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# Abstraction in the Marxian *Oeuvre*: Tendencies, Laws and Dialectics

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## ABSTRACT

Abstraction has taken very different terminologies revolving around the relation between reality and thought. In this framework, the debate on the issue of crisis is fueled by different, often one-sided and ideologically contradictory, uses of abstraction. In this work, we attempt to show that without an adequate grasp of the role of abstraction, and without sufficient flexibility in making the needed abstractions, most interpreters of Marx — Marxists and non-Marxists alike — have constructed versions of his theories that suffer in their very form from the same rigidity, inappropriate focus, and one-sidedness that Marx saw in bourgeois ideology. In this framework, we argue that Marx's abstraction is not 'other things equal', i.e. *ceteris paribus*, but 'nothing equal'. In the same vein, we argue that the capitalist process is a 'non-equilibrium' process. Instead of 'laws', we argue that tendencies and contradictions may be found in the Marxian oeuvre. Furthermore, we argue that the isolation of the third Volume of Marx's capital from the rest of the Marxian oeuvre facilitates the interpretation of Marx's method in terms of 'mechanical materialism'.

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## 1. Introduction

Abstraction is not a particular method but a common process belonging to all forms of thought, taking various methodological forms depending on the way that reality appears before the praxis of the abstraction and emerges after it. Abstraction is part of different methodological traditions such as Cartesian rationalism, analytical thought and dialectics. In the banks of the analytical tradition, abstraction is driven by mechanistic materialist terms. In this context, the 'whole' consists solely of its 'components'. According to dialectics, the understanding of the concrete nature of things, presupposes to be able to consider them in the context of their inter-connections with other things within a wider whole. Dialectical method is the necessary basis for an adequate theory of history and an indispensable part of Marx's thought (Sayers 1984, p. 5). For dialectics, concrete and particular things are always and essentially related, connected to and interacting with other things within a larger totality, given that relations are internal and

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essential to the nature of things, not external and accidental (Sayers 1984, p. 5). Reality has a contradictory nature; the precise is a 'representation', something partial that can be refined for the specific instance, as a materialistic instance, as a step backwards to concrete reality. Marx abstracts every historical social form as in fluid movement, and therefore considers its transient nature not less than its momentary existence (Marx 1958, p. 20). We argue that distortions in the conceptualization of the Marxian oeuvre depart from the different terminologies and methodological contexts along with the use of different versions of abstraction.

One-sided readings have been, in the history of Marxism, a common practice by Marxists (Hudis 2012, p. 35) since his oeuvre invites different interpretations — since Marx employed a host of argumentative and conceptual strategies. This situation made possible the creation of different philosophical tendencies on one or another angle of his thought. Based on Marx's scattered and not entirely consistent fragments, his successors felt free to construct their various interpretations of the Marxian oeuvre. These interpretations have been quite different and often contradictory, bringing about extensive debates, the one on crisis being probably, the most prominent, in the literature.

Marx argued that growing accumulation implies that 'crises increase' (Marx and Engels 1989, CW 9, p. 228), while, according to Wolff (1978, p. 48), 'crisis is the disruption of the unity, the disruption of accumulation'. Crises have been crucial for the ideological apparatus of the collapse of capitalism and the win of socialism giving way to a fierce debate, among Marxist economists (Cullenberg 1992, p. 44). Crisis is often connected to the Law of the tendency of the rate of profit to fall (Heinrich 2012). Grossman (2000) saw the law as a mechanistic economist, and through this a sequential appearance of crisis until the collapse of capitalism while, Milios, Dimoulis, and Economakis (2002, p. 147) concluded that 'the "law" does not exclude the possibility of the nonexistence of the needed conditions and thus the containment or reversal of the falling tendency in the rate of profit'.

Law-like theorizing is based on a mechanistic picture of the world, being an outcome of the static reduction of parts. In this context, relations appear as external, and causality emerges. Furthermore, mechanics are built prominently, either on *a priori* purposeful abstraction, or on the mix of different levels of abstraction. Law-like and causal analysis reflect a preferential adherence of Marxist economists to non-Marxian political economy and especially to neoclassical economics.

This paper aims at bridging this gap in the literature, focusing on the neoclassical impasse of Marxist theory of crisis and laws, its bourgeois theoretical foundations and its neglecting of the critical dimension of Marx's theory. This new insight will hopefully open new paths in the formulation of the arguments on crisis and the clarification of the antithesis to positivism and neoclassical economics.

The reminder of the paper is structured as follows: Section Two focuses on Marx's scientific method and mainly on the issues of abstraction and dialectics; Section Three discusses the issue of the different levels of abstraction and the problems that arise when conflating them; Section Four focuses on overproduction crisis and its relation with the Law of the tendency of the profit rate to fall; Section Five deals with the 'scientific' context of the laws and finally Section Six concludes.

## 2. Marx's Scientific Method: Abstraction and Dialectics

Abstraction is not a particular method but a common process belonging to all forms of thought, taking various methodological forms depending on the way that reality appears before the praxis of the abstraction and emerges after it. Knowledge is a product of practice, observation, abstraction, and analysis; all knowledge production necessarily involves abstracting some things into view and others out (Paolucci 2011). Science and especially social science generally uses theoretical statements that apply universally to all places and times, and makes use of the process of abstraction. According to Swedberg (2020, p. 258), 'an abstraction is a representation of what is general about a phenomenon, without any details or references to what is concrete'.

Abstraction is part of different methodological traditions such as Cartesian rationalism, analytical thought and dialectics. In the tradition of Cartesian rationalism, it is argued that concepts and knowledge are gained independently of sense experience. According to the Cartesian Cogito, knowledge is acquired independently of any experience, depending on the reflective, intuitive awareness of the existence of occurrent thought; reason provides the additional information about the external world. Toulmin refers to Descartes' teachings, arguing that the demands of rationality impose on philosophy a need to seek out abstract, general ideas and principles, by which particulars can be connected together (Toulmin 1992, p. 33).

In the banks of the analytical tradition, abstraction is driven by mechanistic materialist terms. In this context, the 'whole' is considered into its component parts. The different elements and aspects of a given totality are separated, making possible their analysis in isolation. The effect of this method is to produce a fragmented and atomized picture of reality (Sayers 1984, p. 4). Things are what they are,<sup>1</sup> and have their essential nature in themselves, quite independently of the relations in which they stand (Sayers 1984, pp. 4–5). Furthermore, underlying this method of analysis there is the concept of external relations. Things are not affected by their relations or context; put differently, relations are external to, and independent of, the things or terms related, in parallel to Locke's view that relation is 'not contained in the real existence of things, but (is) something extraneous and superinduced' (1960, Essay 2.25.8, p. 322; see also Sayers 1984, p. 5). The analytical approach, with its logic of external relations, has the effect of removing things from their context, producing an abstract account of them, having the effect of fragmenting the world into a disconnected series of atomic particulars and, thereby, producing a mechanical account of reality (Sayers 1984, p. 5). Marxist philosophy tended to criticize mechanical forms of materialism insisting that a dialectical form of materialism is needed in order to comprehend the complexity and richness of concrete historical processes (Sayers 1984, p. 4).

