finite cognition in Marx's methodological underpinnings, the article provides a new perspective on Hegel-Marx scholarship.

I. Introduction

In the last decades a renaissance of Hegel-Marx scholarship has taken place through a series of studies that focused mainly on the role of Hegel's *Science of Logic* in Marx's method in *Capital* (Arthur 2022; Bellofiore 2014; Dafermos 2022; Fineschi 2014; Moseley and Smith 2014; Smith 1990). The recent debate has recognized the significance of Hegel's philosophical legacy in Marx's thought and especially the great homologies between the *Science of Logic* and the articulation of the economic categories in *Capital* (Arthur 2004; Reuten 2014; Sekine 2020).¹



Despite the considerable literature on the Hegel-Marx relationship, the role of Hegel's philosophy in Marx's critique of previous economists has received relatively little attention. This article seeks to fill this gap by examining how Hegel's theory of finite cognition is employed by Marx in his analysis of earlier economists.

In the Grundrisse, Marx refers to the concrete-to-abstract and abstract-to-concrete methods, ascribing them to different historical periods of economic thought and associating them respectively with analysis and synthesis. This methodological framework can also be traced in the Economic Manuscripts of 1861-1863, in which Marx addresses the deficiencies of preceding economists. Although analysis and synthesis have been an important topic throughout the history of philosophy, Marx inherits them through German idealism.² It was Kant who introduced the crucial distinction between analytic and synthetic judgments. Analytic judgments are those in which the predicate is included within the concept that is the subject of the judgment, whereas synthetic judgments are those in which the predicate is outside the concept of the subject (CPR: A7/BII).³ The first judgments are explicative because the predicate does not add anything further to the concept of the subject, 'but only break it up by means of analysis into its component concepts, which were already thought in it' (CPR: A7/BII). The second are ampliative because the predicate extends knowledge by adding content that was not contained in the concept of the subject (see Allison 2004: 89-96). Analytic judgments are based on the principle of identity and/or contradiction, which means that their certainty lies in the inclusion of the predicate within the concept of the subject, whereas synthetic judgments do not contain the identity of predicate and concept as a principle (Prol: §§2-3, 16-23).4 Hegel broadens Kant's analytic/synthetic distinction, extending its epistemological content beyond judgments while retaining its fundamental logical elements (cf. Pippin 1989: 250; Werner 2017). In the Science of Logic, Hegel discusses the analytic/synthetic distinction in detail in the chapter on 'The Idea of Cognition' (Erkennen) and specifically in the part on 'The Idea of the True' (SL: 697-729/W6: 498-541). The idea of cognition has to do primarily with the emergence of spirit within the realm of Logic.⁵ Cognition emerges as the logical consequence of the idea of life. The transition from life to cognition involves the shift from the concept's drive (Trieb) to objectify itself, to a drive to know itself in an external object (SL: 689/W6: 487). In the Logic, life represents the self-objectification of the concept. Consequently, it is crucial to emphasize that the treatment of life within the Logic is approached from a 'logical view' (SL: 677/W6: 470), distinct from Hegel's treatment of life in the Philosophy of Nature (cf. Ng 2020: 279). Specifically, cognition is determined by the impulse to overcome the otherness of the external world and to 'intuit its identity with itself' (SL: 697/W6: 498). Hence, in cognition the one-sidedness of subjectivity and objectivity is sublated, albeit only implicitly, namely in-itself (EL: §225, 291/378). Hegel there presents analysis and synthesis as the two moments of finite cognition which has not yet reached the speculative unity of the absolute idea. The latter is an absolute mode of cognition, namely self-knowing,

in which the gap between subjectivity and objectivity has been overcome. In finite cognition, on the other hand, the opposition between subjectivity and objectivity remains; consequently, the concept is not yet fully aware that it cognizes itself, when theorizing the seemingly external world.

Analytic cognition is the immediate moment of the cognitive process, which consists in transforming discursively the external object into logical determinations. Each determination consists in apprehending the object as given under a universal concept. Analysis generates abstract universals, each of which refers immediately to a specific aspect of the object, leaving all other aspects undetermined (Winfield 2012: 324). Consequently, each determination has the form of abstract identity⁶ since it is related only to itself and in isolation from others (*SL*: 700/*W*6: 502–503). Thus, analytic cognition identifies the essential aspects, or, in Hegel's words, the logical determinations, of the object by separating its aspects and conceives each aspect as immediately identical to itself.⁷ In this way, analytic cognition is associated with the movement from singularity to particularity and universality. The inadequacy of analytic cognition resides in the fact that, while it generates the logical determinations of the object, these determinations exist independently and lack interconnectedness (*SL*: 706/*W*6: 510; *EL*: §227, 293/380).

While analytic cognition starts from a singular concrete object, synthetic cognition starts from a given universal which is the product of analysis. Analytic cognition negates the singular and immediate object, leading to the apprehension of the object in the form of a universal concept. However, cognition does not content itself with knowing the object solely under the form of an essential aspect of it but seeks to know the singularity and immediacy of the object as conceptually understood. In other words, synthetic cognition aims at the unity of the aspects of the object. Consequently, synthetic cognition consists in developing the abstract universal concept in its particular determinations, thus aligning the universal to singularity and objectivity. Therefore, synthetic cognition is the moment of mediation that highlights the difference of the object. Here the external object is thought according to the moments of the concept, namely universality, particularity and singularity (*EL:* §228).

Hegel divides the process of synthetic cognition into three principal stages: definition, division and theorem. Definition lies in determining the concept of the object according to its proximate genus and species. Analytic cognition yields the abstract universal concept, which, along with its specific difference, forms the definition. Being the initial stage of synthetic cognition, definition concerns the determination of the essence of the object, simultaneously constituting the object's specificity. Starting from the point of arrival of analytic cognition, definition captures the object's essential aspect, where the totality of manifold determinations in the intuited existence of the object is reduced to its simplest moments (*SL:* 708/

W6: 513). Hegel emphasizes that 'definition, in thus reducing the object to its concept, gets rid of the externalities that are requisite for its concrete existence' (SL: 708/W6: 512). Now the object, as a determinate species, can be distinguished from other objects. The act of defining an object according to its genus and species necessitates distinguishing its essential features from the incidental ones, discerning those properties that are intrinsic to the object from those that are contingent (SL: 708/W6: 512-13). However, when dealing with a concrete empirical object, one frequently encounters a plethora of properties, making it arbitrary to differentiate between incidental and necessary features. As Hegel observes, 'the content of a definition is taken in general from immediate existence, and because it is immediate, it has no justification' (SL: 712/W6: 519). In so far as definition relies on analytic cognition as its premise, the determination of the concept of the object arises through the analytical abstraction of a property from the immediacy of the object. Nevertheless, as Hegel points out, 'there is in fact no principle, therefore, for determining which aspects of the object⁸ are to be regarded as belonging to its conceptual determination and which only to its external reality' (SL: 709/W6: 513-14; see also note 25 below). In its initial stage, synthetic cognition lacks a theorized understanding of the relationship between the concept and the concrete reality of the object. In this way, we have to do with a nominal definition of the object (see Bowman 2013: 178).

