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**The Money of the Mind and the God of Commodities – The real
abstraction according to Sohn-Rethel**
(UNDER REVIEW; PLEASE DO NOT QUOTE)

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Abstract

According to Sohn-Rethel there is a “secret identity” between commodity form and thought form. Commodity exchange is a real abstraction – embodied in money – and constitutes a social *a priori* which reflects itself in the conceptual abstraction, i.e., in the abstract thought typical of commodity-producing societies: philosophy (in ancient Greece) and modern science (in capitalism). However, the theory of Sohn-Rethel has a fundamental flaw: its exclusive identification of the real abstraction with the sphere of circulation results in the ontologisation of labour which, on the contrary, is a capitalist specificity and the original source of the abstraction in this society.

Keywords: Sohn-Rethel, real abstraction, commodity form, thought form, New Value Critique

The Money of the Mind and the God of Commodities – The real abstraction according to Sohn-Rethel¹

“It is as if alongside and external to lions, tigers, rabbits, and all other actual animals [...] there existed also in addition *the animal*, the individual incarnation of the entire animal kingdom.”

Karl Marx

1 – Introduction

Alfred Sohn-Rethel (1899-1990) is probably one of the most neglected authors in the context of the so-called “Western Marxism”. Greatly influenced by the Critical Theory of the Frankfurt School – he met Benjamin, Adorno, Horkheimer and Bloch in the 1920s and 1930s –, Sohn-Rethel remained always an outsider to the academic world and had to struggle throughout his life with major financial problems.

He never gave up, however, defending his main thesis: “The intellectual work of my life [...] served to clarify [...] a somewhat intuitive view I had in 1921 [while still a college student] [...]: the discovery of the [Kantian] transcendental subject in the commodity form”.² This proposition about the “secret identity” between the real abstraction present in commodity exchange and the conceptual abstraction of thought form³ would earn him since very early on a great mistrust, and even the epithet of “crazy” (!) by Alfred Weber, his doctoral advisor.⁴

Sohn-Rethel is forced to emigrate to England, in 1937, following the Nazi upsurge, where he meets George Thomson, the only person who had also acknowledged the connection between philosophy and money, in his studies on ancient Greece.⁵ Notwithstanding, only after his return to Germany will Sohn-Rethel finally achieve notoriety, with the publication of his *magnum opus: Intellectual and Manual Labour*,⁶ in 1970. He was still able to get a brief appointment at the University of Bremen, between 1972 and 1976.

As Jappe notes, “Sohn-Rethel is one of the few Marxists” who can help us “understand the XXI century”, since he recovers the “most valuable and fundamental core” of Marx’s theory: “the analysis of the logic of value and of the commodity”.⁷ In fact, he was able to discern that the distinctive characteristic of capitalism is the “abstraction” it imposes on social life. With the concept of real abstraction, “Sohn-Rethel gave a very important contribution to the elaboration of the critique of commodity fetishism”,⁸ standing as one of the forerunners of the denominated “New Value Critique”.⁹

Sohn-Rethel’s main thesis is that there is not only an analogy but a “true identity” between the formal elements of the social synthesis – “the network of relations by which society forms a coherent whole”¹⁰ – and the formal elements of thought. “The conceptual basis of cognition is logically and historically conditioned by the basic formation of the social synthesis of its epoch”.¹¹ Therefore, “the categories are historical by origin and social by nature”.¹² In other words, “the socially necessary forms of thought of an epoch are those in conformity with the socially synthetic functions of that epoch”.¹³

In the context of commodity production, it is (commodity) exchange which possesses a socially synthetic function through the abstraction it gives rise to, centred on the functions of money as the “universal equivalent”. The formal elements which constitute the exchange abstraction resemble unequivocally the conceptual elements of

the cognitive faculty emerging with the spread of commodity production. According to the author, as conceptual elements, these forms constitute the basic principles of thought both of Greek philosophy and modern natural science, and are at the origin of the separation between intellectual and manual labour.¹⁴

To sum up, in market societies the social synthesis is performed by the categories themselves in such a way that the cognitive faculty they engender is an *a priori* social capability of the mind. In this sense, Kant was right by claiming that

the basic constituents of our form of cognition are performed and issue from a prior origin, but he was wrong in attributing this pre-formation to the mind itself engaged in the phantasmagorical performance of “transcendental synthesis a priori”, locatable neither in time nor in place.¹⁵

Nonetheless, we should emphasize that Sohn-Rethel’s theory presents several flaws because it locates the source of the real abstraction in the sphere of circulation,¹⁶ since, in his view, “production [...] is a a-social and supra-historic metabolism with nature”.¹⁷ On the contrary, only in capitalist societies does “labour” constitute the social bond; in the societies of the past, productive activity was “object of conscious decisions taken on the other spheres of life”,¹⁸ and so it did not represent a separated and autonomized realm. Furthermore, if in Marx it is “abstract labour” which confers the products their “objectivity of value”, i.e., constitutes the “substance of value”, to Sohn-Rethel it is exchange that is responsible for the value of commodities.¹⁹

From here stems the main difference, as we shall see, between the Sohn-Rethelian theory of “real abstraction” and that of the New Value Critique. In short, Sohn-Rethel fails to see that

the abstraction in the act of exchange does no more than to fulfil the abstraction [already] created in production, in which labour is concrete as a material process, but not to its producers *as social beings*. It was the mode of capitalist *production* which turned circulation into a total form, and not the other way around.²⁰

In this article, we begin by analyzing the relation between real abstraction and conceptual abstraction in Sohn-Rethel’s view, explaining the formal elements of exchange and its relation to the fundamentals of abstract thought (section 2). Then we present the historical relation between the forms of social synthesis and the different thought forms they originate (section 3), paying a special attention to capitalism and its connection with modern science (section 4). Finally, we present a critical analysis of the Sohn-Rethelian oeuvre in light of the New Value Critique (section 5).

2 – Real Abstraction and Conceptual Abstraction

2.1 – The critique of epistemology as a complement to the critique of political economy

The work of Sohn-Rethel intends to answer one of the great epistemological questions, namely “what is the origin of the forms of consciousness, of those ‘grids’ [*grilles*] which allow every individual to organize the multiple data provided by sensible perception [...]?”²¹ To this day, two fundamental answers were given to this question:

those categories are either themselves of empirical origin, the result of the constancy of experience, but without absolute validity and without allowing the deduction of *a priori* judgments [...] . This is the empiricist answer, from David Hume to Paul Feyerabend. Or else an ontological structure is presupposed, practically innate to man, which everywhere and in every time organizes in the

same *a priori* manner a material that is unknowable (*inconnosable*) as such. This is, of course, the solution proposed by Kant.²²

In an original way, Sohn-Rethel suggests a third hypothesis: “the origin of the forms of consciousness (and of knowledge) is neither empirical nor ontological, but *historical*”.²³ The forms of thought derive from human action; however, not from action as such, “as a category itself philosophical and abstract, but from the *historical and concrete action of man*”²⁴ as a social being. This is in accord with the Marxian thesis that it is social reality which determines human consciousness, and not the reverse. In other words, forms of consciousness are the “expression of human social relations in a given time”, being in that specific context that they acquire an “objective validity”.²⁵

Marxian categories express simultaneously particular social relationships and forms of thought.²⁶ Therefore, according to Sohn-Rethel, the analysis of the commodity form, which constitutes the cornerstone of the critique of political economy developed by Marx, can also serve as point of departure to a critique of “bourgeois” epistemology, particularly that of Kant.