In the Marxist tradition, abstraction has taken very different terminologies, e.g., 'for Lukács, it was the concept of 'totality' (Lukacs 1971); for Mao, a 'contradiction' (Mao 1968); for Raya Dunayevskaya, the 'negation of negation' (Dunayevskaya 1981; Hegel 1956); for Scott Meikle, 'essence' (Meikle 1985); for Ollman 'internal relations' (Ollman 1976)' (see also Ollman 2003). For Marx, the abstract refers to a concept

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<sup>1</sup>'Everything is what it is and not another thing' — Bishop Butler's slogan admirably sums up the logic of this sort of analytical approach; this saying was used by G.E. Moore as the motto of his *Principia Ethica* (1903 [1993]), and thereby achieved modern currency as one of the slogans of the analytical movement (see also Sayers 1984, p. 5).

produced through abstraction, which consists of extracting — as a mental representation — a specific part or aspect of the perceivable reality (Inwood 1993, p. 41; see also Germer 2001). The abstract is, therefore, a product of thought, which consists of the mental representation of an isolated element of empirical reality, as it is directly reflected in thought. In this sense, the abstract constitutes ‘an elementary stage in knowledge, but it is not knowledge itself, since the latter cannot be reduced to the representation of one or several isolated aspects of reality’ (Germer 2001).

Marxian abstraction starts from the ‘real concrete’ (the world as it presents itself to us) and proceeds through ‘abstraction’ (the intellectual activity of breaking this whole down into the mental units with which we think about it) to the ‘thought concrete’ (the reconstituted and now understood whole, present in the mind) (Marx 1904, pp. 293–294). Thus, philosophical abstraction cannot be measured in the concrete instances, although derived from them (Foley 2011, p. 25). Knowledge consists of the concrete, that is, of the apprehension of the object under analysis as the whole of parts which are interrelated in a particular way, or in the internal structure of the object; ‘concrete knowledge of reality is only possible if the parts, abstracted from the whole through thought, are rearticulated in the concrete whole’ (Corazza 1996, p. 38; see also Germer 2001). Harvey (2012) was pointing that without abstraction, Marx would not arrive to foundational concepts. Marx’s method is based on the idea that reality has a contradictory nature; the precise is a ‘representation’, something partial that can be refined for the specific instance, as a materialistic instance, as a step backwards to concrete reality. Reality is seen in a mirror, and as in the nature of mirrors, it reflects but does not direct (Niebyl Year Unknown).

According to dialectics, understanding the concrete nature of things presupposes the ability to consider them in the context of their inter-connections with other things within a wider whole. Dialectical method is the necessary basis for an adequate theory of history and an indispensable part of Marx’s thought (Sayers 1984, p. 5). For dialectics, concrete and particular things are always and essentially related, connected to and interacting with other things within a larger totality, given that relations are internal and essential to the nature of things, not external and accidental (Sayers 1984, p. 5). All the properties of things exist by virtue of their relations, or in the words of Spinoza ‘*omnis determinatio est negation*’ (all determination is negation). A thing manifests color only by reflecting light in a certain way; an object manifests mass only in and through its mechanical interactions with other bodies; a thing shows its shape only through its relations to other things in space (Sayers 1984, p. 8). In any case, historical materialism maintains that social relations are internal and essential features of the nature of both people and productive forces (Sayers 1984, p. 8).

Therefore, in the context of dialectics, concrete things must be understood in the context of their relations and in a dynamic fashion; only when relations between opposites are not fixed and stationary, their unification is intelligible, implying that opposites interpenetrate and pass into each other dynamically (Sayers 1984, p. 8). The world is an ongoing process, a bunch of potentialities that is constantly being realized, ‘becoming’ rather than ‘being’; put differently, parts are conceived only through their ‘momentary relation’. The world should be understood, as ‘a moving train’ (Althusser 2006, p. 189). Thus, Marx conceives every historical social form as moving, and therefore considers its transient nature not less than its momentary existence (Marx 1958, p. 20).

When Marx grasps an instant picture of the world, he underlines its character as a temporarily stable part of a larger ongoing process, referring to it as a ‘moment’ (Ollman 2003, p. 67). In this way, commodity is spoken of as a ‘moment in exchange’, money (in its aspect as capital) as a ‘moment’ in the process of production, and circulation in general as a ‘moment in the system of production’ (Marx 1973, pp. 145, 217). In the words of Marx, ‘production and consumption ... appear as moments of a single process in which production is the actual point of departure and accordingly the predominant moment. Consumption, as a pressing necessity, as a need, is itself an internal moment of productive activity’ (Marx 1973, p. 23).

The epistemological priority to capital,<sup>2</sup> in the Marxian oeuvre, identifies ‘relations as developments coming out of this germ’ (Marx 1973, p. 436). This conceptualization makes possible to ‘distinguish or rank the levels of the whole according to their relative importance’, attributing *a posteriori* the relative momentary importance, ‘without succumbing to reductionism or pluralism’ (Smith 1984, p. 527). Marx’s admission, that momentary sights can only be conceived as pictures of the very historical situation, reflects his epistemological priority to movement<sup>3</sup> over stability, so that stability is seen as a ‘paralysis’ of movement (Marx 1971, p. 212).

Change is intrinsic into parts and wholes, unable to be separated from them; parts cannot be conceived outside their coexistence in the moving whole. Thus, relations between parts and wholes make up to processes and processes can only be identified in the transforming parts of which it consists. It can’t be driven on the extension of the identities of the parts. Parts are ‘members of a totality, distinctions within a unity ... Mutual interaction takes place between the different moments, this is the case with every organic whole’ (Marx 1973, pp. 99–100). The conception of the parts as logically independent of and easily separable from their surrounding conditions equals to thinking them as static, eternal and reducible; a way of thinking that may be attributed to the mechanistic materialism of the analytical method. In other words, when parts are seen out of their co-existence, ‘determinations’ and causes appear. Neglect of the abstraction and dialectics transforms causes and effects as rigidly opposite poles, as a disregard of interaction (Dobb 1947 [2001]). On the opposite, Marx argues that ‘production, distribution, exchange and consumption ... all constitute members of a single whole, differences within a single unity ... Interaction takes place among the various moments. Such is the case with every organic unity’ (Marx 1973, pp. 29–30). In the same spirit, forces and relations of production, base and superstructure, are all aspects of a single whole, internally and organically related, in dialectical interaction and conflict (Sayers 1984, p. 12). In other words, dialectical development in the Marxian narrative does not proceed uniformly and in a linear manner, but is rather a ‘movement in contradictions’ (Heinrich 2012).

### 3. Levels of Abstraction

Nearly every major thinker and school of thought within contemporary Marxian political economy has made some reference to levels of analysis or levels of abstraction, and has

<sup>2</sup>Within the Althusserian framework, ‘abstract-in-thought’ is identical to ‘mode of production’, while for Jameson the mode of production consists the highest abstraction within his three-level analysis.

<sup>3</sup>Given that change is always a part of what things are, Marx’s research problem could only be *how*, *when*, and *into what* they change (Ollman 2003, p. 67).

shown some sensitivity to the difficulties in mediating more abstract levels of analysis with more concrete (Albritton 1992, p. 16). Moving from the real concrete to more abstract notions of the ‘abstract in thought’, ‘*homocentric circles*’, or more abstract common denominators may be identified. Moving towards wider abstractions more abstract common identities<sup>4</sup> applying to all are to be found. Starting from the material world, the uniqueness of a person and situation is observed; it is the concrete in terms of observation, where separate subjects with unique qualities, such as personality, name and address may exist; it is the core-circle. It is the level of here and now. Here ‘consumption, political subjectivities and the aesthetic, cultural and political preferences of individuals’ may be observed (Harvey 2012, p. 22).

After the praxis of abstraction, human beings are seen as living labor, since the common identity under the capitalist era, is the fact that people take part in the specific capitalistic labor division; forming a wider circle. It is the level of the capitalist world and the entire 400 or so years of the capitalist era that are considered. In the words of Ilyenkov (1982, p. 97), ‘here labor in general, labor as such appears as a concrete universal substance, and a single individual and the single product of his labor, as *manifestations of this universal essence*’. In the same vein, commodity exchange, when seen from the filter of abstraction gets substituted for the whole of the process by which a product becomes a commodity and eventually available for exchange. In terms of reality it is a specific commodity with specific apt characteristics, specific temporality and to be consumed by specific subjects (Marx 1973, p. 198).