This inherent limitation of definition leads to the stage of division. Defining an object requires discerning the determinations that fall within its abstract universal concept and those that do not. Division is the process of distinguishing which features can be subsumed under the universal concept (SL: 713/W6: 519-20). The ground of this distinction is the abstract universal concept. Hegel notes that any object 'that seems to possess an elementary universality is made the object of a specific science' (SL: 715/W6: 523). In other words, any object possessing a universality can be theorized as a set of determinations associated with its abstract universality. Thus, division entails the particularization of the universal concept. Based on its abstract universal concept, the object is conceptually known in its particular forms and determinations. In this context, Winfield highlights that 'cognition by division is engaged in conceiving, not just imitating objectivity' (Winfield 2012: 328). Hence, the object is cognized in its differences. The abstract universal concept, in itself, is a particular among other particular aspects but at the same time is the universal aspect of a specific object, thus serving as the principle for its classification. For example, Euclid defines the triangle as a trilateral figure, namely a figure 'contained by three straight-lines' (EG: 6). The trilateral is a particular figure among other figures such as circles, quadrilateral figures and so on. Simultaneously, this definition constitutes the ground for division and the triangle's classification into right-angle, isosceles, acute, obtuse triangles and the like. Another example is the law that can be divided into civil, criminal, church law and so on (see LL:

§230, 223–24); or animals that can be categorized into mammals, birds, fish, reptiles and amphibians. However, in synthetic cognition, the particularization of the universal does not proceed immanently through the concept's self-determining activity but rather, it relies on the identification of the particulars as externally given in experience (*SL*: 716/*W6*: 523). This inherent constraint renders division inadequate for achieving an exhaustive conceptualization of the object, as the singularity of the object lies beyond the theorizing activity of subjectivity.

In the third stage of synthetic cognition, the conceptual definition of the object within the context of finite cognition is completed. Hegel stresses that in the theorem the focus lies on 'the self-referring determinateness, the internal differentiation of the object and the connection of the differentiated determinacies to one another' (SL: 718/W6: 526). In the stage of definition, the general concept of the object is established, while in the stage of division, various aspects of the object are determined in relation to its universal concept. Taking the triangle as an example, it is initially defined as a three-sided figure, and in the division, different types of triangles are distinguished such as acute, isosceles, obtuse, etc. Moving to the theorem, the focus is on understanding the necessary differentiation of the object within itself. This involves grasping how the universal concept of the object is necessarily divided in these particular determinations and connected to the concrete reality of the object. In the case of the triangle, it requires identifying a law or principle that explains the necessary transition from the abstract conceptual determination of the triangle to the differentiation of various triangles and, consequently, the connection of conceptual determinations with the concrete reality of the empirical triangles. The determination of a triangle, based on the relation between its two sides and the enclosed angle, constitutes a theorem through which we establish a truth about any triangle. Though in the stage of definition, the triangle is defined as a three-sided figure, it is only a theorem 'that first expresses the determinateness of the angles through the determinateness of the sides' (*SL*: 721/*W6*: 531). Here, as Bowman asserts:

> the concept of the triangle has been differentiated from its threesided reality, and through a synthesis of the conceptual determinations of the triangle as explicated in the intervening theorems, its three-sided reality has been reproduced in a thoroughly conceptual form. (Bowman 2013: 178)

Accordingly, the stage of the theorem proves a truth about the object and is defined by its function in connecting the conceptual determinations of the object with its singularity. Here the object is cognized in the forms of its concrete real existence (*SL*: 718/W6: 527). Therefore, the theorem demonstrates the necessary interconnection of the totality of the determinations of the object. This necessary interconnection starts from universal definitions, followed by initial theorems that serve as

axioms and are grounded on definitions. The process gradually unfolds, culminating in a more comprehensive theorem that leads to the real definition of the object (see *SL*: 719–22/*W6*: 529–32; also Winfield 2012: 329; cf. Moretto 1993).⁹ For this reason, Hegel points out that 'the theorem is the properly synthetic element of an object, because the relations of its determinacies are necessary, that is, are grounded in the inner identity of the concept' (*SL*: 718/*W6*: 527). Accordingly, the theorem is a mediation that interconnects the universal with the singular through a process of proof (*SL*: 723–24/*W6*: 533). In the theorem, cognition acquires the form of necessity, yet it does not achieve the form of the concept, proper to philosophical cognition, where universality is self-determining and immanently particularizes itself. This is because in synthetic cognition the object remains external to the concept. Since synthetic cognition is separate from the truth it seeks, 'it's determinate content is given to it' (*SL*: 728/*W6*: 540) and 'proceeds from something externally presupposed' (*EL*: §231, 295/383).

The limitations of finite cognition are overcome within the realm of infinite cognition represented by the absolute Idea. The absolute Idea is 'the concept of self-determining reason itself' (Houlgate 2005a: 36). The idea cognizes itself, which means that cognition has itself for its object (SL: 736/W6: 550; EL: (236, 299/388). Hegel stresses that the absolute idea 'is the pure form of the concept that intuits its content as itself' (EL: §237, 299–300/W6: 388). The absolute Idea reveals itself as pure thought and 'self-knowing truth' (SL: 735/W6: 549). Its content is the entire system of the determinations of the logic as immanently generated by the activity of the self-relating concept while its form is the method of this content, it is the form of the absolute negativity of the concept (SL: 752/W6: 572). In contrast to finite cognition, in the absolute method the moments of the concept are internally interwoven (SL: 750/W6: 569). The unity of the different determinations is not carried out externally but through their immanent self-differentiation within their unity (EL: §237, 299-300/388-89). Hence, the progression from one category to the next is the progression of the concept's self-differentiation (see Nuzzo 2005: 202). In this way, the pure concept forms a system of science and 'concludes by apprehending this conceptual comprehension of itself, hence by sublating its position as content and object and cognizing the concept of science' (SL: 752/W6: 572). Hegel points out:

> In the absolute method, the concept maintains itself in its otherness, the universal in its particularization, in judgment and reality; at each stage of further determination, the universal elevates the whole mass of its preceding content, not only not losing anything through its dialectical advance, or leaving it behind, but, on the contrary, carrying with itself all that it has gained, inwardly enriched and compressed. [...] The richest is therefore the

most concrete and the most subjective, and that which retreats to the simplest depth is the mightiest and the most all-encompassing. (*SL*: 750/W6: 569)