The problem of knowledge must be related to the theory of Kant, obviously not as the “a-historical [question] of ‘knowledge as such’”, but as the “specific historical phenomenon [marked] by the separation between intellectual and manual labour, which appears [...] in an completely developed form for the first time among the ancient classics and then, in its turn, mainly in the modern European era”.²⁷

If in the prevalent epistemological theories scientific and philosophic “intellectual” labour, i.e., the conceptual form of thought, is characterized by the historical “timelessness” of its content and “that *a-historicity* is accepted as a given basis”, Sohn-Rethel, in his turn, suggests the study of the “forms of emergence of intellectual labour and its separation from manual labour as a partial *historical-materialist* problem”, that is, the embeddedness of the “question of knowledge in its Kantian formulation [...] on the ground of the historical materialism induced by Hegel”.²⁸

The author proclaims, therefore, the thesis of a “social origin of pure reason”, deducting the pure concepts of reason from the “abstract physicality of the act of exchange”. The abstraction is a space-time reality, but occurs “behind the backs” of the persons involved.²⁹ In this sense, the Kantian “transcendental unity of self-consciousness” is the intellectual reflection of one of the elements of the exchange abstraction: the form of exchangeability of the commodities underlying the unity of money and social synthesis.

By providing the (material) carrier in which the real abstraction is embodied, money helps to understand the “logical uniformity of the exchange abstraction” present in all the individuals of a market society: the key categories of their conceptual thought reproduce the formal elements of the real abstraction.³⁰

The “transcendental subject” can thus be defined “as a fetish concept of the capital function of money”.³¹ This false consciousness culminates in the Descartes’ *ego cogito*: “the formation of thinking which in every respect merits the term “social” presents itself as the diametrical opposite to society, the *Ego*”.³²

The social structure of commodity exchange rests on the non-empirical abstraction of the act of exchange and reveals a “formal equality with the abstraction of the basic methodological concepts of exact natural science”. It can be said that “the abstraction of exchange is not thought but possesses the form of thought in pure categories of reason”.³³

We can conclude that, unlike Kant, Sohn-Rethel traces back the mental abstraction to the structural conditions which are on the basis of socialisation and not to the “idealist phantasmagorias of the transcendental Subject or Spirit”³⁴:

The birth of pure reason occurs [...] not in or through man, nor step by step, with the formation of the empirical concepts of our ordinary language, but through an [already] formed abstractness, finished and identical to all individuals [facing it] [...]. Through that [abstractness], pure reason is a potency disengaged from human psychology and produced apart from human subjectivity. [...] Reason is a completely reified human power, to which the physicality of the act of exchange transmits itself in the form of the conversion of the real abstraction into thought abstraction. [...] Thus, far from being the brilliant illustration of men’s spiritual autonomy, which idealism sees in it, the capability of understanding of civilized men presupposes ... the extension of the depth and opacity of reification.³⁵

Following Sohn-Rethel’s line of thought,³⁶ we will analyse in the next pages the three major ideas that guide his work: commodity exchange is the original source of the abstraction; this (real) abstraction entails the formal elements essential to the cognitive faculty of conceptual thought; the real abstraction engenders the “ideal abstraction” common to both Greek philosophy and modern science.

2.2 – *Commodity Exchange, real abstraction and social synthesis*

Sohn-Rethel tells us that his first writings, namely those of the 1930s, should be seen as a mere “stage of self-development; those works should not be judged in themselves, but according to the clarification they have finally and definitively brought me: *that which is presented in my 1970 book [Intellectual and Manual Labour]*”.³⁷

Nonetheless, we find already in those writings the fundamental thesis which constitutes the core of Sohn-Rethelian thought, at least in its embryonic stage:

Are not perhaps the unity of self-consciousness and the subject of knowledge, in reality, from the start, only an unavoidable intellectual reflection of the unity of money, discursive thought [only] a form of consciousness conditioned by the function of money in a society mediated by commodities, and rational knowledge of the object only the ideal reproduction of the ways in which production according to the laws of commodity exchange is performed in that society? This assumption seems at first sight a bold hypothesis, which carries with it severe consequences. Nevertheless, we want to consider it because we think it could be proven right. This hypothesis, in fact, goes as far as saying that *the forms of consciousness, which we call forms of knowledge in the rational sense, arose from the reification present in commodity exchange.*³⁸

The primitive version of the “phenomenological” analysis of exchange is already found in his “Critical Liquidation of Apriorism”.³⁹ However, there is a great emphasis in exploitation as the source of reification⁴⁰ instead of the description of the formal elements of exchange, as will be the case in *Intellectual and Manual Labour*.⁴¹

The further developments and results of his research in the following decades became known only in the form of short essays (cf., for example, Sohn-Rethel, 1965). It is only in 1970, when the author is finally able to publish his main work, which the first detailed presentation of its theory sees the light of day and a major interest in it arises⁴². In the following pages, thus, we turn ourselves to the analysis of his *magnum opus*.

2.2.1 – *The commodity abstraction*

Let us listen to Sohn-Rethel:

The form of commodity is abstract and abstractness governs its whole orbit. [...] In the form of money riches become abstract riches and, as owner of such riches, man himself becomes an abstract man, a private property-owner. [...] [Therefore,] a society in which commodity exchange forms the *nexus rerum* is a purely abstract set of relations where everything concrete is in private hands.⁴³

Yet the essence of the commodity abstraction is the fact that it is not thought-induced, i.e., it does not owe its origin to men's minds but to their actions: "It is abstraction in its precise, literal sense".⁴⁴ The economic concept of value resulting from it is characterized by a complete absence of quality, by a purely quantitative differentiation applicable to any kind of commodity. As we shall see further on, this characteristic of the abstraction "value" reveals a remarkable similarity with the fundamental categories of quantitative natural science:

While the concepts of natural science are thought abstractions, the economic concept of value is a real one. It exists nowhere other than in the human mind but it does not spring from it. Rather it is purely social in character, arising in the spatio-temporal sphere of human inter-relations.⁴⁵

In his analysis, Marx makes the distinction between "use-value" and "exchange-value" the main feature of the commodity. Sohn-Rethel, in his turn, draws this distinction in terms of the corresponding human activities: "actions of use" and "actions of exchange".⁴⁶ Use and exchange are mutually exclusive in time. Use refers to the material processes by which men secure their livelihood, to that which Marx calls interchange or "metabolism with nature." This material practice is suspended during the act of exchange, which has nothing of natural about it: it is something purely social in terms of its constitution and scope. Although exchange implies the negation of the corporeal reality of use and use-value, it entails, nonetheless, a "physical reality": the movement in time and space of the commodities from one owner to the other.⁴⁷ Capitalist social synthesis is realized by exchange and not by use.⁴⁸

The salient feature of the act of exchange is that its separation from use takes on the blind necessity of an "objective social law". But the abstractness of exchange does not apply to consciousness of the people who trade: the consciousness of the actors is occupied with the potential (and "concrete") use of the things to be exchanged, so that it is the act of exchange which performs "unconsciously" the abstraction. The act of exchange, and only the *act*, is abstract, so that the consciousness and the action of the persons involved go separate ways.⁴⁹

As commodity production develops, the imagination of man becomes ever more separated from its actions and individualised, assuming the dimension of a private consciousness, which makes it impossible the "direct" transference of the forms of exchange – real abstraction – to human consciousness. Therefore, the exchange abstraction enters their consciousnesses only *after* the act of exchange has taken place, "when they are faced with the completed result of the circulation of the commodities": money, "in which the abstractness assumes a separate embodiment".⁵⁰

To sum up, the value or commodity abstraction should be seen as a "real abstraction" deriving from the social human activity and, in its turn, this "abstraction contained in exchange [...] determines the conceptual mode of thinking peculiar to societies based on commodity production".⁵¹ Nevertheless, people become aware of the commodity abstraction "only when they come face to face with the result which their own actions have engendered 'behind their backs'"⁵²: money.