Put differently, the difference in the depth of abstraction is adequately described when turning on the particularities of capital; when it is narrow it includes fixed capital, circulating capital, etc. (Moseley 2013, p. 14). While, when it is broad, it includes accumulation, competition, and concentration. Thus, higher levels of abstraction depict wider *spectrum and possibilities*, while narrower levels of abstraction equal to *subjectified* and greatly diminished possibilities, giving way to the ‘*common sense*’. Moving back to the real concrete, possibilities are seen in their historical crystallizations of human and social behavior. Moving towards wider abstractions every set of alternatives is seen as more feasible and/or attractive, since the very personal, class, and human qualities brought are formed in the widest sense. According to Foley (2011, p. 21), ‘the continuing relevance of the higher order abstraction ... with the additional lower order determinations ... does not imply, however, that the two thought-experiments coexist’.

Meanwhile, class struggle and the struggle for the working day as abstractions may be theorized as parts inherent to the capitalist mode of production. We argue that after wide abstractions such as the mode of production, the struggle for the working day should adhere to the same level of abstraction, being in such a case unable to provide knowledge for time and space. Thus, at this level of abstraction, struggles may be conceived of as an

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<sup>4</sup>Hegel explained that when one speaks about the difference between two things, that is how identity emerges. The ‘truth’ of these two objects consists only in their relation to each other — ‘each contains the other in its own concept’ (Hegel 1966, p. 118). Hegel was arguing:

we speak, accordingly, of the notions of colour, plant, animal, etc. They are supposed to be arrived at by neglecting the particular features which distinguish the different colours, plants, and animals from each other, and by retaining those common to them all ... But the universal of the notion is not a mere sum of features common to several things, confronted by a particular which enjoys an existence of its own. It is, on the contrary, *self-particularizing* or *self-specifying*, and *with undimmed clearness finds itself at home* in its antithesis. (Hegel 1975, p. 225, original emphasis)

inherent characteristic of the capitalist mode of production unable to be predicted or located in any way. It is inherent, meaning that something should be happening unable to be precise in any way. If we focus on the specific places or times where and when struggles take place, we can understand the particularities of class-struggle in a country and during a specific period. In that case, these struggles should follow a specific analysis of the mode of production in one country or in a specific period. The conclusions reached driven cannot be generalized in any sense, given that the information they contain depict the specific moment under analysis. Different levels of analysis cannot be combined to provide either specific knowledge or generalizations.

Mingling wider and narrower abstractions, equals to ascribing hyper-historical characteristics to temporary instances of capitalism. Put it differently, temporal, specific characteristics are induced to eternal, general characteristics, particularities are induced to general characteristics and empirical truths are induced to theoretical 'truths', when different levels of abstraction are combined. In the words of Marx: 'to try to give a definition of property, an independent relation, a category apart, an abstraction and eternal idea, can be nothing but an illusion of metaphysics and jurisprudence' (Marx 1973, p. 154). Given the limitations, narrow abstractions have limited explanatory power compared to wider abstractions; their conclusions should not be induced to generalizations that are in force for the capitalist mode of production, given that the latter refer to wider abstractions. Distortions arise when the method of abstraction is driven through 'thinking in terms of the thought concrete' and 'seeing in terms of the real concrete', applying possibilities of wider abstractions into narrower ones and the inverse.

Marx has criticized classical political economists<sup>5</sup> for reductionist, abstraction, i.e., abstraction that is trapped into aspects of the reality. As Paolucci (2011, p. 72) argues, 'traditional political economy ... often constructs concepts based on observations of the present and universalizes them backward to prior systems and/or pitches them at the level of society in general. Such forms of knowledge are not only reductionist but also non-dialectical, non-historical, and non-materialist'. Statements ascribing aspects of reality with general or eternal characteristics were used by political economists ideologically or purposefully, in the double sense of including too few connections and too short a time period.<sup>6</sup> We argue that the generalization of momentary pictures of the capitalist era facilitates the extraction of predetermined conclusions making use of purposeful and ideological abstraction. Purposeful use of abstraction facilitated the derivation of scientific conclusions in the context of a priori theoretical sketches, since 'the conclusions of neoclassical economics are already present in the assumptions it draws from appearances' (Lebowitz 2009, p. 12).

<sup>5</sup>Ricardo is an eloquent paradigm of narrow abstractions, 'one can see that though Ricardo is accused of being too abstract, one would be justified in accusing him of the opposite: lack of the power of abstraction, inability, when dealing with the values of commodities, to forget profits, a factor which confronts him as a result of competition' (Marx 1968, p. 191). While '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 the given premises' (Marx 1989/Marx and Engels 1989, p. 500).

<sup>6</sup>Marx rejects deductive frameworks for explaining central processes of capitalism, e.g., 'since sales and purchases are negotiated solely between individuals, it is not admissible to seek here for relations between whole social classes' (Marx 1992, p. 550). In the same manner he rejects reductive frameworks as well, 'for, in the beginning of civilization, it is not private individuals but families, tribes, etc., that meet on an independent footing' (Marx 1992, p. 332, see also Paolucci 2007, p. 40).

#### 4. Overproduction Crisis and Laws

Marx was arguing that growing accumulation implies that ‘crises increase’ (Marx and Engels 1989, CW 9, p. 228). According to Wolff (1978, p. 48), ‘crisis is the disruption of the unity, the disruption of accumulation’. For Marx, the crisis is part of a series of fluctuations: ‘The life of modern industry becomes a series of periods of moderate activity, prosperity, over-production, crisis and stagnation’ (Marx 1958, p. 427).

According to Heinrich (2012) in Marx’s work, there are various approaches to explain crises, while no final presentation<sup>7</sup> of his theory of crisis can be found.<sup>8</sup> Crises first took on a special *political* meaning for Marx in 1850 when he attempted a closer analysis of the failed revolutions of 1848–49 (Heinrich 2012), acknowledging the crisis of 1847–48 as the decisive process which led to revolution. The fact that the crisis of 1857–58 was over quickly, not leading, economically or politically, to the shaking up of conditions that Marx had hoped was integrated into his theoretical development: after 1857–58, Marx no longer argued in terms of a theory of final economic collapse, and he no longer made out a direct connection between crisis and revolution (Heinrich 2012).

In the *Manuscript of 1861–63*, the theory of crisis is dealt with under new considerations: crises are no longer an indication of the dissolution of the capitalist mode of production, but are rather the constant and completely normal accompaniment of this mode of production, which provide a ‘forcible adjustment of all the contradictions’ (Heinrich 2012). Correspondingly, the theory of crisis no longer constitutes the endpoint of the presentation (Heinrich 2012).

The elements of a theory of crisis could be summarized in several points: first, that the crisis is one phase in the cycle which is the normal course of capitalist accumulation.<sup>9</sup> Second, that ‘Marx always refers to crises as crises of *overproduction* and such crises are always linked to the tendency for production to expand beyond the limits of the market’ (Clarke 1994, p. 78). Third, that ‘the most extensive considerations of crisis in the Capital manuscripts can be found in connection<sup>10</sup> with the presentation of the Law of the tendency of the rate of profit to fall in the manuscripts of the third volume from 1864–1865’<sup>11</sup> (Heinrich 2012). In that vein, Dobb (1937) concluded that Marx

<sup>7</sup>According to Heinrich (2012), the view that the various fragmentary references to crisis theory in the three volumes of *Capital* constitute a fully developed coherent structure, which only requires diligent exegesis, has never seemed sensible. In the same spirit, Milios, Dimoulis, and Economakis (2002) argue that Marx’s theoretical views expressed on the economic crisis are not given in that a developed and analytical form to constitute a general theory.