Based on the above, I undertake to show that Marx's critique of preceding economists has Hegel's theory of cognition and in particular the distinction between analytic, synthetic and speculative cognition, as a methodological background. My analysis begins by interpreting the section on 'The Method of Political Economy' in the *Grundrisse*, in which Marx refers to the concrete-to-abstract and abstract-to-concrete methods. I argue that Marx's approach to these two methods broadly follows Hegel's approach to the two forms of finite cognition. Thus, I distinguish Marx's concrete-to-abstract and abstract-to-concrete methods from his systematic dialectical method of *Capital* (Arthur 2022: 27–45; Meaney 2014: 45–46) by shedding light on the methodological framework of Marx's critique of the earlier economists. In this context, my analysis suggests that Marx's immanent critique of the method of the previous economists takes place from the standpoint of the systematic dialectical reconstruction of the categories of political economy which has been fully achieved in *Capital*.¹⁰

In what follows, I offer an interpretation of Marx's critique of Ricardo's method from the perspective of Hegel's analysis of synthetic cognition. I argue that Ricardo's methodological limitations are tied to the deficiencies of synthetic cognition and that Marx overcomes these deficiencies with his systematic dialectical method in the same way as Hegel overcomes the deficiencies of synthetic cognition with his absolute cognition. Accordingly, I contend that Hegel's theory of finite cognition becomes fundamental in understanding Marx's critique of the classical political economy.

Therefore, this article focuses on the role of Hegel's theory of finite cognition in Marx's thought for the following reasons: 1) to show that Marx's employment of Hegel's epistemology is not limited to *Capital* but extends throughout his critique of the history of political economy; 2) because the analysis of Marx's critique of the previous political economy from the perspective of Hegel's theory of cognition is almost absent in the literature; and 3) to explicate that the systematic dialectic of *Capital* differs radically from the abstract-to-concrete method that Marx describes in the *Grundrisse*, a matter which is often overlooked in the discussions of Marx's method.

II. Grundrisse's 'Introduction' and the Hegelian background

In the *Grundrisse*, the section on 'The Method of Political Economy' is suitable for revealing the homologies between Marx's approach and Hegel's treatment of

finite cognition in the 'Idea of the True' (see Ushida 1988: 19-27; Meaney 2002: 169-75). Marx begins his discussion of the methods of classical political economy by describing the two courses that cognition follows when considering a country from the point of view of political economy. In this passage, I assume that Marx is referring to what he defines in his book, A Contribution to the Critique of Political Economy, as 'classical political economy'. This term encompasses all the major political economists 'beginning with William Petty in Britain and Boisguillebert in France and ending with Ricardo in Britain and Sismondi in France' (CPE: 292/37).¹¹ The first course, from the concrete to the abstract, starts from the immediate and given concrete object, which is the presupposition of the specific process of cognition.¹² The following statements illustrate the substantial similarities between Hegel and Marx on this issue. Hegel stresses that analytic cognition 'starts from a presupposition [vorausgesetzten], hence from some singular, concrete object' (SL: 700/W6: 503). Similarly, Marx writes that 'it seems to be correct to begin with the real and the concrete, with the real presupposition [Voraussetzung]' (G: 100/34-35).¹³ Marx goes on to note that

when we consider a given country politico-economically, we begin with its population, its distribution among classes, town, country, the coast, the different branches of production, export and import, annual production and consumption, commodity prices etc. (G: 100/34)

The concrete and immediately given object initially appears as a chaotic manifold. This manifold of the aspects of the given material in sensuous intuition appears primarily as contingent, while any abstraction is carried out through the division and dissolution of this material. Hegel emphasizes that the analytic cognition which deals with empirical objects 'begins from a concrete material that has an accidental manifoldness within; every distinction of content and every advance to further content depend on this material' (*SL:* 703/*W6*: 505). The process of conceptualization consists in dissolving the manifold and picking out particular features of the given. In this procedure, the object, which is initially conceived as immediate at the level of sensuous intuition, is led through analysis to its conceptual apprehension in the form of abstract logical determinations. Hegel explains that analytic cognition consists in 'the transformation of the given material into logical determinations' (*SL:* 701/*W6*: 503). Therefore, the analytic course of cognition consists in moving from the concrete material of sensuous intuition to abstract universal concepts. Marx describes exactly this process:

if I were to begin with the population, this would be a chaotic conception [*Vorstellung*] of the whole, and I would then, by means of further determination, move analytically towards

ever more simple concepts [*Begriffe*], from the conceived concrete towards ever thinner abstractions until I had arrived at the simplest determinations.¹⁴ (*G*: 100/35)

It is the moment of immediacy in the process of cognition where the various abstract determinations are conceived as external to each other (see Burbidge 2005: 177). The analysis of the object and the creation of simple and abstract determinations imply its conception in the form of abstract universality (see SL: 700/ W6: 502). This means that each logical determination of the object is conceived as a simple identity lacking mediation.¹⁵ The content of knowledge represents the immediate and given existence of the object, apprehended in the form of a set of abstract universal concepts rather than representing its differentiation. Hegel notes that analytic cognition is the immediate communication of the concept to the object (SL: 700/W6: 502). Similarly, Marx points out that 'in so far as I abstract from what distinguishes a concrete from its abstract, it is of course the abstract, and does not differ from it at all' (G: 249/175). In this respect, the aim of analytic cognition consists primarily in determining the logical determinations of the object in their isolation, thereby conceptually transforming the immediate object. Hegel argues that 'analytic cognition has in general this identity for its principle, and the transition into another, the linking of different terms is excluded from it and from its activity' (SL: 700/W6: 502-503). However, it is important to stress that analytic cognition, in so far as it is theoretical cognition, does not merely describe the object of representation. Winfield duly emphasizes that 'induction, after all, is always trying to get at what is universal in the given' (Winfield 2012: 323).

Marx associates the concrete-to-abstract method with the initial period of classical political economy, in the seventeenth century (*G*: 100/35; see also Ushida 1988: 18). A classic case is W. Petty and P. Boisguillebert, who confuse the most essential and universal relations of the economy, such as labour and value, with their immediate appearance.¹⁶ He also underlines that this method is only a first stage and it would be a mistake to adopt it for the predominantly scientific investigation of the economy. Marx writes as follows:

The reduction is not even formally scientific to the minimal extent that everything is reduced to a real economic relation by dropping the difference the development makes; rather, sometimes one and sometimes another side is dropped in order to bring out now one, now another side of the identity. (*G*: 250/175)

After the course from the concrete to the abstract is completed and the universal determinations and relations are distinguished, cognition follows the reverse course (cf. Pavlidis 2010). The second course leads back to the immediacy of the population,

but now, it is no longer perceived as a chaotic conception of the manifold; instead, it is comprehended as a totality of multiple determinations and relations (G: 100/35). Marx argues that the course from the abstract to the concrete is the one political economy historically followed after its initial period, asserting that it is 'obviously the scientifically correct method' (G: 101/35). This method corresponds to Hegel's synthetic cognition. The initial concrete therefore no longer appears as it is given in sensuous intuition but as a conceptually constituted totality (SL: 714/ W6: 520). Hegel notes that in the theorem, which represents the culmination of synthetic cognition 'the object [Gegenstand] is a synthetic relation of differentiated determinations' (EL: §231, 295/382). Similarly, Marx contends that in the abstract-to-concrete method 'the concrete is concrete because it is the concentration of many determinations, hence unity of the diverse' (G: 101/35). Synthetic cognition is characterized by the logical movement from universality back to singularity (LL: §228, 222). Because of its logical structure, synthetic cognition is mostly associated with the method of deduction.¹⁷ In synthetic cognition, the various determinations are examined in their relationship to each other. Hegel points out that synthetic cognition aims 'at grasping the manifoldness of determinations in their unity' (SL: 707/ W6: 511). It is therefore the stage of unification of the diverse. The object is thus cognized as a unity of multiple relations and related determinations.