2.2.2 – *The formal elements of exchange*

Sohn-Rethel enumerates a set of formal elements inherent to commodity exchange: (i) practical solipsism; (ii) the form of exchangeability of commodities; (iii) abstract quantity; (iv) abstract space and time; (v) substance and accidents. As we shall see, all these formal characteristics have a near perfect correspondence with the formal elements of thought. But let us describe them in a little more detail.

In the first place, on the basis of commodity production is a condition of “reciprocal independence”.⁵³ Commodity exchange impels solipsism among the persons involved in it, i.e., it is not dependent on what they communicate with each other. “The doctrine that between all people, for every one of them, *solus ipse* (I alone) exist is only a philosophical formulation of the principles that in practice regulate exchange”.⁵⁴

Thus, the form of the interrelation of commodity exchange shapes the psychological mechanisms of the individuals whose life it dominates, “mechanisms which they then conceive of as inborn, human nature. [...] They consider themselves to have acted in self-interest although in fact they have merely obeyed the laws of the exchange nexus. The practical solipsism of commodity exchanging owners is nothing but the practice of private property as a basis of social relations”.⁵⁵ The act of exchange is social, while the mind of the people involved in it is private: the result is a change in the statute of commodities as private propriety.⁵⁶

Secondly, commodities are exchangeable by virtue of being objects capable of a mutual exclusion of propriety.⁵⁷ The indivisibility or unity of the commodity does not derive from its material features but from its social features: the singleness of its (social) existence constitutes the form of exchangeability of commodities. This exchangeability applies to every commodity, regardless of its material properties.⁵⁸ The commodity belongs to a unified world common to all private individuals, so that exchange confers the social synthesis its unity.⁵⁹ Money functions as the concrete, material carrier of the form of exchangeability of commodities and expresses its oneness.

The abstraction refers to the *interrelation* of the actors of exchange and not to the actors themselves. This is so because it is not the individuals who cause the social synthesis but their actions. We are faced here with a pure abstraction that possesses, however, a spatio-temporal reality and takes on a separate representation in money, a relation that is formalized only in terms of human understanding. “Money is an abstract thing, a paradox in itself – a thing that performs its socially synthetic function without any human understanding”.⁶⁰ The function of money is not related to our natural or physical being; it is comprehensible only in the framework of our interrelations as human beings. Money does not possess any meaning outside the human mind and, nonetheless, “has definite reality outside it - a social reality”.⁶¹

Thirdly, exchange contains a postulate of equality between the two commodities to be exchanged. “They are equated by virtue of being exchanged, they are not exchanged by virtue of any [material] equality which they possess”.⁶² The transformation of human relations in relations between things, i.e., the reifying character of exchange, is connected to this equalizing effect of the act of exchange on the objects traded.⁶³ The equalisation produced by exchange overcomes all the specific dimensional measurements and establishes a realm of non-dimensional quantity, of quantity *tout court*. “In other words, the postulate of the exchange equation abstracts quantity in a manner which constitutes the foundation of free mathematical reasoning”.⁶⁴

Fourthly, this abstraction of pure quantity achieves a greater importance when related to the corresponding abstraction concerning time and space. Exchange imposes an abstraction from all (material) activities that form the “metabolism with nature” since the objects exchanged are assumed immutable during the transaction. “Exchange

empties time and space of their material contents and gives them contents of purely human significance connected with the social status of people and things”.⁶⁵ In other words, unlike past societies, time and space are no longer specific – associated to specific events and phenomena – but become abstract.

Finally, with the duplication of the commodity in commodity and money, “its propertyless and persistent substantiality mirrors itself in the indistinctive materiality of money”.⁶⁶ As such, the immutable and non-descriptive nature of the commodity as exchange-value reflects its substance, while its specific properties as use-value constitute its accidents.⁶⁷

The act of exchange has to be described as *abstract movement through abstract (homogenous, continuous, and empty) space and time of abstract substances (materially real but bare of sense-qualities) which thereby suffer no material change and which allow for none but quantitative differentiation (differentiation in abstract, non-dimensional quantity)*.⁶⁸

The key-point to be retained is that the “formal features of exchange [...] constitute a mechanism of real abstraction indispensable for the social synthesis throughout and supplying a matrix for the abstract conceptual reasoning characteristic of all societies based on commodity production”.⁶⁹ The pattern of movement inherent to the exchange abstraction introduces a concept of nature as an “objective material world”, a world from which man, as a social subject, has withdrawn himself. Abstract (infinite) time and abstract (unlimited) space provide a conception of nature antithetical to society. In fact, a clear idea of nature emerges only in the age of commodity production, overcoming the anthropomorphisms of tribal societies grounded on communal production.⁷⁰

In modern societies we can distinguish, therefore, two “physicalities”: one, “concrete and material”, comprises commodities as objects of use and the human activities corresponding to the material interchange with nature – it is a “primary nature”; the other, “abstract and purely social”, concerns the commodities as objects of exchange and quantities of value – it is a synthetic, “second nature” created (unconsciously) by man. “Both are real in time and space; *primary nature is created by human labour, second nature is ruled by relations of property*”.⁷¹

The abstraction from primary nature engendered by exchange, through its separation from use, imposes itself as an abstract “physicality” or, better yet, as a kind of abstract nature, “devoid of all sense reality and admits only of quantitative differentiation. Furthermore it is understandable solely to people acquainted with money and engaged in the use and acquisition of it”⁷², i.e., in the context of “civilization” born in Ancient Greece. The social and purely abstract reality of exchange exists only in men’s mind but does not spring from it. It arises out of the act of exchange, of its necessity implied by private production carried on independently by individuals.

In this sense, Sohn-Rethel reaches the following conclusion: “This real abstraction is the arsenal from which intellectual labour throughout the eras of commodity exchange draws its conceptual resources. It was the historical matrix of Greek philosophy and it is still the matrix of the conceptual paradigms of science as we know it”.⁷³ The changes in these paradigms indicate changes occurring in the structural framework underlying them and vice-versa, “because the socially necessary forms of cognition in any epoch have no source from which they can originate other than the prevailing functionalism of the social synthesis”.⁷⁴

2.2.3 – *The conversion of the real abstraction into the conceptual abstraction and the “independent intellect”*

Let us recapitulate: it is only the act of exchange which exerts a social effect; the consciousness of the individuals is private and ignores the socially synthetic character of their actions. We can speak of a “second nature” that encompasses a “socially synthetic reality in historical time and space and the ideal form of cognition through abstract concepts”.⁷⁵ Second nature includes, therefore, the commodity form (understood only as the act of exchange) – i.e., the “real abstraction” – and the abstract thought form (philosophy and science), i.e., the “conceptual abstraction”.