<sup>8</sup>In the twentieth century, the starting point for Marxist debates on crisis theory was the third volume of *Capital*, the manuscript of which was written in 1864–65; later, attention was directed towards the theoretical considerations on crisis in the *Theories of Surplus-Value*, written in the period between 1861 and 1863 and finally, the *Grundrisse* of 1857–58 also came into view, which today plays a central role in the understanding of Marx’s crisis theory for numerous authors (Heinrich 2012).

<sup>9</sup>Crisis has been ascribed with ontological characteristics in the history of capitalism since the developmental of capitalism is a process of the collision with its internal limitations (Kuruma 1972, p. 323).

<sup>10</sup>Against this argument, Wolff (1978, p. 52) detached the crisis from the tendency of the profit rate to fall, arguing that ‘when the aspects of capital accumulation which tend to diminish realized profit rates come into play, crisis does not necessarily, automatically follow’. While, according to Clarke (1994, p. 96) cyclical crises do not come up from the secular tendency for the rate of profit to fall, while a lower general rate of profit makes crises more likely and more destructive.

<sup>11</sup>Marx turns his attention for the first time to the secular law of the tendency for the rate of profit to fall, in the *Grundrisse*, something that had been a long-standing preoccupation of classical political economy (Clarke 1994, p. 96). However according to Heinrich (2012) the assumption that Marx intended to base his theory of crisis upon this law, is primarily a consequence of Engels’s editorship of the third volume of *Capital*. Engels heavily revised the material to construct the third chapter on the ‘law’: he condensed it with abridgments, he made rearrangements, and divided it into four sub-sections creating the impression of an already largely completed theory of crisis (Heinrich 2012). And since Engels gave

meant the ‘Law’ to be the primary explanatory principle for the outbreak of the crisis. Marx defined the quantitative framework for the ‘Law’, arguing:

This is in every way the most important law of political economy, and the most essential for understanding the most difficult law from the historical standpoint. It is a law which, despite its simplicity, has never before been grasped and, even less consciously articulated. (Marx 1973, p. 748)

But competition makes the new procedure universal and subjects it to the general law. A fall in the profit rate then ensues. (Marx 1971, p. 374)

Marx named ‘trade-cycle’<sup>12</sup> the recurring economic fluctuations, in which economic activity was followed by economic downturns, some more severe than others, on national and international levels (Patsouras 2005, pp. 76–77). Based on Marx’s studying and terminology, many Marxists would state that cycles are an intrinsic and inherent characteristic of the way that the evolution of capitalism appears (Evans 2004, p. 47). According to Shaikh (1987) and Mandel (1975), four different patterns of cyclical fluctuations, (short, medium, longer, long) are identified into capital accumulation, the fourth of which tends towards general economic crises. The supporters of the sequential fluctuations and cycles draw arguments to sketch a ‘law’ that provokes the phenomenon as a causal mechanism, in the tendency of the rate of profit to fall. Kuruma (1972, p. 329) was arguing that cycles for Marx signify the ‘*movement that various aspects of modern industry necessarily pass through in the course of its development*’. While, for Wolff (1978, p. 48) ‘*the Marxian ... theory articulates no formulas which produce a rigidly periodic cycle*’. Furthermore, for Wolff (1978, p. 51), ‘what produces crisis is a relation, an interaction among aspects of capitalist accumulation’, or elsewhere ‘the crisis ... has its origin in one, or more likely several distinct mechanisms of the accumulation process’ (Wolff 1978, p. 48), concluding that ‘as Marx’s goal was to analyze the basic laws of motion of the capitalist mode of production, crisis — a central element of that notion — could not be a central concern.

In the nexus of the Law, enterprises invest part of their profits in order to achieve more efficient ways to subtract surplus value — through capital investment and technological innovation — bringing upon, an increase in the technical composition of capital, larger than the increase, in the productivity of labor, under the presupposition that the other factors remain stable.<sup>13</sup> As a result, the rate of profit falls. Competition and profit seeking are the driving forces behind the increased technical composition of capital and accumulation. Put it differently, Marx ascribes the falling rate of profit to internal dynamics of technological change within capitalism. The search for relative surplus-value increases the organic composition of capital, leading to a falling rate of profit in the long run; under the assumption of a limit in the rate of exploitation (Harvey 2010). Capitalist competition striving after super-profits, results in the production of relative surplus value (Wolff 1978, p. 50).

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the whole thing the chapter title ‘Development of the Law’s Internal Contradictions,’ he created — on the part of readers who did not know that this chapter title did not at all originate with Marx — the expectation that this theory of crisis was a *consequence* of the ‘law’ (Heinrich 2012).

<sup>12</sup>Often, Marx was describing recurring fluctuations as crisis cycles (Heinrich 1995), depicting an intentional splicing between the notions of fluctuations and crisis.

<sup>13</sup>In other words, the law would apply, should organic composition of capital, the ratio of technical composition of capital to productivity of labor takes prices greater than unit.

According to Harvey, the argument, behind the Law, is incomplete and problematic 'because there is no definite reason why the ratio of the composition of capital should increase in the way Marx suggests it would' (Harvey 2010, p. 265). Milios, Dimoulis, and Economakis (2002, p. 147) conclude that 'the "law" does not exclude the possibility of the nonexistence of the needed conditions and thus the containment or reversal of the falling tendency in the rate of profit'. Shaikh (1978, p. 240) argues that technical progress will raise the rate of profit corresponding to a given real wage only if real wages rise so much that technical progress cannot offset their effects on the rate of profit. Sweezy (1973) and Robinson (1959) argue that the rate of exploitation might rise sufficiently to offset the rise in the organic composition of capital, arguing against the empirical validity of the 'Law', while, Rosdolsky (1956) and Meek (1960) claim that due to the absolute limit of the working day, the production of surplus value has an impassable limit, defending the truth of the law (see also Cullenberg 1992, p. 48). Grossman (2000) saw the Marxian law as a mechanistic economist, and through this a sequential appearance of crisis until the collapse of capitalism. Wolff (1978, p. 47) tried to reformulate the question posed in terms of the existence of the 'Law', going beyond the dispute between realization problems or falling profit rate account for crisis in Marx, concluding that the operation of the mechanism behind the 'Law' is a subtle affair of diverse possibilities (Wolff 1978, p. 51). According to Giacché (2011) against a falling rate of profit acts among others an increase in interest-bearing capital; this factor, which Marx mentions last, consists in an increasing share of capital becoming 'interest-bearing capital' that is investments in credit and financial activities. According to Heinrich (2012), the rate of profit can be raised—under otherwise constant conditions—by an increase in the rate of surplus value and thus the fundamental difficulty for every proof of the law is the fact that the formulation of a general statement about the *degree of increase* for  $c/v$  is not possible (Heinrich 2012). Economakis (2016) refers to counteracting causes that prevent the manifestation of Marxian 'law', such as the 'devaluation of the existing capital', owing to '[a] rise in productivity', focusing on the denial of any compensatory effect of surplus value rate to the tendency of the rate of profit to fall, arguing against the assumption of an ever active compensatory effect of the surplus value rate. Furthermore, the same author argues that the mechanical operation of the 'law' leads to a deterministic-catastrophic conception of capitalist development<sup>14</sup> and entails serious theoretical contradictions and inconsistencies from the standpoint of Marxian theory.