While analytic cognition conceives the determinations of the object as immediate, synthetic cognition conceives them as mediated. Therefore, the transition from analytic to synthetic cognition represents a shift from 'immediacy to mediation, from abstract identity to difference' (*SL*: 706/*W6*: 510). The connection of the various logical determinations consists in the representation of the necessary relations of the object (cf. Ng 2020: 282). For this reason, Hegel claims that synthetic cognition aims at the necessity of the object (*SL*: 707/*W6*: 511). In my view, Marx's claim that the second method of cognition is the 'scientifically correct' one should be contextualized by the necessity inherent in synthetic cognition (*G*: 101/35). While analytic cognition prioritizes the identity of the object begins with representing its necessity. In this regard, synthetic cognition is primarily concerned with comprehension (*Begreifen*) as it reveals the internal relations and unity of the object's aspects, thereby uncovering laws and necessities (*SL*: 706–707/*W6*: 511).

To clarify this issue, it is essential to emphasize the following: Marx appears to link the knowledge of an object with the method of acquiring that knowledge. In both *Grundrisse* and the *Manuscripts of 1861–1863*, he criticizes the method employed by classical political economy's greatest representatives, namely the abstract-to-concrete method. How, then, can we reconcile his recognition of the abstract-to-concrete method as obviously the scientifically correct method with his criticism of it? Marx's immanent critique of the abstract-to-concrete method employed by classical political economy occurs from a higher methodological

standpoint, that of systematic dialectics. The systematic dialectical method is also structured based on the abstract-to-concrete logical progression. In contrast to the abstract-to-concrete method of classical political economy, it involves an immanent derivation of categories without the need for a shift towards the sensuous immediacy of the object. Thus, a systematic dialectical approach to an object represents the highest level of scientific knowledge of that object. It does so by revealing the object's internal movement, presenting it as a self-developing whole. Nonetheless, the science or systematic knowledge of an object begins with the transition to synthetic cognition, which 'represents the first instance of self-reference' (Bowman 2013: 185). In my interpretation, Marx regards the abstract-to-concrete method of classical political economy as the scientifically correct method because it marks the beginning of the science of an object, even though it does not constitute its complete scientific (systematic dialectical) presentation. For instance, Marx discusses Ricardo's method, stating that 'on the one hand [...] the Ricardian method of investigation is scientifically justified and has great historical value, on the other hand the scientific deficiencies of his procedure are clearly visible' (EM 2: 392/818). In this passage, it can be inferred that Marx acknowledges Ricardo's correct scientific method while simultaneously highlighting its deficiencies. This also suggests that the correct scientific method of classical political economy, namely the abstract-to-concrete method, does not necessarily imply an adequate and critically comprehensive understanding of the object. In light of the above, Marx's claim regarding the abstract-to-concrete method as the scientifically correct method can be construed from the perspective of Hegel's statement on the logical structure of synthetic cognition. Hegel highlights that 'the advance from the universal to the particular [...] constitutes the basis and the possibility of a synthetic science, of a system, and of systematic cognition' (SL: 713/*W6*: 520).¹⁸

Marx associates the abstract-to-concrete method with the emergence of the later classical political economists, including Smith and Ricardo, who dealt with the economy as a system, starting from simple and universal relations and advancing towards the surface of the economic phenomena (*G*: 100–101/35; cf. *EM* 2: 354/775–76; Meaney 2002: 171). This approach consists in explaining the various economic phenomena in terms of essential relations. For instance, Adam Smith's methodological approach is abstract-to-concrete because he starts from the universal category of the division of labour and advances to relations such as exchange, distribution, accumulation, revenue and the like (Ushida 1988: 19).¹⁹

At this moment and based on the previous analysis I attempt to clarify an important issue of interpretation around the statements on method in the *Grundrisse*. Marx notes that whereas the concrete-to-abstract method leads to the conception of the object in the form of abstract determinations, the abstract-to-concrete method, by unifying these abstract determinations, reproduces the object in thought.

Here Marx also criticizes Hegel for absolutizing the synthetic aspect of cognition. In Marx's own words:

Hegel fell into the illusion of conceiving the real as the product of thought concentrating itself, probing its own depths, and unfolding itself out of itself, by itself, whereas the method of rising from the abstract to the concrete is only the way which thought appropriates the concrete, reproduces it as the concrete in the mind. (*G*: 101/35)

However, Marx's portrayal of thinking as concentrating itself and unfolding itself out of itself does not correspond to synthetic cognition, but rather to the absolute method (SL: 735-53/W6: 548-73; EL: §237, 299-300/388-89; see also Meaney 2002: 175–82). The problem of interpretation arises from the fact that Marx describes two stages of cognition, whereas Hegel's overall theory encompasses three stages. Marx therefore is not explicit about the relation between the concrete-to-abstract, the abstract-to-concrete and his own systematic dialectical method.²⁰ On the one hand, if Marx's rejection of the speculative moment is assumed, it follows that his method consists in synthetic cognition.²¹ In this case, it is impossible to perceive the fundamental difference between Marx's method, particularly in Capital, and the method employed by the later classical political economists who advance from simple relations to complex economic phenomena. Moreover, his criticism of their method in the Manuscripts of 1861-1863 remains unexplained. On the other hand, if we assume that the abstract-to-concrete method described by Marx corresponds to the systematic dialectic of the speculative moment, it remains unexplained why he includes the later classical political economists within it (Ninos 2023c).