The real abstraction converts into its ideal reflection or intellectual form. This “conversion” requires as point of departure the use of coined money – the only “palpable” aspect of the real abstraction – in commercial trade.⁷⁶ There is no matter in nature fully in accord with the stuff of which money is made. All existing materials are perishable, transient, corruptible, subject to the effects of time, etc. Money is something real and, yet, unlike any other sensible quality by which reality is considered *real* for us. By not possessing sensible qualities, money is indestructible, eternal.⁷⁷

Underlying this monetary function is the general commodity abstraction “which allows for, and indeed enforces the formation of non-empirical concepts of pure thought when this abstraction becomes mentally identified in its given spatio-temporal reality”.⁷⁸ The “immaterial”, non-empirical matter, of which money should virtually be made of, can only be represented genuinely outside the “common realm of natural matter and empirical perception; in other words: only in the form of the non-empirical or “pure” concept”.⁷⁹

The fact that the reflecting medium of the real abstraction is coinage accounts for the creation of logical uniformity of the intellectual abstraction among all conceptual thinkers in an exchange society of a given stage [of development] and formation. [...] The basic categories of intellectual labour [...] are replicas of the elements of the real abstraction.⁸⁰

What differentiates intellectual labour from manual labour is precisely its use of non-empirical form-abstractions, representable only with the use of pure, non-empirical concepts. These abstract thought forms stem from the *real* abstraction of exchange, itself non-empirical and purely social. This is the only way to decipher the origin and “the nature of intellectual labour and of science and yet avoid idealism”.⁸¹ Greek philosophy constitutes the first historical manifestation of the separation between head and hand.

The historical origin of conceptual thought is translated, in its totally developed form, into the rise of “pure intellect” completely divorced from man’s physical activities.⁸² This intellect, in its turn, applies itself to external reality – society and nature – according to the “object” which is familiar to it – the objective pattern of thought transposed from the commodity abstraction and its formal characteristics.⁸³ The science guiding the intellectual labour stemming from second nature is founded in a non-empirical abstraction and in *a priori* concepts of nature. Thus, the already mentioned formal elements of exchange – abstract space and time, abstract matter, abstract mathematical quantity, abstract movement, etc. – constitute a framework of analysis likewise abstract, capable of comprising all observable phenomena.⁸⁴

The notion of nature as a physical objective world independent of man – the division between society and nature – arises when commodity production reaches its peak as a monetary economy, i.e., “when social relations assume the impersonal and reified character of commodity exchange”. The non-empirical concepts stemming from the real abstraction have an “objective reality” because they describe action reduced to an elementary physical reality, that is, they describe the “absolute minimum

[denominator] of what can constitute a natural event”, so that they represent the paradigm of mechanistic thinking.⁸⁵

“[A]s a general rule” the form of thought “will conform to the make-up of the existing social formation based on commodity production. The reasoning itself, however, is totally impervious to this conformity since its alienation blinds it to [the form of] society”.⁸⁶ The abstraction is on the basis (and in the result) of exchange but that fact eludes intellect, which is destined to “be alienated by false consciousness when it tries to explain its own mode of thinking”.⁸⁷

According to Sohn-Rethel, “the valid foundations of the science of an epoch are those in keeping with the social synthesis of that epoch.” Therefore, the “significant changes in the formation of the social synthesis indeed entail corresponding changes in the formation of science”.⁸⁸ In fact, as we shall see further on, the development of modern science went along with the rise of modern capitalism.⁸⁹ The discovery of the so-called natural laws is the goal of the mathematical and experimental method of “exact” science born with Galileo and Newton.

We can conclude that, in commodity production, intellectual labour and social thought are *necessarily* separated from physical labour. Material production loses its direct social cohesion and is able to form a viable totality only through a network of exchanges performed under the aegis of private propriety which, as capital, controls production and subjects manual labour to exploitation. Manual labour is spoiled of the knowledge governing its activities.⁹⁰

3 – Commodity Form and Thought Form: historical evolution

Let us start by presenting the distinction Sohn-Rethel draws between “societies of production” and “societies of appropriation”. When the form of social synthesis is determined by the labour relation in the productive process, i.e., receives its fundamental structure directly from the human labour process interacting with nature – then it is a “society of production” and has the possibility of being a classless society. This is the case of “primitive” communities and of a (possible) future communist society. People create their own society as producers.⁹¹

Societies of appropriation, in its turn, are based in the appropriation of the labour products by the non-working members of society. There are two kinds of appropriation: (i) unilateral, in which there is a (public) appropriation by an instituted authority – through the levying of tributes or robbery pure and simple – of the surplus produced in the context of forms of “direct lordship and bondage”; and (ii) reciprocal, grounded on private exchange and commodity production. “The common feature of all societies of appropriation is a social synthesis effected by activities which are qualitatively different and separated in time from the labour which produces the objects of appropriation”.⁹²

Broadly speaking, according to Sohn-Rethel⁹³, we can distinguish three major eras in the social development of mankind that correspond, in its turn, to three stages in the development of thought and knowledge: primitive societies, Bronze Age societies and commodity-producing societies (ancient and modern). In synthesizing this historical evolution, we will pay special attention to the last type, namely to Ancient Greece and modern capitalism.

3.1 – Primitive societies and the Bronze Age

Tribal society (or primitive communism) corresponds to the emergence of language and human consciousness. However, consciousness is here entirely “practical”, i.e., it entails the knowledge of how to do things but not the knowledge necessary to explain them. Thus, the individual is not able to conceive his existence apart from the social

group to which he belongs (tribe, clan, etc.); he does not face nature as an individual but, on the contrary, defines in a “magical” way a process that goes completely beyond his understanding.⁹⁴

Bronze Age civilizations (e.g. Ancient Egypt) correspond to the emergence of script and numbers. In these societies, trade does not permeate yet the internal order of the community, being carried on essentially with other peoples. Their main intellectual developments include: the creation of counting systems to organise the stored goods, the establishment of standard measures, astronomy and the calendarisation of floods for agricultural purposes, an elementary geometry in order to divide and redistribute the arable land, and the creation of written records. Although these elements reveal the existence of an intellectual labour separated from manual activities, they do not imply nor presuppose yet a mode of conceptual thinking.⁹⁵

3.2 – Greece: the classical society of appropriation

Iron metallurgy developed around 1000 BC and gave rise to civilizations like the Greek, Etruscan and Roman. Let us quote Thomson:

[B]y increasing productivity and so rendering possible new divisions of labour, the use of iron carried still further the process of transforming collective production and appropriation into individual production and appropriation. Hence it marked a new stage in the growth of commodity production. The village commune, resting on common ownership and surrendering its surplus in the form of tribute, was succeeded by a community of individual proprietors, each producing independently for the open market. Such was the Greek *polis*, based on the use of iron.⁹⁶