Given that competition is an inherent structural characteristic of the capitalist mode of production,<sup>15</sup> we argue that the construction of the law as a mechanical apparatus demands a de-escalation of the analysis of competition towards a uniformly acting mechanism irrespectively of the specific characteristics of the here and now of the capitalist mode of production. According to Fineschi (2009), we can have two treatments of competition: a first abstract one at the level of capital's essence and a second more concrete one at an empirical level. For an active law, competition should be reduced to the actions of the individual capitalist at the empirical level. In other words, we argue that the way

<sup>14</sup>The establishment of a permanent relation between crisis and the Law of the tendency of the rate of profit to fall, generated models ending up in the abolition of capitalism in terms of its own 'fate'.

<sup>15</sup>According to Fineschi (2009) competition as phenomenal form is instead the manifestation of the essence and not an immediate identity with it. Rosdolsky (1977) thought that competition should be treated inside capital in general as a solution of the classics' misinterpretation of the relation of capital itself and many capitals.

capital-in-general operates is reduced to the rationality of the individual capitalist and is driven in terms of the empirical real, where she is pushed by competition and the subsequent technical change, taken out of her context. But capital, as dealt with in Marx's analyses, is still not capital as it exists in its empirical, individual manifestations; only after capital is depicted as the unity of production and circulation are we at the point where we can deal with the fundamental properties of empirically existing individual capitals (Heinrich 2012). In the Marxian framework, the individual capitalist is a theoretical structure, outcome of the essence of capital in general. But what is 'capital in general'<sup>16</sup>? Marx defines it as 'what they all [capitals] have in common,' the quintessence of capital, whose features tell us conceptually what capital as such is, before we deal with 'many' capitals (Fineschi 2009). It is not 'one' capital set apart from others; it is, rather, their concept, and so exists before the partition into many capitals (Fineschi 2009). Therefore, Marx speaks of it also as total social capital, because it is the (so far) undivided whole (Fineschi 2009).

The individual capitalist can be understood only after abstracting up to capital-in-general and then going back to the individual capitalist who is now totally different to the one that can be observed in reality. The *concrete in thought* is not the real itself, but the *logical* representation of the real, which Marx called the essence of the real in opposition to its appearance; therefore, the product of intellectual activity — the *concrete in thought* or theory — is the representation of the essence or the internal connections of reality, which is not directly perceived through the senses but must be elaborated through reasoning<sup>17</sup> (Germer 2001). But even when focusing to the empirics and material appearances of the individual capital interest-bearing capital<sup>18</sup> and credit belong to the study of the appearing movement of capital. Analysis at the level of the empirics of the individual capital presupposes analysis of the interest-bearing capital which acts against the validity of a falling rate of profit. In that sense, the de-escalation of abstraction in terms of reality in order to prove the validity of the law of the tendency of the profit rate to fall collides with the appearance of interest-bearing capital which acts towards the increased rate of profit.

Marx was arguing that capital, in its non-embodied form, explains solely how capital produces surplus value or how money generates more money, 'becoming capital' in its very moment: 'But we are still concerned neither with a particular form of capital, nor with an individual capital as distinct from other individual capitals etc. We are present at the process of its becoming' (Marx 1973, p. 435).

<sup>16</sup>In fact, whereas from 1857 to 1863 in the manuscripts as well as in Marx's letters, Marx often referred to 'capital in general' when discussing the structure of the planned work, this term no longer showed up anywhere after the summer of 1863 (Heinrich 2012). In the Manuscripts of 1857–58 and 1861–63, Marx dealt substantially with the topic 'capital in general'; in several plans he put down in that period this was indicated as the first point of the book on capital, to be followed by the 'competition' of 'many' capitals. At the end of 1862 Marx referred to a new project, in which that category was not mentioned (Fineschi 2009). This reference opened a debate on whether Marx abandoned the notion of 'capital in general' or it was maintained as part of a new outline (Fineschi 2009). We understand capital in general as the 'capital as a whole', even though according to Muller (1978) and Schwarz (1978) capital as a whole cannot be simply reduced to capital in general (see further Fineschi 2009).

<sup>17</sup>The *concrete in thought* is the product or result of thought through a process of synthesis, of aggregation, in which the significant parts of reality are combined in a totality, in which they are dynamically articulated in a specific way (Germer 2001).

<sup>18</sup>Marx's theory of interest up to Theories of Surplus Value does not yet contain a systematic investigation into the credit mechanism; there is only an elaboration of the abstract form of interest-bearing capital, presupposing the existence of moneyed capitalists outside the industrial enterprise (Itoh 1978).

We argue that the mechanistic, materialist argument focuses on the reality of the individual capital, inducing it to the abstract-in-thought, the capital as a whole, in order to uncover causal mechanisms that act uniformly, paving the way for *ceteris paribus* theorizing, causality and laws. It is a theorization of the capitalist mode of production, where decision making of the individual capitalist represents the operation of capital-in-general.

Focus on the materialist characteristics of the individual capitalist and its induction to capital-in-general equals to empiricist abstraction.<sup>19</sup> The basis of methodological individualism constitutes of the process of the ‘ideologizing’ of reality, postulating precisely that the explanation of capitalism should be sought in the *natural* motivation of individuals, conflating them with the motivations of the *capitalist* individual and interpreting them as innate and *general* human motives (Germer 2001, original emphasis). In the words of Max:

The latter [i.e., the transition from the abstractions to the concrete] is obviously the scientifically correct method. The concrete is concrete because it is the concentration of many determinations, hence unity of the diverse. It appears in the process of thinking, therefore, as a process of concentration, as a result, not as a point of departure, even though it is the point of departure in reality and hence also the point of departure for observation [Anschauung] and conception. (Marx 1973 [1953], p. 101)

The meaning that Marx gave to the concrete is the representation of the intelligible real, which implies a notion of totality as a synthesis of many linked elements, or many determinations (Germer 2001). The mechanistic materialist methodology suffers from the same problematics of microeconomics: individualism, rationality,<sup>20</sup> causality,<sup>21</sup> and equilibrium; forgetting all the heritage of Marx’s materialist dialectics.

Competition, and its subsequent technical change, do not act with a uniform way in terms of the organic composition of capital, neither with the profit rate. Put differently, we know that competition is a structural characteristic of the capitalist mode of production, and we also know that technical change is also a structural outcome of competition for the capitalist mode of production, but we cannot predict the exact way that they are taking place. There exist producing tensions unable to be quantified or proven within a specific *modus operandi*. Competition when seen from the spectrum of mechanical materialism is seen as a predictive mechanism, acting in the same univocal way, in the narrowest sense of abstraction, acting as a competitive struggle between individual capitalists.

Capital is the key abstraction of the analysis of capitalism; grasping the specific characteristics which distinguish capitalism from all others modes of production and capital from all other forms of wealth (Marx 1973, p. 449). As argued by Moseley (2013, p. 11), in Marx’s theory of surplus-value ‘capital is posited as the unity of production and circulation’ (Marx 1973, p. 745). Capital is introduced as an abstraction in itself:

<sup>19</sup>In a similar vein, if we attempt to locate objectivity of value outside of the exchange relationship, it eludes our grasp; the objectivity of value is quite literally a ‘spectral objectivity’ (Heinrich 2012).

<sup>20</sup>To abstract does not mean that you can then take the pieces [like the economists do] and create a rational actor out of them (Durkheim 1886 [1970]).

<sup>21</sup>Key problem is that causality cannot be handled in the same way in social science as in natural science (Swedberg 2020, p. 261).

*Capital in general*, as distinct from particular capitals, does indeed appear (1) *only as an abstraction*; not an arbitrary abstraction, but an abstraction which grasps the specific characteristics which distinguish capital from all other forms of wealth ... These are aspects which are common to every capital as such, or which make every specific sum of values into capital ... (2) however, capital in general, as *distinct* from the particular real capitals, is itself a *real* existence (Marx 1973, p. 449).