Hegel emphasizes that 'synthetic cognition passes over from abstract identity to relation, or from being to reflection' (*SL*: 707/*W6*: 511). The transition to reflection marks the stage where the determinations of the object stand in relation to each other, and the object is now understood as self-relating. From this aspect, in synthetic cognition the concept implicitly cognizes itself in the object and this implies the first appearance of self-reference (see Bowman 2013: 183–86). However, in synthetic cognition the concept is not fully self-relating, it is selfrelating in-itself. Thus, synthetic cognition is implicitly self-relating and exhibits systematicity, even though it fails to be the complete and explicit self-reference as speculative cognition (cf. *SL*: 707/*W6*: 511). There is therefore an internal identity between synthetic and speculative cognition which manifests itself in their broader common logical structure consisting in the movement from universality to particularity and singularity. Synthetic cognition, the gap between subjectivity and objectivity is maintained. This means that the maintained externality does not allow the concept to become fully self-reflective (Bowman 2013: 187). As Hegel stresses, cognition has not yet reached the stage of 'the absolute reflection of the concept that the latter recognizes in its object' (*SL*: 707/W6: 511). Overcoming the gap between subjectivity and objectivity leads to the speculative stage of the absolute idea, where 'the concept has become the idea's own content' (*SL*: 752/W6: 572). At this stage, the idea

as it runs itself as object through the totality of its determinations, builds itself up to the entirety of its reality, to the system of science, and concludes by apprehending this conceptual comprehension of itself, hence by sublating its position as content and object and cognizing the concept of science. (*SL*: 752/ *W*6: 572; see also Bowman 2013: 187)

Accordingly, Hegel sees the true dialectic of speculative cognition as the completion of the systematic and self-referential thinking²² that begins with the incomplete form of synthetic cognition. From this perspective, Marx's expression 'correct scientific method' stems from the understanding that the abstract-to-concrete method follows the moments of the concept, namely universality-particularity-singularity. Simultaneously, his critique of this method, as seen in the above passage on Ricardo's method, consists in the fact that in this method, as employed by classical political economy, the moments of the concept are not internally interwoven and fully mediated. This implies that the abstract-to-concrete method of classical political economy corresponds to Hegel's synthetic cognition, and its deficiencies are associated with the limitations of the latter.

According to my analysis, the methods of political economy that Marx describes in the *Grundrisse* correspond to analytic and synthetic cognition.²³ It is precisely for this reason that he associates them with the different periods of classical political economy and their respective limitations. The dialectical method elaborated in *Capital* corresponds in its general structural features to speculative cognition. Consequently, Marx's critique of the classical political economy can be seen as a critique of the deficiencies of analytic and synthetic cognition elaborated through the lens of his systematic dialectic. Therefore, both the examination in *Capital* and the critique of the classical political economy are based on Hegel's methodological background as presented in the *Science of Logic*.

III. Ricardo's scientific deficiencies and Marx's critique of synthetic cognition

I stressed that Marx assigns the abstract-to-concrete method to the period of classical political economy. In this period, several approaches emerge in which the

synthetic method is more and more developed so that the abstract determinations constitute more and more essential determinations of the object and are linked in an increasingly systematic way to the more concrete ones. These are theories that represent the internal structure of the economy with greater accuracy, linking it more or less to its surface phenomena and manifestations. With the end of this period, classical political economy is brought to its completion (*CPE*: 301/46). Ricardo is the last important representative of the classical school, and Marx acknowledges in him both the rigour of his scientific approach and the scientific deficiencies of his method (*EM* 2: 392-93/818-19).

Ricardo made the determination of value by labour-time the foundation of his approach (*PPE*: 8–15). He focused exclusively on the quantitative aspect of value, namely how different quantities of labour are associated with different magnitudes of value (*EM* 2: 389, 399/815–16, 822–25; *CPE*: 300/45). The changes in the magnitudes of the value of commodities are explained by the changes in the magnitudes of the necessary labour for their production (Rubin 1979: 254). He therefore attempted to explain the whole of economic phenomena based on the principle of the determination of value by necessary labour time. Marx writes:

Ricardo starts with this [the determination of value by labour time] and forces science to get out of the rut, to render an account of the extent to which the other categories—the relations of production and commerce, forms of this basis—evolved and described by it, correspond to or contradict this basis, this starting-point. (*EM* 2: 391/817)

This kind of methodological approach is primarily synthetic. Ilyenkov stresses that 'Ricardo's view did not consist in the reduction of complex phenomena to a number of their elementary constituents but rather in the deduction of all complex phenomena from one single substance' (Ilyenkov 2008: 183). For this reason, Marx explains that Ricardo's understanding of value, as determined by the amount of necessary labour time, is intrinsically associated with the investigation of the object's inner coherence, namely with the inner coherence of the modern economic system as a whole (EM 2: 391/817).

In his book titled On the Principles of Political Economy and Taxation, Ricardo starts the first chapter with the principle that the value of a commodity is determined by labour time (PPE: 8). The examination starts with the universal, namely with value. Value and labour, as the determinant of value, are the result of the analytic course of political economy, namely the process of distinguishing the necessary from incidental features of the object (cf. Winfield 2012: 327). Ricardo's examination begins with the first and immediate moment of synthetic cognition, the definition. With the definition, cognition reduces the 'wealth of manifold determinations of the intuited existence to its simplest moments' (*SL*: 708/*W6*: 513).

Value is the proximate genus and its determination by the labour time is the specific difference.²⁴ The object is now a universal which is essentially determined.²⁵ However, Hegel underscores that the specific difference 'has its more exact meaning over against another particular' (*LL:* §230, 223). Thus, the completion of the definition requires the linking of the category of specific difference with the other categories of the object.

The transition to the other economic categories through the labour theory of value corresponds to the second moment of synthetic cognition, the division. What is cognized in division is the particularization of the universal. In this way, the object is seen as a totality of determinations related to the universal genus. The particular economic aspects and relations are examined in relation to the labour-time determined value. Drawing the particular economic determinations from experience, Ricardo examines whether or not the particular relations accord with the universality of labour-time determined value and if they modify it (EM 2: 390/816). In this respect, Hegel points out that synthetic cognition consists partly 'in orderly arranging the particularities found in the empirical material, and partly also in discovering universal determinations of this material by means of comparison' (SL: 716/W6: 523). Ricardo begins by raising the question of whether wages contradict the labour theory of value (EM 2: 391/817). Then he asserts that the inclusion of constant capital in value aligns with the labour theory of value, and changes in wages do not affect the value of commodities. It follows the investigation of the effect of machines, fixed capital and changes in wages in capital with different periods of turnover, on the determination of value by labour time. The examination continues with the changes in the value of money, the treatment of rent, the difference between natural and market price, the profit, the rate of profit, etc. (PPE: §§1-6; see EM 2: 393-94/819-20). Thereby, Ricardo's treatment begins from labour-time determined value taken as the universal and heads towards particular aspects such as wages, money, rent, prices, profit, rate of profit and the like. He attempts to prove that the law of labour theory of value applies as such to all individual economic phenomena. Thus, Ricardo's examination of the economy is a unity of different determinations which is mediated and classified. This is the final stage of synthetic cognition, what Hegel calls theorem. The theorem, as Burbidge notes, 'sets out expressly the basis of the reciprocity between the universal and its particulars' (Burbidge 2005: 178). Hegel introduces the theorem within an a priori framework using the example of geometry, without providing explicit explanations for its applicability to empirical sciences. However, when considering the realm of political economy, we are confronted with an empirical object. It can be inferred that in an *a posteriori* context, which pertains to cases of empirical objects, the theorem substantiates a necessary truth about the object. Consequently, by establishing the connection between the thought determinations of the empirical object, it unveils laws and inner relations (cf. Meaney 2002: 174-75).