Commodity exchange originated abstract thought only in late classical antiquity, since only in the Greek civilization did it prove itself as an overarching social synthesis. Before that there existed only isolated and accidental acts of exchange.⁹⁷ When commercial reality acquired such a large prominence that it led to the invention of coinage, around 680 BC, its adverse and disruptive effects permeated the internal order of the community.⁹⁸ The rise of private propriety and exchange among the individuals resulted in the transformation of products into commodities and in the creation of a social synthesis based on a monetary economy and on *private* appropriation.⁹⁹

This revolution was accompanied by its unique and distinctive form of thought. The growth of commodity production in Greece led to the birth of philosophy and the mode of conceptual thinking in the Ionian coast of the Aegean Sea (with Thales, Anaximander, etc.), the centre of maritime commercial activity.¹⁰⁰ The division between intellectual and manual labour “becomes a factor of prime importance”.¹⁰¹

The first “pure thinker” that created (unconsciously) a concept perfectly adequate to money was Parmenides with his concept of “the One” (or “that which is”): unchanging through time, extended through all space, lacking any sensible properties and strictly homogeneous, uniform and incapable of perishing.¹⁰² Let us quote Thomson once more:

[M]an, the subject, learnt to abstract himself from the external world, the objet, and to see it for the first time as a natural process determined by its own laws, independent of his will; yet by the same act of abstraction he nursed in himself the illusion that his new categories of thought were endowed with an immanent validity independent of the social and historical conditions which had created them.¹⁰³

Mathematics and, in particular, the geometry created by the Greeks possessed also a purely intellectual and formalized character, apart from any practical connection with measurement (as was the case in Egypt, for instance). Measure dissociated itself from the act of measurement, which means the manual operation subordinated itself to an act of pure thought aimed at apprehending quantitative laws of space or abstract numbers.¹⁰⁴

Their conceptual content was independent not only from this or that particular purpose but from any practical task. [...] [A] pure form abstraction had to emerge and be admitted into reflective thought. We reason that this could result only through the generalisation intrinsic in the monetary commensuration of commodity values promoted by coinage.¹⁰⁵

Sohn-Rethel concludes that although there was no production of surplus-value in the capitalist sense, Ancient Greece's social synthesis was based on the exchange of products as commodities and no more on a communal mode of production. This was enough for the real abstraction to become the dominant feature and imprint its mark on the form of thought prevalent in that society and "allow us to trace back the conceptual characteristics of Greek philosophy and mathematics [...] to this source".¹⁰⁶

3.3 – *The Middle Ages and the Renaissance*

With the collapse of the Roman Empire, the forms of commodity production typical of classical antiquity came to an end. The economy lost its monetary and slavery character and Feudalism emerged, based on an agricultural and artisan small-scale production. Individual production took place according to the division of labour inside the mediaeval manor.¹⁰⁷

Notwithstanding, the growth, between the IX and XII centuries, of the productive forces available to artisans and peasants led to formation of cities and to the rebirth of monetary relations, associated to the development of merchant capital. Tributes and taxes started to be levied in money, which forced the establishment of a monetary economy and of a corresponding reasoning in individuals.¹⁰⁸ By the end of the XIV century occurs a transition from the modes of artisan production to a pre-capitalist era, marked by the Renaissance and the emergence and development of natural sciences.¹⁰⁹

In result of the commercial revolution in the Middle Ages – which grew deeper and deeper in the following centuries – a change occurred from individual production to social production on an ever wider scale. The formation of urban communities in late Feudalism entailed the need of communal walls and defences, administrative buildings, cathedrals, roads, bridges, water-supply and drainage systems, etc. These developments were responsible for a series of activities that the limited economic, technical and theoretic resources of artisan production could no longer meet.¹¹⁰

Above all, the craftsmen lacked a fundamental qualification to solve the problems posed by the dawn of a new era: the abstract thought embodied in mathematics, that is, "the logic of socialised thought". If capital started to exert its influence on production, mathematics came to dominate the intellectual powers of social production: for the first time there was a large-scale applied-use of science.¹¹¹ Mathematics opens a gap between thought and human action, "establishing an unambiguous division of head and hand in the production processes".¹¹²

More than any other factor, "it was the development of firearms which imposed the use of mathematics on artisanry. [...] [T]he technology of firearms [...], from the second half of the fifteenth century [on], intensified and accelerated technological developments enormously".¹¹³ The use of firearms raised crucial problems, such as, for

example, the relation between explosive power, weight of the cannons and the range of projectiles, solvable only with resource to mathematics. Furthermore, firearms production increases melt-casting, (ore) mining and the demands on transportation. Military architecture acquired also a greater importance in view of the protection of harbours and cities. And let us remember that all these developments were accompanied by the establishment of a monetary economy on an unprecedented scale.¹¹⁴

4 – Capitalism and the birth of modern science

It is possible to “understand the historical and logical genesis of the exact sciences as an essential part of the capitalist relations of production”.¹¹⁵ The mathematical and experimental method of Galileo allowed knowledge of nature from other sources than manual labour: this is the key feature of modern science, since “with a technology dependent on the knowledge of the workers the capitalist mode of production would be an impossibility”.¹¹⁶

The decisive factor for the emergence of exact sciences was the extension of the concept of inertia to movement by Galileo, thereby creating the science of dynamics. Galileo open the way to the application of mathematics to the calculation of natural phenomena, being a forerunner of Newtonian mechanics. He demonstrated that the phenomena could be isolated from uncontrolled environmental influences and tested experimentally.

The principle of inertial motion states that a body remains in movement as long as it does not suffer any influence from an external force.¹¹⁷ Therefore, it presupposes: the possibility of isolating a body from its physical environment; a conception of infinitely homogeneous space (Euclidean geometry); and a conception of movement – and of rest – as states present on the same ontological level.¹¹⁸

Our explanation of the principle of inertial motion is that it derives from the pattern of motion contained in the real abstraction of commodity exchange. This motion has the reality in time and space of the commodity movements in the market, and thus of the circulation of money and of capital. The pattern is absolutely abstract, in the sense of bearing no shred of perceptible qualities, and was defined as: abstract linear movement through abstract, empty, continuous and homogeneous space and time of abstract substances which thereby suffer no material change, the movement being amenable to no other than mathematical treatment. Although continually occurring in our economic life the movement in this description is nor perceivable to our private minds. When it does indeed strike our minds it is in a pure conceptual form whose source is no longer recognisable; nor is the mechanism to which it owes its abstractness.¹¹⁹

In this way, Sohn-Rethel derives the *a priori* concepts of science, not from an external nature, but from the historical nature of man. Let us take once again the example of the concept of inertia. In antiquity, in the Middle Ages and still in the Renaissance, a static concept of inertia is predominant because the processes of exchange are confined to the sphere of circulation (merchant and monetary capital). But with the advent of capitalism, a dynamic concept of inertia arises. This stems from the fact that the means of production – men and machines – become under the sway of the market. “[P]roduction [...] [is now a] mingled unity of exchange and production, [...] constitutes a constant and continuous process functioning as an economically self-compelling system”.¹²⁰