Coercive laws of competition acting towards the increased technical composition of capital and accumulation coincides with the theoretical transition from Marx's two first preparatory manuscripts for Capital (The Grundrisse and the Manuscripts of 1861–63) written according to the plan of capital in general to the third volume of Capital. The main difference is to be found in the fact that while the first volume does not go beyond the analysis of 'capital in general',<sup>22</sup> the third does and therefore represents the transition to the analysis of 'many capitals' (Rosdolsky 1977, p. 65). Marx makes innovations in Volume III, in order to deal with the functioning of independent capitals: he introduces the concept of realization crises and he theorizes financial markets raising a central question for investment theory that did not exist in Volume I and posing the question of the control on the investment decision of the enterprise (Crotty 1993, pp. 8, 9). In the first volume of Capital, Marx identifies the possibility of disproportion and overproduction crisis, while in volume three he refers to disequilibrating and equilibrating structures and processes (Saad-Filho 2002, p. 41). In the words of Marx:

It cannot be the purpose of the present, third volume simply to make general reflections on this unity. Our concern is rather to discover and present the concrete forms which grow out of the *process of capital's movement considered as a whole*. In their actual movement, capitals confront one another in certain concrete forms, and, in relation to these, both the shape capital assumes in the immediate production process and its shape in the process of circulation appears merely as particular moments. The configurations of capital, as developed in this volume, thus approach step by step the form in which they appear on the surface of society, in the action of different capitals on one another, i.e., in competition, and in the everyday consciousness of the agents of production themselves. (*Capital*, 3, p. 117)

This transition highlights 'first and foremost a blue-print without which Marx's economic system could never have developed, but which ... can only lay claim to full validity within specified limits' (Rosdolsky 1977, pp. 52–53). The introduction of the concept of equilibrium by Marx in the third Volume of Capital through the identification of equilibrating forces highlights the fact that equilibrium obscures the course of dialectics belonging to the tradition of neoclassical economics. It is from the concept of equilibrium that much of the hard core of neoclassical economic theory has sprung, as well as its methodology and logic (Clark 1989, p. 49). Furthermore, the isolation of the third Volume of Marx's capital from the two other Volumes facilitates the interpretation of Marx's method in terms of mechanical materialism and analytical Marxism, given that capital in general only comes to the background of the analysis enabling the isolation

<sup>22</sup>The first two volumes of Capital do not fundamentally go beyond the analysis of 'capital in general', while the third volume is the place where competition, credit and share-capital are introduced. According to Crotty (1993, p. 6) 'Volume I abstracts as much as is practical from cost-profit differences among firms and from details of the process of competitive struggle: though competition is intense, all firms are implicitly assumed to receive their proportionate share of industry profit, therefore, the effect of competition cannot be fully explored until the many capitals approach of Volume III'. Furthermore, referring to profit; 'profit in general' should be contrasted with the profit of one individual capital, 'at the expense of another' (Rosdolsky 1977, p. 50).

of the individual capitalist as a rational actor that moves the profit rate through her real practices, inducing her reality to the capital as a whole.

The Marxian oeuvre has given the opportunity to Marxists to establish a supplementary 'schema' of the crisis in the notion of the reserve army of labor. According to Dobb (1937), the population of the reserve army of labor, i.e., the population of the unemployed, will determine the magnitude of real wages during the process of accumulation. A very large reserve army — because of rapid population growth, rapid mechanization, disposition of proletarianized workers — will prevent an increase in real wages. In such a case, the profit rate's movement is unclear. The fluctuations and the magnitude of the industrial reserve army are determined both by the business cycle and by long-term trends of capital accumulation (Mandel 1975). The reserve army of labor is the empirical representation of the contradictions<sup>23</sup> of accumulation, deepening or mitigating the general tendency of the profit rate to fall. According to Heinrich (2012), the *tendency of a growing* industrial reserve army assumed by Marx cannot be strictly substantiated as a claim; however, it is at least clear that the industrial reserve army in capitalism cannot disappear in the long run.

Summarizing, we argue that crisis is inherent to the capitalist mode of production, however the specificities, causal mechanisms, time and location of its appearance cannot be predicted, or described in detail at the level of abstraction of the capitalist mode of production. According to Heinrich (2012), Marx himself had a problem determining which moments of crisis are to be developed at which level of abstraction. Every crisis takes a unique form with specific characteristics, specific temporality and specific decrease in the rate of profit due to specific reasons and influencing specific subjects. The fact that the technical composition of capital is contrasted to the increase in the productivity of labor sheds light to the moment that is under examination and it is incapable of providing information towards wider periods, such as the whole history of capitalism. Furthermore, according to Heinrich (2012), it was already clear to Marx in the *Grundrisse* that: 'in a general crisis of overproduction the contradiction is not between the different kinds of productive capital, but between industrial and loan capital; between capital as it is directly involved in the production process and capital as it appears as money independently (*relativement*) outside that process.' Thus a systematic treatment of crisis theory cannot, therefore, follow immediately from the 'law of the tendency of the rate of profit to fall,' but only *after* the categories of interest-bearing capital and credit have been developed (Heinrich 2012).

Finally, we have argued that abstraction, crisis and the Law of the profit rate to fall, have been used ideologically, aiming at clarifying and grounding scientifically the unavoidable of Socialism in the battle against Capitalism.<sup>24</sup> Besides, in the history of

<sup>23</sup>Bargaining power is an indispensable tool that capitalists use, in order to maintain stable real wages (Pollin 1998). Meanwhile, Engels identifies the regular displacement of labor in the cyclical alternation of boom and slump as the essential mechanism through which the proletariat is formed as a revolutionary class (Clarke 1994, p. 57).

<sup>24</sup>Stalin, in his *History of the Communist Party of the Soviet Union: Short Course* (1938) presented dialectical materialism as a set of propositions and laws representing the Marxist–Leninist world outlook and characterizing Marxism as a science that had identified the laws of history. With the general ossification of philosophy in the Soviet Union from Josef Stalin onwards, dialectical materialism failed to develop and found little favor elsewhere. The Stalinist transformation of Marxism into an official belief system served to provide an ideological rationalization of the Soviet regime (Walker and Gray 2007, p. 305). While, 'dialectical conception of Marxism although flourishing for a short season in the late 1960s and 1970s, it nevertheless entered a major crisis in the 1980s under the pressure of an antagonism to a "straw Marx" characterized by determinism, vulgar materialism, and economic reductionismism' (Gimenez 2005, p. 11).

Marxism, the idea of crisis has given way to catastrophological representations of the capitalist economy, through invincible ‘historical tensions’. In any case, the theory of crisis has a central role to play in the ideology of Marxism and cannot be understood outside that ideological context; it gives emphasis on the *necessity* of crisis as an essential and ineradicable feature of the capitalist mode of production, defining the objective limits of capitalism and the necessity of socialism (Clarke 1994, p. 7).

## 5. On Laws and Science

We have argued that the law of the falling profit rate applies under specific historical circumstances and assumptions: under those conditions of production which Marx called ‘specifically capitalist methods of production’; i.e., when technical composition of capital increases more rapidly than the productivity of labor, resulting in the inability of the increased rate of exploitation to compensate for the consequences of the increased value composition of capital. Other factors also act under the universality of capital and the transformation of human into living labor, such as changes in the length of the working day and running speed of the machinery, change in raw materials prices, rises in the level of skills of working people in the given production system (and with given technology) (Milios, Dimoulis, and Economakis 2002, p. 147). The Law should therefore be conceived in historical terms i.e., as a ‘historical’ law. Thus, ‘it provides no adequate basis for judgment on the course of evolution of the rate of profit in general, given that this is influenced just as much by “all the other factors” apart from those having to do with technological innovation’ (Milios, Dimoulis, and Economakis 2002, p. 147).