Ricardo's method is synthetic because, starting from the abstract relation of the labour theory of value, it attempts to explain the other economic categories in a sequential way. This method is the characteristic feature of synthetic cognition (cf. Bowman 2013: 182). Marx highlights both the historical significance of Ricardo's method in the field of political economy and its deficiencies associated with the mode of presentation (Darstellungsart) and the conclusions (EM 2: 390/ 816). The main problem with his method is that 'it omits some essential links and directly seeks to prove the congruity of the economic categories with one another' (EM 2: 390/816). Moreover, it applies its basic theoretical principles to 'various extraneous matters' (EM 2: 397/820). In this context, Marx underscores that the limitation of synthetic cognition lies in the fact that the particularization and the transition to singularity is carried out through the turn to the external material rather than being derived immanently through the self-differentiation of the initial universal concept (cf. SL: 718-19/W6: 526-27, 728/W6: 540-41).²⁶ As a result, Ricardo's synthetic method does not facilitate the determination of the specificity of the particular economic aspects and the connection between the abstract and the concrete economic categories (C III: 136/55). Unable to immanently deduce the specific determinations of the particular economic categories through the universal category of the labour-time determined value, Ricardo is compelled to extract them by turning to empirical immediacy. For instance, in his analysis of money, Ricardo cannot derive the specific features of the money form through the concept of labour-time determined value (EM 2: 389–90/816).²⁷ To determine money he produces definitions by turning to sensuous intuition. This means that the determinations of money are derived through empirical induction, namely by detecting the general properties which all phenomena of money have in common (Ilyenkov 2008: 190). This makes him unable to distinguish the determinations peculiar to exchange values as determined by labour time from the determinations that money acquires as a manifestation of labour (EM 2: 389-90/816). Thus, Ricardo fails to prove that money is the necessary form of value's appearance (EM 2: 389-90/816; see also Murray 1993: 51). By the same token, Ricardo fails to distinguish between surplus value and profit (EM 3: 275/1277). By assuming a general rate of profit among capitals of equal size, he attempts to verify whether it is compatible with the law of value. Marx writes on the latter:

> Instead of postulating this general rate of profit, Ricardo should rather have examined in how far its existence is in fact consistent with the determination of value by labour-time, and he would have found that instead of being consistent with it, *prima facie*, it contradicts it, and that its existence would therefore have to be explained through a number of intermediary stages, a

procedure which is very different from merely including it under the law of value. He would then have gained an altogether different insight into the nature of profit and would not have identified it directly with surplus-value. (EM 2: 401/826)

Accordingly, even though the synthesis of the economic categories is attempted, the connection of the latter is more or less external. For this reason, Marx duly emphasizes 'how from the mere determination of the "value" of the commodities their surplus-value, the profit and even a general rate of profit are derived remains obscure with Ricardo' (EM 2: 416/840). In this respect, Ricardo's method is a synthesis in which the determinateness of particular and singular relations presupposes the induction and the turn to sensuous intuition. Although he begins with the universal, the transition to individual and concrete economic categories is carried out externally; something that makes the connection of singularity to universality a kind of 'empirical addition' (SL: 722/W6: 532).

From the above analysis, it can be inferred that Marx's critique of Ricardo's method is a critique of synthetic cognition. Since in synthetic cognition the gap between subjectivity and objectivity is maintained, the 'self-referring determinateness' and the 'internal differentiation' of the object are not fully achieved (SL: 718/ W6: 526). The reality of the concept and the reality of the object are still external to each other. Due to this limitation of synthetic cognition the connection between universality, particularity and singularity is carried out externally by confronting the empirical object. Considering the universal concept as unchangeable, the connection of the thought determinations of the object is based on the common features they share with the universal.²⁸ Synthetic cognition carries out the unity of the different determinations, something which it has in common with speculative (or systematic dialectical) cognition. Yet, synthetic cognition differs because the unity of the determinations takes place from the aspect of a given (identical) object rather than from a self-developing one (organic whole).²⁹ As a result, the particular and singular aspects of the object are conceived as mere modes of the unchanged universal category. The universal category is understood as a cause logically prior to its effects (see Houlgate 2005b: 24). Hence, the various aspects are not understood in their specificity but based on their derivational relation to the fixed universal category.³⁰ The impossibility of determining the concrete aspects through the development of the logical consequences of the universal category leads to the turn to the external material and to the sensuous intuition. This mode of transition to the particularity and singularity maintains an important degree of externality in synthetic cognition (Bowman 2013: 197–98). Thus, the manifold economic categories appear as 'indifferent parts standing in a multitude of external relations to one another' (SL: 723/W6: 534). Such an approach, where the unity of the categories is represented as fixed and external, cannot represent systematically the connection

between the abstract and the concrete relations of the object. Consequently, in synthetic cognition the categories are not exhibited in their development and internal articulation (cf. Smith 1990: 35). Marx writes on this matter:

With Ricardo the one-sidedness arises also from the fact that in general he wants to show that the various economic categories or relationships *do not contradict the theory of value*, instead of on the contrary, *developing* them together with their apparent contradictions out of this basis or presenting the development of this basis itself. (*EM 2*: 377/801)

So, when Marx (EM 2: 393/819) refers to the scientific deficiencies of Ricardo's method, he means nothing but the inherent limitations associated with synthetic cognition.

What Marx identifies as the underlying cause of the deficiencies of the abstract-to-concrete method is its incapability to represent the object's inner motion systematically, thus reproducing, in broad terms, a static view of the object. In the abstract-to-concrete method of classical political economy, the moments of the concept are in an external relation to each other and thus the transition from universality to particularity requires a shift to experience and sensuous intuition. This implies that the object is conceived statically since the immanent derivation of the determinations of the object is internally interwoven with the investigation of the object as self-developing (see Ilyenkov 2008: 194-202; Ninos 2023b). That's why Marx's criticism of Ricardo focuses on his ahistorical conception and its failure to conceive capitalism as a self-developing process (G: 331/249). Even though Ricardo's synthetic method successfully reveals necessary inner relations and laws, it fails to reveal capitalism's self-differentiation (cf. EM 2: 394-97/820; PhG: 32/52). Regarding this matter, Hegel asserts that synthetic cognition reveals 'propositions and laws, and proves their necessity; but it proves the latter not as a necessity inherent in a fact in and for itself' (SL: 707/W6: 512). Hence, all the advantages of Ricardo's synthetic method are associated with his substantialist viewpoint, namely with the conception of the object as a coherent system, while all its deficiencies are associated with the ahistorical consideration of the object (Ilyenkov 2008: 194). At this point, we can understand Hegel's assertion that 'a conditional knowledge in respect of the Idea merely signifies that the working out of the development has not yet advanced very far' (LHP: 175/77). To conclude, Marx's immanent critique of Ricardo's method is a critique of synthetic cognition that takes place from the aspect of a higher methodological approach, that of systematic dialectic that corresponds to Hegel's speculative cognition.