If in the economic realm social power is now capital, in the field of technology it is science or, more precisely,

the methodical operation of the human mind in its socialised form, guided by its specific logic, which is mathematics. This socialised mind of man [...] is money without its material attachments, therefore immaterial and no longer recognisable as money and, indeed no longer being money but the “pure intellect”. In its form as money it is capital ruling the labour process [...] [and] operates in an automatic manner enforcing the embodiment of the labour employed into values containing a surplus. In its form as the scientific intellect the socialised mind applies itself to physical phenomena on which the automatic working of the labour process of the various capitals is found to be depending.¹²¹

The pattern of abstraction present in exchange assumed the meaning of the “absolute minimum” of what constitutes a (natural) physical event. Any event that may be taken as a composite of this minimum is, thus,

conceivable in terms of pure theoretical categories and amenable to full mathematical treatment. This is, in fact, how modern science proceeds. Theoretical hypotheses in conceptual form and mathematical formulation are worked out and tested [...]. The phenomenon tested is safeguarded from any touch by human hand and made to register specific measurements which are then read as indicated by the instruments, and which must be in answer to the questions advanced by the hypothesis.¹²²

By virtue of its isolation, a phenomenon can only be subject to investigation outside the context in which it occurs. In this way,

modern science is not aimed at helping society in her relations with nature. It studies nature only from the viewpoint of capitalist production. If the experiments yield a reliable verification of the hypothesis the latter becomes an established “law of nature” in the shape of a law of recurrent events. And this is the result the capitalist may utilise for technological application in his factory.¹²³

In a remark that has lost nothing in topicality, Sohn-Rethel tells us that the “objects over which capital can exercise control must be cast in the form of a commodity. It is the exact truth of exact science that it is knowledge of nature in commodity form”.¹²⁴ In this sense, if in the primitive communal modes of production “the social practice was rational but the theory was irrational (mythological and anthropomorphic), [...] on the basis of commodity production the relation was reversed; the social practice has turned irrational (out of man’s control) but his mode of thinking has assumed rational forms”.¹²⁵

Sohn-Rethel is still able to understand the potentialities of automation, although not relating it to the supersession of labour. It is obviously necessary to redefine the relation of man to automation, but

now man would, in principle, have at his disposal production forces which in themselves embrace in their physical reality the socialisation which in the ages of commodity production has grown up in the intellectual work of the human mind - that is, in science. This is a reversal in the relationship between man and his tool. The tools are the repositories of his social potentialities and man can remain an individual using these tools to satisfy his needs and wishes with as yet unforeseeable horizons. It is clear that this assumes socialism in the place of capitalism.¹²⁶

Socialism must establish an alliance between society and nature through a science grounded on the unity of intellectual and manual labour.¹²⁷ In a socialist society science will be, methodologically speaking, the same as it is today. However, socialism will have the means to contravene the nefarious features science possesses under capitalism: the fact the scientific categories stem from the second nature and are completely alienated from the qualitative realities of the primary nature; the fact that science is forced to isolate its objects from the environment in which they are embedded; and the fact of being a purely intellectual activity.¹²⁸

The associated producers will control the material and intellectual means of production, concerting it in order to establish a true symbiosis with nature at a global level. “[T]he material practice of the people in their social exploits commands the need for scientific findings to be integrated into the relationship of society to nature”. The findings will no longer remain disconnected; instead, they will be always combined and will regulate “collective interaction with nature”.¹²⁹

According to Sohn-Rethel, in a socialist society science will lose its unilaterally intellectual character. The breakthroughs achieved by science, during the XX century, seem not adequate anymore to the rationality underlying capitalism,

for it has unleashed natural powers which capital fails to control [and “to make a profit out of it”, that is, to cast it in the form of value, N.M.]. Thus if we remain in the clutches of capitalism we are threatened with the loss of the social rationality of science which capitalism formerly possessed and may find ourselves with the irrationality of our social practice combined with no less an irrationality of our theory. [...] [M]an has reached a crossroad where he is faced with the alternative either of taking the socialist road and perhaps achieving a rationality of both social practice and theory or continuing on the capitalist road and forfeiting both.¹³⁰

5 – Sohn-Rethel and the New Value Critique

5.1 – The false ontologisation of labour

Classical “labour movement Marxism”¹³¹ was always trapped in a foreshortened critique of capitalism, grounded in an understanding of capitalism merely on the basis of (juridical) private propriety of the means of production and on the corresponding “subjective” exploitation of the workers by the capitalists through the appropriation of the surplus-value they produce. Thus, this situation calls for the “expropriation the expropriators”, claiming back from the “parasites of society” the surplus-value produced by “honest productive labour”. And the instrument for this, “the motor of history”, is constituted by “class struggle”, by the elevation of the proletariat to the status of “historical subject” responsible by the construction of a society grounded on an ontology of labour. Ultimately, this stands fundamentally as a critique of distribution – in other words, of circulation – that opposes the “anarchy of the market” to the centralised planning and allocation of the labour(-time) of society.

New Value Critique¹³² (NVC) calls this the theory of “exoteric” Marx. Opposed to it is the “esoteric” core of Marx’s theory: the scandal is no longer the “theft” by the capitalists of the surplus-value produced by the workers, but the production of value itself and labour itself as the substance of value. Recovering Marx’s theory of fetishism, the NVC undertakes a radical critique of the “modern commodity-producing system”, emphasizing the necessity of abolishing its basic categories which tend to be ontologised, including by “Marxists”: value, commodity, labour, State, market, etc. It is no more a question of “class struggle” but instead of a struggle against an impersonal, quasi-objective¹³³ form of domination, transformed in an “automatic subject” and that eludes men’s control and subjugates them. It is no longer the case of freeing labour but

of freeing ourselves *from* labour; human emancipation will come about not from the elevation of labour to the supreme principle of humanity, but from its abolition, from the liberation of the “interchange or metabolism with nature” (Marx) and the production of material wealth from the shackles of value and of the abstraction *labour qua* reified human sociability, from the madness of a “real metaphysics”.

By recovering Marx’s analysis of the commodity form and Marx’s theory of fetishism, Sohn-Rethel takes place among the forerunners of this current.¹³⁴ However, as we have already seen, one of his central ideas is that “the abstraction stems from the relation of circulation between men”.¹³⁵ For the author,

*neither labour is abstract by nature, nor is it abstraction to “abstract human labour” its own product. Labour does not abstract itself. The abstraction is placed outside labour, in the social form of relationship typical of the relations of exchange. [...] [Exchange] abstracts (or, better put, abstractifies) labour. The result of this relation is the value of commodities.*¹³⁶

And in another place he adds that it cannot be acknowledged

to the value-form of commodities any inherent relation to labour. [...] [Therefore,] the decisive factor present in commodity production is that on its basis socialisation does not root its social character in the labour process [...], but in a formalised and generalised system of appropriation as circulation of exchange. [...] In other words, *the abstraction of the commodities is an exchange abstraction, not a labour abstraction.*¹³⁷

In this way, as it is easily understood from what has been said before, this assertion constitutes the main target of NVC’s objections to the Sohn-Rethelian oeuvre¹³⁸. Therefore, we will now briefly present the major criticisms levelled by some of its key-authors to Sohn-Rethel: Robert Kurz claims that the fetishism of value permeates the entire process of capitalist social reproduction; Moishe Postone argues that only in capitalism is “labour” responsible by the social synthesis; and Norbert Trenkle demystifies the supposed “innocence” or neutrality of the concept of concrete labour.