Harvey attributes the controversy on the Law, to the neglect of the fact that ‘capitalism is law-like ... but the laws are a product of human action’. As a result, the ‘laws should be distinguished from those that derive from our embeddedness in a world governed by natural laws (such as those of physics, chemistry and Darwinian evolution)’ (Harvey 2012, p. 14). As Ollman (2003, p. 97) clarifies: ‘laws have no more force than what comes out of the processes from which they are derived, balanced by whatever counter-tendencies there are within the system’. Marx’s theorems conceived as ‘laws’ could be used as a permanent reminder for the existence of a crucial parameter, while they cannot be used as ‘compelling causality’. A causal statement ‘was never more than a partial truth and an approximation for Marx, a statement in a particular context’ (Dobb 1947 [2001], p. 7). Notions such as, ‘cause and effect’, ‘independent parts’ or ‘partial’ are missing from Marx’s methodology given that relation is co-existence and interconnection, in the Marxian oeuvre. Instead, we find frequent claims such as: the propensity to exchange as the ‘cause or reciprocal effect’ of the division of labor; and interest and rent ‘determine’ market prices and ‘are determined’ by it (Marx 1959, p. 134; Marx 1971, p. 512). In that spirit, Marx considers capitalism as a ‘*pattern of patterns*’, a ‘*social complex*’. Cause does not exist, *stricto sensu*, being always part of a wider conjunctural setting, and this setting overdetermines the effects of the cause (Hardy 2014, p. 467). Under the veil of over-determination,<sup>25</sup> economic structure has primacy over

<sup>25</sup>The term comes from Freudian psychoanalytic theory where it is used to show how several simultaneous factors each with some explanatory power can contribute to the formation of a dream (Freud 1965, in Smith 1984, p. 520). By over-

aspects of society, while structural causality is a term pinpointing solely the fact that parts are already parts of a whole. Engels emphasizes the complexity of determinations taking place in the ‘whole of the capitalist mode of production’:

It is not that the economic situation is cause, solely active, while everything else is only passive effect. There is, rather, interaction on the basis of economic necessity, which ultimately always asserts itself. (Engels 1968, p. 704)

Furthermore, this Law-like, normative interpretational nexus is structured in ‘scientific’ terms influenced from the Cartesian methodology (Cullenberg 1992). Science works as ‘the progressive uncovering of valid knowledge via a *de facto* reduction in error in assertions about relationships in time/space’ (Paolucci 2011, p. 19); while, being in need of prediction, seeks for causal mechanisms and determinations. Two presuppositions exist in order to predict: the normal state and the ability to disconnect the parts from the whole as causes. Law-like<sup>26</sup> and causal analysis reflect a preferential adherence of Marxist economists to non-Marxian political economy<sup>27</sup> and especially to neoclassical economics. The impasse of Marxist crisis theory ‘has arisen primarily because it has tried to establish itself on bourgeois theoretical foundations and in particular, on the theoretical foundations of general equilibrium theory,’<sup>28</sup> neglecting the critical dimension of Marx’s theory’ (Clarke 1994, p. 11). Dobb (1937, pp. 102–103) argues that crisis acts as an equilibrating mechanism in the Marxian oeuvre, appearing ‘as catharsis as well as retribution: as the sole mechanism by which, in [the capitalist system], equilibrium can be enforced’ (see also Shaikh 1978, p. 233). Under equilibrium theorizing objects and parts tend to be reduced to static, missing their internal contradictions, processes and interdependences of the ‘whole’. In that spirit, forces and variables are seen as causal mechanisms. The concept of equilibrium in economics came as a preconception, as part of economist’s ‘vision’, as all metaphysical propositions necessarily are, as faith, (Clark 1989, p. 50).

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determination Althusser combines the determinacy ‘in the last instance’ of productive forces and the ‘relative autonomy’ of the superstructure. He argues that ‘social formation’ is constituted in ‘instances’, determined by more than solely economy, incorporating ‘regional structures’ within the whole (Smith 1984, p. 519). Hardy (2014, p. 463), on the contrary, argues that determination ‘in the last instance’ incorporates the idea that productive relations are embedded in social relations, and thus they are not formed independently from wider social relations (Resnick and Wolff 1987, pp. 92–93; Elliott 1993, p. 236). Wolff (2006, p. 86) essayed to combine the Hegelian dialectic with the Althusserian notion of overdetermination, resulting in an anti-essentialist, subtler form of Marxist analysis (Hardy 2014, p. 454). Overdetermination, according to Wolff (2006, p. 80) entails: ‘that every aspect of history — an individual, an event, a social movement ... is constituted by all the other aspects of the social and natural totality within which it occurs. It has its existence (and each specific quality of that existence) only insofar as it is overdetermined in and through (constituted by) the relations that bind it to them all. The logic of overdetermined constitutivity displaces ... [the logic] of causes and their effects’ (see also Hardy 2014, p. 456).

<sup>26</sup>Natural law theories have as their foundation the idea of a natural order; under this perspective, the purpose of the social theorist is to discover the social physics which regulates the social universe (Clark 1989). By placing nature as the final cause, a social theory is elevated to the lofty and respectable heights of the natural science. Naturalism manifests itself in two ways: analysis of innate human nature; and the reliance on ‘state of nature’ explanations to illuminate the origins and functions of social phenomena.

<sup>27</sup>The need to unravel the cause of the causes has always been the key question from its early beginning, in the field of political economy; same as in all social sciences. According to Russel (1918 [1963], ch. 9, p. 141) ‘the law of causality, I believe, is a relic of bygone age, surviving, like the monarchy, only because it is erroneously supposed to do no harm’. For Sraffa, ‘cause [is] required only when there is a deviation from what is normal, or uniform, or constant’ (Sraffa 1960, Bill up to 27/8i-iii–D1/9, quoted in Parrinello 1999).

<sup>28</sup>As Haavelmo (1944, ch. II, pp. 27–28) points out, the specific instance of the Walrasian system of equilibrium in probabilistic and holistic systems is defined as the one that emerges *a posteriori* out of an enormous set of possibilities. ‘But once this is established, could we not then forget about the whole process, and keep to the much simpler picture that is the actual one?’

Analytical thought implies causes and causalities given its ability to separate in theory things which are inseparably united, creating an impassable logical gulf between them; an atomized and fragmented picture of the world is the necessary outcome of the analytical method (Sayers 1984, p. 8). Causality appears when factors such as the length of the working day or factors outside technical change, changes in raw materials prices, or rises in the level of skills of working people are conceived as being stable. According to Wimsatt (2006, p. 448) reductive frameworks are usually conditional, partial, local, and context dependent on the specific mechanisms involved, and they are associated with ‘*ceteris paribus*’ conditions. From that specter, we argue that Marx’s abstraction is not ‘other things equal’ i.e., *ceteris paribus*, but ‘nothing equal’. Marx was aware of the fact that this *ceteris paribus* reasoning is highly problematic and that the magnitude he treated as a constant should have been treated as a variable<sup>29</sup> (Kurz 2018).