IV. Conclusion

Within the traditional philosophical discourse surrounding the philosophical affinities between Hegel and Marx, the dominant approach tended to oversimplify dialectic, reducing it to a superficial interpretation (see Ninos 2023b), or focusing on common topics that both thinkers addressed; history, alienation, the state and the like. However, recent scholarship has brought new interpretations which deal in detail with the homologies between the method of *Capital* and the *Science of Logic* (see Moseley and Smith 2014). Thus, beyond simplistic interpretations of dialectic, Marx's systematic dialectic possesses a distinctive speculative character. The emergence of these new interpretations has expanded the scope of research on the relationship between Hegel and Marx, creating opportunities for fruitful dialogue between scholars in both fields.

In this article, I contended that Marx employs Hegel's philosophy to assess the methodologies of previous economists. My analysis suggested that Marx's critique of classical political economy is rooted in Hegel's treatment of finite cognition, which serves as Marx's fundamental methodological framework. By taking Marx's critique of Ricardo as a case study, I sought to demonstrate the previous assertion by arguing that Marx's critique of Ricardo's method is based on Hegel's critique of the deficiencies of synthetic cognition. In this context, I underscored the advantages of the systematic dialectical method which led Marx to overcome the deficiencies of synthetic cognition and the shortcomings of the classical school. Hence, the article has endeavoured to unravel a crucial theoretical topic that has implications for both the Hegelian and the Marxist debate, while also highlighting the possibility of productive engagement between scholars in these areas.

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Notes

¹ In this article, I do not deal with the question of the homologies between Hegel's *Logic* and Marx's method in *Capital*, as this emphasizes a different aspect of the Hegel-Marx relationship. Hence, I begin my examination by taking for granted that the method of *Capital* is similar, in its general structural features, to Hegel's speculative method (see Arthur 2004; Campbell 1993;

Ninos 2023a; Sekine 2020; Smith 1990, 1993; Vazjulin 2006). However, I admit that the question of the homologies between Hegel's *Logic* and the dialectic of *Capital* is a matter of a great debate. ² The distinction between analytic and synthetic modes of cognition goes back to Greek philosophy (see Pozzo 1993: 27–39).

³ Abbreviations and translations used

- CI = Marx, Capital: A Critique of Political Economy, vol. 1, trans. B. Fowkes (Harmondsworth: Penguin, 1976)/Das Kapital, Band I, MEW 23 (Berlin: Dietz-Verlag, 1962).
- C III = Marx, Capital: A Critique of Political Economy, vol. 3, trans. D. Fernbach (Harmondsworth: Penguin Books, 1981)/Das Kapital, Band III, MEW 25 (Berlin: Dietz-Verlag, 1964).
- CPE = Marx, A Contribution to the Critique of Political Economy, in K. Marx and F. Engels, Collected Works, vol. 29 (New York: International Publishers, 1988)/MEW 13 (Berlin: Dietz-Verlag, 1961).
- CPR = Kant, Critique of Pure Reason, trans. and ed. P. Guyer and A. Wood (Cambridge: Cambridge University Press, 1998).
- *EG* = Euclid, *Elements of Geometry*, trans. and ed. R. Fitzpatrick (Richard Fitzpatrick, 2007).
- EL = Hegel, Encyclopaedia of the Philosophical Sciences in Basic Outline. Part 1: Science of Logic, trans. and ed. K. Brinkman and D. O. Dahlstrom (Cambridge: Cambridge University Press, 2010)/Enzyklopädie der philosophischen Wissenschaften im Grundrisse. Erster Teil: Die Wissenschaft der Logik Mit den mündlichen Zusätzen, in Werke 8 (Frankfurt: Suhrkamp, 1970).
- EM 2 = Marx, Economic Manuscripts 1861–1863, in K. Marx and F. Engels, Collected Works, vol. 31 (New York: International Publishers, 1989)/Zur Kritik der Politischen Ökonomie (Manuskript 1861–1863), MEGA, Teil 3 (Berlin: Dietz-Verlag, 1978).
- EM 3 = Marx, Economic Manuscripts 1861–1863, in K. Marx and F. Engels, Collected Works, vol. 32. (New York: International Publishers, 1989)/Zur Kritik der Politischen Ökonomie (Manuskript 1861–1863), MEGA, Teil 4. (Berlin: Dietz-Verlag, 1979).
- G = Marx, Grundrisse: Foundations of the Critique of Political Economy (Rough Draft) (Harmondsworth: Penguin, 1973)/Ökonomische Manuskripte 1857/1858, MEW 42. (Berlin: Dietz-Verlag, 1983).
- JL = Kant, The Jäsche logic in Lectures on Logic, trans. and ed. M. Young (Cambridge: Cambridge University Press, 2004).
- LHP = Hegel, Lectures on the History of Philosophy vol. 3, trans. E. S. Haldane and F. H. Simson (London: University of Nebraska Press, 1995)/Vorlesungen über die Geschichte der Philosophie III, in Werke 20 (Frankfurt: Suhrkamp, 1979).
- LL = Hegel, Lectures on Logic. Berlin 1831. (Bloomington: Indiana University Press, 2008).
- MEW = Marx-Engels Werke (Berlin: Dietz, 1956–).
- PbG = Hegel, Phenomenology of Spirit, trans. A. V. Miller (Oxford: Oxford University Presss, 1977)/Pbänomenologie des Geistes, in Werke 3 (Frankfurt: Suhrkamp, 1970).
- PPE = Ricardo, On the Principles of Political Economy and Taxation (Kitchener: Batoche, 2001).

- Prol = Kant, Prolegomena to any future metaphysics, trans. and ed. G. Hatlfield (Cambridge: Cambridge University Press, 2004).
- SL = Hegel, Science of Logic, trans. G. di Giovanni (Cambridge: Cambridge University Press, 2010)/Wissenschaft der Logik, Band I & II, in Werke 5 & 6 (Frankfurt: Suhrkamp, 1969).

⁴ For a further discussion see Allison (2004).

⁵ In my interpretation, I understand Hegel's *Logic* as both logic and ontology that 'uncovers the fundamental categories of thought and the inherent structure of being itself' (Houlgate 2005b: 19). ⁶ The concept of abstract identity represents an identity that exists solely for itself and excludes

difference. This form of identity serves as the principle of understanding (*EL*: \$45, 90/122). For a detailed analysis of the concept of 'identity' in Hegel's thought, see Trisokkas (2016).

⁷ Hegel emphasizes that analytic cognition starts with an immediately given material, which can encompass both a concrete empirical object and a completely abstract object, such as those encountered in arithmetic and mathematical sciences. In the latter cases, he considers their method as 'the most immanently analytic' (*SL:* 702–703/*W6*: 505).

⁸ Throughout the article, I replace di Giovanni's translation of the term 'Gegenstand' as 'subject matter' with my own translation, rendering it as 'object'.