Kurz acknowledges that Sohn-Rethel’s theory was the first to introduce the concept of real abstraction in the Marxist debate. Notwithstanding, “for him the socially objectified abstraction is real only as an “exchange abstraction” [...] . It is only in the market that abstract labour presents itself as the common substance of the commodities which makes them compatible”.¹³⁹ In other words, “abstract labour [...] is treated implicitly as a concept of circulation [...] [located] beyond the sphere of production”.¹⁴⁰

This amounts [...] to the subdivision of the capitalist process of reproduction into an ontological-transhistorical sphere of concrete labour, of the process of material production, on the one hand, and a specifically capitalist sphere of exchange, of the market, of the “anarchic” regulation of the market, on the other hand, the point being to “set free” the ontologised sphere of production from the specifically capitalist sphere of circulation [...] . Paradoxically, “labour” as “labour in its specifically capitalist form” [abstract labour], “converts” itself thus not in labour itself, and likewise, not in the effective expenditure of labour power in the real production process, but only in its social beyond, as a process of exchange or act of the market situated outside labour, when it is not even active labour anymore but only its fetishistic reflection in the products as commodities.¹⁴¹

We should notice that the “fetish form of value [...] comprises the whole process of social reproduction”.¹⁴² In Sohn-Rethel, value is relegated to an “*ex post* process of abstraction”, so that the author has to conceive the “double character of labour represented in the commodities” as split into two distinct spheres, “instead of determining the character of the whole reproduction: in production we find no other than ‘concrete’ or ‘useful’ labour, while the product in the form of the commodity arises only in circulation as the representation of abstract labour”.¹⁴³

This *quid pro quo* stems from the fact of labour not being itself – as Sohn-Rethel thinks – something natural, being “precisely in its quality of products of labour that things are already commodities or products of the real abstraction, and not only through the act of exchange in the market”.¹⁴⁴ Kurz concludes therefore that even though Sohn-Rethel reached further than the “labour movement Marxism” and should be

given credit for, with his concept of real abstraction, having developed the theoretical consciousness of the problem, something that constituted a landmark, he remains trapped in an ontology of labour and, thus, to a concept of real abstraction limited to circulation, which furthermore binds him to a schism of the concept of labour into a bad, *a posteriori* and purely circulatory abstraction, on the one hand, and a “good”, productive and supposedly ontological concretion, on the other.¹⁴⁵

According to Postone, although Sohn-Rethel attempts to analyse the “structures of thought [...] in terms of their constitution by forms of social synthesis”, he does not grasp “the specificity of labour in capitalism as being socially constituting”.¹⁴⁶ Thus, Sohn-Rethel claims that “the sort of abstraction and form of social synthesis entailed in the value form is not a labour abstraction but an exchange abstraction”.¹⁴⁷ Postone argues that Sohn-Rethel

does not relate the notion of labour abstraction to the creation of alienated social structures. Instead, he evaluates positively the mode of social synthesis [...] effected by labor in industrial production as non-capitalist and opposes it to the mode of socialisation effected by exchange, which he assesses negatively. *The latter mode of social synthesis alone [...] constitutes the essence of capitalism.*¹⁴⁸

However, the “historically specific quality” of labour in capitalism refers precisely to the fact that it performs the social synthesis, something unknown in the societies of the past. Therefore, it is the specificity of the capitalist process of production and the “alienated social structures” created by the socialisation mediated by labour which are responsible for the real abstraction and not a purported (commodity) exchange extrinsic to the productive process and to labour.¹⁴⁹

Postone applauds the Sohn-Rethelian attempt “to relate the historical emergence of abstract thought, philosophy, and natural science to abstract social forms”.¹⁵⁰ Nonetheless, his equivocated interpretation about the character and constitution of those forms ends up undermining his “sophisticated attempt at an epistemological reading of Marx’s categories”.¹⁵¹

According to Trenkle, labour is not an “anthropological constant”¹⁵² but, on the contrary, is “a powerful real abstraction historically imposed, which coerces people under its violent power”.¹⁵³ Thus,

labour, as the specific form of activity of commodity society, is already *per se* abstract because it constitutes a sphere separated/abstracted [*abgezogene*] from the remaining social context. And, as such, it only exists in general where commodity production has already transformed itself in the determining form of socialisation;

that is, in capitalism, where human activity in the form of labour does not serve any other goal than the valorisation of value.¹⁵⁴

With the concept of real abstraction, Sohn-Rethel describes “a process of abstraction that is not executed through the consciousness of people as an act of thought, but which it is presupposed in thinking and acting as an *a priori* structure of social synthesis and which determines them.” Nevertheless, to the author, the real abstraction is connected exclusively to the act of commodity exchange through the “functional bond of the market”.¹⁵⁵

In this sense, the sphere of labour appears to him

as a pre-social space in which the private producers still fabricate their products completely uninfluenced by any socially determined form. It is only *a posteriori* that they launch their products as commodities into the sphere of circulation, where, then, in exchange, abstraction is made from their material particularities (and with this, indirectly, from the concrete labour expended on their production) and they thus become the carriers of value. *This point of view, which separates the sphere of production from circulation through an external opposition, does not grasp the internal nexus of the modern commodity-producing system.*¹⁵⁶

For Trenkle, the crux of the matter is that

the products are not fabricated in the capitalist process of production as innocent useful things that reach the market *a posteriori*, but each process of production is beforehand directed to the valorisation of capital and correspondingly organised. This means that the products are already fabricated in the fetishist form of the value-thing; they should concern only one aim: to represent the abstract labour-time expended in its production in the value form. The sphere of circulation [...] is the place in which the value represented in the products is realised or at least should be realised.¹⁵⁷

Obviously the commodities must also be useful things, but the sensible/material body of the commodity (“use-value”) is not the primary goal of capitalist production; it constitutes an “unavoidable side effect”, since “value does not realise itself without a material carrier”.¹⁵⁸ It can thus be claimed that the “concrete” side of labour does not rest unspoiled by the “presupposed form of socialisation”. “If abstract labour is the abstraction of an abstraction, then, concrete labour represents only the paradox of being the concrete side of an abstraction (that is, of the form-abstraction ‘labour’)”.¹⁵⁹ In this way, it is “concrete” only in the sense that different commodities “need materially different processes of production” which, however, do not “function technically and organisationally” in a neutral way “regarding the implicit goal of valorisation.” We can say that “the concrete-material side of labour is ... nothing more than the palpable form in which the dictatorship of abstract labour-time confronts and coerces the activity of the workers under its rhythm”.¹⁶⁰

Let us sum up, then, Trenkle’s critique of Sohn-Rethel: “the commodities produced by the system of abstract labour already represent value even if they have not entered yet the sphere of circulation”.¹⁶¹ This is so because to be able to enter the process of circulation (“market”), the products (“commodities”) must already “find themselves in the fetishistic form of the value-thing”.¹⁶²

5.2 – Scientific knowledge and the “bourgeois subject”