The analytical approach produces a mechanistic picture of the world involving dissection and decomposition of a given whole into its constituent parts. Relations are conceived of as being external; the whole is merely a collection of externally related parts, which are not essentially affected by their relations to each other in the whole. Thus, in the analytic division, the parts are not altered: nothing is lost; clarity and precision are gained (Sayers 1984, p. 10). For mechanical action is external action; a clock, for example, appears to be a mechanism in which the parts are related to and act upon each other purely externally (Sayers 1984, p. 11). Marxism is reduced to a form of technological determinism and historical change is portrayed as a linear causal process (Sayers 1984, p. 11). Economic relations and political forms are merely ‘functional’ to the prevailing level of technological development: in themselves they are inactive and inert; social processes are thus lifeless, without any independent development or internal activity of their own (Sayers 1984, p. 11). As Engels wrote (1890, p. 689), ‘What these gentlemen all lack is dialectics. They always see only here cause, there effect. That this is a hollow abstraction ... that here everything is relative and nothing absolute — this they never begin to see. Hegel has never existed for them’.

The Marxian method rooted in the ideal of ‘German science’, involves the risk of never coming to recognize the essential characteristics of ‘normal’ science (Sacristán 2014, p. 51). The formal scientific reasoning is broken by Marx, given that he ‘blurs the limits of the implicitly formal theoretical artifact, upon inserting it within a complete, inevitably hazier, social perspective’ (Sacristán 2014, p. 47). Marxist academics such as Althusser concluded in a dramatic manner that ‘Marx’s work is not, contrary to everything that they had taught until a very short time ago, exact science,<sup>30</sup> *scientia in statu perfectionis*’ (Sacristán 2014, p. 30). In any case, ‘scientific truth is always a paradox, if judged by everyday experience, which captures only the delusive appearance of things’ (Marx 1865 [1965], p. 209). Thus, the philosopher cannot truly know ‘where [the world] has come from (origin) or where [the world] is going (goal)’ (Althusser 2006, p. 290). In our opinion, Marx’s method, acting in philosophical<sup>31</sup> terms, offers mostly

<sup>29</sup>Marx attempting to clarify the relationship between economic aggregates and the forces affecting the general rate of profits in rather tedious calculations he typically kept one variable constant in order to identify the impact of changes of some other variable on the rate of profits (Kurz 2018).

<sup>30</sup>In the end, ‘Marxist pluralism allows for only two interpretations: either Marxism reduces to the few common theories, or it is a culture and not a theory, a collective consciousness’ (Sacristán 2003, p. 224).

<sup>31</sup>Scientific questions are reduced into empirical realities, and as a result, they ‘are not the global and complete systematizations traditionally envisioned by philosophers’ (see also Waismann 1951).

a comprehension of the functioning of the world and does ‘not predict, or cause anything to happen’.

Against causal mechanisms and equilibrium, Marx uses the term ‘tendency’ (Althusser 2006, p. 264) simplifying the conception of contradictions, e.g., ‘class contradictions are not “laws” that operate unimpeded’ (Hardy 2014, p. 469). Tendencies<sup>32</sup> coexist with counter-tendencies, and in that sense we could speak for equilibrating and non-equilibrating mechanisms. In our opinion, naming the process of capital accumulation, ‘non-equilibrium process’ (O’Hara 2000, p. 87; Freeman 1995, p. 45),<sup>33</sup> would be more suitable, since tendencies and counter-tendencies, towards surplus value creation and profitability, arise.

An emerging non-equilibrium alternative not only shows Marx’s contested conclusions to be precisely true, but offers a clear and coherent explanation of the most puzzling observed phenomena of market economies today including the falling rate of profit, the business cycle, and why technical progress coexists with mass poverty and growing inequality. (Freeman 1995, p. 50)

## 6. Conclusion

Given that Marx’s method of dialectics is based on the idea that reality has a contradictory nature; the precise is a ‘representation’, something partial that can be refined for the specific instance; as a materialistic instance; as a step backwards to concrete reality, we have tried to show that causes do not exist per se in the Marxian oeuvre. Marx considers the functioning and future development of everything as integral to what it is, thus he grasps this whole as a single process, capitalism as a ‘pattern of patterns’; a ‘social complex’. In an often quoted, though little analyzed remark in the Introduction to Capital, Marx says that value, as compared to larger, more complex notions, has proved so difficult to grasp because ‘the body, as an organic whole, is more easy to study than are the cells of that body’. To make such a study, he adds, one must use the ‘force of abstraction’ (Marx 1958, p. 8). From that specter, we argue that Marx’s abstraction and dialectics are not ‘other things equal’ i.e., *ceteris paribus*, but ‘nothing equal’. Relations are not external, and appearances can be dealt only after an adequate grasping of the abstract-in-thought. In any other case, Marxism is reduced to a form of technological determinism and historical change is portrayed as a linear causal process (Sayers 1984, p. 11). In the same vein, we argue that equilibrium theorizing is not appropriate to consider the Marxian oeuvre, reflecting mainly the spirit of neoclassical economics. The concept of equilibrium in *Economics* came as a preconception, as part of economist’s ‘vision’, as all metaphysical propositions necessarily are, as faith, (Clark 1989, p. 50). Furthermore, we argue that the isolation of the third Volume of Marx’s capital from the two other Volumes facilitates the interpretation of Marx’s method in terms of mechanical materialism and analytical Marxism, given that capital in general only comes to the background of the analysis enabling the isolation of the individual capitalist as a rational actor that moves the profit rate through her real practices, inducing her reality to the capital in general. The transition from capital in general or

<sup>32</sup>Trends in the short-term may exist, although no general predetermined result in the long-term future of capitalist development is in force (Papageorgiou and Michaelides 2016, p. 8).

<sup>33</sup>According to Freeman (1995, p. 51) when value theory is conceived in non-equilibrium terms, the result is an alternative to neoclassical economics.

capital as a whole to the empirics of individual capital seems to designate the trojan horse through which the Marxian literature advocates for a Marxian crisis theory, given that capital is reduced to the actions of the individual capitalist who acts uniformly and rationally as a profit-seeker, inspired by the empirical real. Capital as dealt with in Marx's analysis is not capital as it exists in its empirical, individual manifestations. Only after capital is depicted as the unity of production and circulation are we at the point where we can deal with the fundamental properties of empirically existing individual capitals (Heinrich 2012).

Furthermore, focus on the materialist characteristics of the individual capitalist and its induction to capital-in-general equals to a priori empiricist abstraction. Abstraction is blurred whenever particularities of the functioning of capitalism are considered at the level of capital-in-general and momentary instances are induced to eternal features of capital accumulation. Capital is the key abstraction of the analysis of capitalism; grasping the specific characteristics which distinguish capitalism from all others modes of production and capital from all other forms of wealth (Marx 1973, p. 449).

We argue that without an adequate grasp of the role of abstraction in dialectical method, and without sufficient flexibility in making the needed abstractions of extension, most interpreters of Marx (Marxists and non-Marxists alike) have constructed versions of his theories that suffer in their very form from the same rigidity, inappropriate focus, and one-sidedness that Marx saw in bourgeois ideology. Thus, we cannot conclude in the existence of an analytical theory for laws and crisis in the Marxian oeuvre, having in mind that Marx is not primarily trying to unravel deterministic mechanisms for the specific phenomena in the capitalist mode of production. Hence, we can solely observe tendencies and counter-tendencies as particularities, though as ex-ante observations. Put it differently, fluctuations, law-like movemenets and crisis depend on the specific manifestations of capital accumulation and class struggle. Economakis (2016) argues that it could be concluded that the mechanical operation of the Law leads to a deterministic-catastrophic conception of capitalist development and entails serious theoretical contradictions and inconsistencies from the standpoint of Marxian theory.

Finally, although we have elaborated on various statements concerning Marx's method, they remain only *one way* to read the Marxian oeuvre, given that 'different theories impart different meanings and significance to their major concepts' (Cullenberg 1992, p. 53).

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