⁹ Hegel's treatment of the theorem is primarily drawn from Euclidean geometry, which he regards 'as the representative of the synthetic method of which it delivers the most accomplished exemplar' (*SL*: 721/*W6*: 530). Therefore, he views Euclidean geometry as the highest form of synthetic cognition due to the deductive rigor of its method (*SL*: 724–29/*W6*: 535–41; see also Bowman 2013: 158–200).

¹⁰ Smith aptly points out that 'Marx's commitment to a dialectical ordering of economic categories comes out quite forcefully in his criticism of earlier economic theories (1990: 35). As previously indicated in footnote 1, this article does not aim to demonstrate the homologies between Marx's method in *Capital* and Hegel's absolute method. Nonetheless, I begin my analysis with the assumption that the systematic dialectic of *Capital* aligns with Hegel's absolute method in terms of its general structural features, following interpretations by scholars such as Arthur (2022), Meaney (2002), Sekine (2020), Vazjulin (2006) and others.

¹¹ At times, Marx appears to employ the term 'classical political economy' more narrowly, referring specifically to economists from the Smith to Ricardo period. In this article, I use 'classical political economy' in its broader sense.

¹² In the philosophical context of both Hegel and Marx, the term 'abstract' means 'internally simple' while 'concrete' signifies 'internally complex'. See Ilyenkov (2008).

¹³ Translation modified.

¹⁴ Translation modified.

¹⁵ On the relation between immediacy and mediation, see also Houlgate (2006).

¹⁶ Petty confuses exchange value with its appearance in the exchange of commodities while Boisguillebert confuses labour, as the source of value, with its immediate concrete form (*CPE*: 292–95/37–41). In the concrete-to-abstract method, cognition negates the givenness of the object by isolating specific features, thereby generating universal determinations that

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still retain an element of sensuous immediacy. Consequently, thinkers who employ this method conflate the abstract determinations that express the object's essential relations with the aspects perceived at the level of sensory intuition. Furthermore, with earlier classical political economists, such as Petty and Boisguillebert, in mind, Marx writes about their method: 'classical political economy seeks to reduce the various fixed and mutually alien forms of wealth to their inner unity by means of analysis and to strip away the form in which they exist independently alongside one another. It seeks to grasp the inner connection in contrast to the multiplicity of outward forms. [...] Classical economy is not interested in elaborating how the various forms come into being, but seeks to reduce them to their unity by means of analysis, because it starts from them as given premisses' (*EM* 3 499–500/1498–99).

¹⁷ Here I use the term 'deduction' in its general sense, namely as 'an inference which proceeds from a more general to the less general, or from the necessary to the contingent' (Bunnin and Jiyuan 2004: 163).

¹⁸ The movement from the universal concept of genus to its particulars leads to the conception of the object as a totality of relations. Longuenesse points out that 'forming concepts of natural kinds (genera and their specific differences, under which individual things are subsumed) means that one has found a justification to represent as an objective whole (or a totality of things united by objective determinations) what presented itself as an empirically determined collection of similar things' (Longuenesse 2007: 211). See below on division.

¹⁹ Marx contends that Adam Smith traces the inner connection between the economic categories whereas he exposes the connection of appearances as detached from the internal connection (EM2: 390/816). Since Smith presents the inner connection and subsequently the connection of appearances, thought as detached from the first, his approach is based on the abstract-to-concrete method. It is worth noting that the abstract-to-concrete method varies among different thinkers. For instance, in Smith's abstract-to-concrete method, aspects of the concrete-to-abstract method still prevail, whereas in Ricardo, it is employed in a more precise manner (see EM2: 338/759, 387/813, 394/820).

 20 We should also bear in mind that *Grundrisse* are Marx's personal notes, which were not intended for publication (Musto 2008).

²¹ For instance, Ushida fails to distinguish the speculative cognition from synthetic cognition (1988: 19–27). See Meaney's objections to Ushida's reading (Meaney 2002: 170).

²² For an insightful analysis of Hegel's threefold distinction of thinking, see Kalatzis (2018). See also Luciano (2023).

²³ Hegel introduces the stages of analytic and synthetic cognition using examples from *a priori* sciences, such as arithmetic for analytic cognition and geometry for synthetic cognition. In contrast, Marx's concrete-to-abstract and abstract-to-concrete methods, attributed in different phases in the history of political economy, are associated with *a posteriori* science. This difference might suggest that a direct parallel between Hegel's analytic-synthetic distinction and Marx's methods is not justified. However, it is important to note that Hegel views arithmetic and geometry as exemplar, though not exclusive, sciences for illustrating analytic and synthetic cognition

(*SL*: 702–703/*W6*: 505, 721/*W6*: 530). Since finite cognition always engages with external objects, its stages can be appropriately applied to *a posteriori* sciences, such as political economy. ²⁴ Kant defines the relationship between genus and species as follows: 'The higher concept, in respect to its lower one, is called genus, the lower concept in regard to its higher one species' (*JL*: 594).

²⁵ Longuenesse argues that a proper understanding of the genus and its specific difference enables one to consider a thing according to its proper concept and evaluate its adequacy to this concept (Longuenesse 2007: 213). However, the proper determination of the genus cannot be fully achieved at the level of synthetic cognition (cf. Ng 2020: 282–83). The acquisition of the proper determination of the genus is interwoven with the stage of speculative cognition.

²⁶ Winfield notes that in synthetic cognition 'the universal from which it starts, as something given, does not contain the generation of its particularization. Consequently [...] synthetic cognition must add the sought-after particularization, but to do that, it must go beyond the given universal. As an exercise of cognition, the particularization must be located by confronting objectivity and uncovering its particularization as it falls under a universal' (Winfield 2012: 327). Although Marx also investigates an external object, in *Capital*, the transition to the various economic categories is carried out in a distinctive speculative way 'by developing the logical consequences of the commodity form' (Campbell 1993: 297; cf. *C I*: 102/27).

 27 Marx stresses that 'money and exchange itself (circulation) therefore appear only as purely formal elements in his economics' (*G*: 327/246).

²⁸ In the stage of the theorem, the fixity of the universal is manifested through axioms derived from another science, which assume the character of given principles and presuppositions for the object of cognition (*SL*: 719–20/*W6*: 529).

²⁹ On this matter, Hegel notes that the connection in diversity that speculative cognition carries out 'is no longer a synthesis as understood in finite cognition; the no less thoroughly analytic determination of the object, the fact that the connection is within the concept, already distinguishes it fully from the latter synthesis' (*SL*: 741/*W*6: 557).

³⁰ Ilyenkov aptly parallels Ricardo's method with Spinoza's geometric method. He argues that Ricardo understands the labour theory of value as the universal substance of all economic phenomena and, correspondingly, the particular and concrete phenomena as its modes (Ilyenkov 2008: 182–83). For a further discussion, see Bowman's analysis of Hegel's critique of the geometric method (Bowman 2013: 190–200).

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