If there is a clear disagreement regarding the origin of the real abstraction (in capitalism), the “epistemological” aspect *stricto sensu* of Sohn-Rethel’s theory seems to be more at one with the theory of NVC. According to Ortlieb, the “structural relations between the mathematical-scientific method [...] and the logic of commodity society, in its actual developed form” seem to make “Sohn-Rethel’s [epistemological] program clearly viable”¹⁶³, although it may be objected that the same predecessors of industrial capital – merchant and interest capital – arose also in other societies (in China or in India, for instance), “without thought taking the same course it took in the West and, furthermore, without emerging an independent capitalist dynamic”.¹⁶⁴

Even though natural science presents itself as a “value-neutral science”, it constitutes in fact a historically specific product.¹⁶⁵ As Sohn-Rethel had already noted, the scientific method – from Galileo and Newton to our days – does not derive primarily from observation, but from mathematical propositions and non-empirical concepts.¹⁶⁶ Ortlieb tells us, in a statement clearly at one with Sohn-Rethel, that, for example, “the idea of universal natural laws of nature presupposes an objective concept of linear time infinitely divisible, as well as a concept of homogeneous space”.¹⁶⁷

The “revolution of the mode of thinking” that emerged along with Modernity introduced “a reason which is specific of the bourgeois epoch”, so that the “objective knowledge” produced in this society is not an “a-historical knowledge, independent of the forms of society and valid in equal measure to all human beings”.¹⁶⁸ We can say that “scientific thinking [...] ended up by imposing itself thanks to the power of commodity society”.¹⁶⁹

Ortlieb bases his analysis primarily in the (bourgeois) subject-form, being visible some similarities with Sohn-Rethel’s analysis, which already in 1937, in his “Critical Liquidation of Apriorism”, wrote that the concept of subjectivity refers to the “subject of knowledge”. In this sense, “the thought of the subject of knowledge presupposes a kind of self-reflection, through which the individual distinguishes ‘himself’ as a thinking being from his body and from all that is material in space and thinks himself as identical through time”.¹⁷⁰ His thesis is that subjectivity relates to the “economic substitutability of the function of money as monetary material”, so that the theoretical subject arises from the identification of man with money. “The theoretical subject is the possessor of money”.¹⁷¹ And he adds further on:

As a possessor of money [the individual] identifies himself as immaterial subject of validity in the function of identically uniform and general money, as well as a purely material body in the stuff of his money, creating therefrom the *Dasein* of his subjectivity and his valid actions. Through the validity of his thought, the possessor of money is identical with all other possessors of money.¹⁷²

Ortlieb develops these Sohn-Rethelian intuitions in the following manner, which deserves to be quoted fully:

The nexus that holds together commodity society and the objective form of knowledge is the bourgeois subject, i.e., the specific constitution of consciousness which, on the one hand, is required in order to survive in the commodity and monetised society, and which, on the other hand, the subject must possess in order to be capable of [achieving] objective knowledge.

Commodity form [...] has converted itself in the universal form because capitalism has turned labour power into a commodity whose carriers may dispose freely: that is, free from personal domination, free from all coercion except that which forces them to earn money. But this impersonal coercion is universal [...] and the sale of their own labour power [has converted itself] in the predominant form of

reproduction. [...] The necessity of possessing the larger amount of money as possible converts itself therefore into the ultimate “self-interest”, equal for all members of society, although they must pursue it by competing with each other [...].

The apparent autonomy of the individual corresponds to the apparent neutrality of the economic process, which presents itself to the economic monads as a process ruled by laws, describable only with the concepts of theory [...] borrowed from the natural sciences. In both ways, the bourgeois subject is unaware of his own social condition: without further obligations than to ensure his livelihood (which, however, he cannot achieve as an individual), he feeds with his abstract labour the mega-machine of the valorisation of capital, of whose functioning, on the other hand, he does not take any responsibility, since he experiences it as ruled by natural laws inaccessible to his own agency.¹⁷³

As we have already seen, the nexus between the possibility of objective knowledge and the consciousness of self-identity was underlined by Hume and Kant. According to Ortlieb, and once more at one with Sohn-Rethel, “the consciousness of identity cannot be deduced from experience” since it precedes “all empirical knowledge”. But it is not also “something inborn to the human being as such, but [something] constituted socially”, requiring “the constitution of a subject capable of objective knowledge”.¹⁷⁴

Ortlieb sets out this subject by examining the demands inherent to modern scientific method. Scientific experiments are, first and foremost, “an intervention of experimenter on himself: the elimination of his corporeity and of his feelings”, in order to ensure the “elimination of the subjective factor”, i.e., the illusion that the subject, after all, has nothing to do with a purely objective, technical process of knowledge.¹⁷⁵

Nevertheless, all experimental acts and measurements constitute a reciprocal relationship “between the subject that knows and the nature which he turns into his object”, mediated precisely by the scientific mathematical method. This means that a “scientific experiment” never refers itself simply to a “nature-in-itself” but uniquely to this specific form of interaction”, so that the so-called laws of nature are not mere “products of discourse” multipliable *ad infinitum*, “not in the need of its objective side, nor mere proprieties of nature, which have nothing to do with the knowing subjects”.¹⁷⁶ In short, “the schism of individual peculiarities” to which the subject of knowledge has to submit himself in order not to compromise an experiment is the equivalent to that which “the objects of his contemplation, in the mathematical abstraction of the mental experiment, are submitted: abstraction is made from all its qualities and even from every concrete thing”.¹⁷⁷

Thus, Ortlieb, concludes that

The illusion that makes the regularity produced by the experiment appear as a propriety of nature itself is the same illusion by which the blind social process of commodity society presents itself to men like a process ruled by laws, external to themselves, when indeed it is them who constitute it through their action as bourgeois subjects. The subject as a “conscious agent which is not conscious of his own form” [Kurz] conceives himself as separated from nature and from all other subjects, whom he experiences as mere “external world”; in this way it is unconsciously presupposed the total social framework, specific to bourgeois society, the only one to produce such form of consciousness. The systemic nexus of commodity-form, objectified that way, constitutes also the equality of subjects that the objective form of knowledge presupposes: their equality as commoditised and monetary monads, adult and responsible citizens, endowed with equal rights and submitted to identical rules and laws.¹⁷⁸

6 – Conclusion

Throughout his work, Sohn-Rethel demonstrates that

Natural science, like mathematics, [...] is a functional part of a particular form of the social life-process. Its logic is based on the abstraction from our own timebound existential condition, [...] on the abstraction of society from itself. It is from this abstraction, not from any absolute root and spontaneous “intellectual” font, that the logic of science derives its character of timelessness. *There is, in other words, a timebound cause for timeless logic.*¹⁷⁹

Thus, Sohn-Rethel does not simply derivate the cognitive concepts from the material world or “external” nature, but “from the *social being* of the historical epochs in which these concepts arise and play their part”.¹⁸⁰ The mode of conceptual thinking emerged, historically, from the division between intellectual and manual labour associated to commodity production. Intellectual labour has a basic characteristic: its “timeless universal logic”, which makes it incompatible with history, social as well as natural. In this way,

Timeless concepts are ahistorical in their meaning and present themselves as historical miracles like the “Greek miracle” [...]. *Of course, this ahistorical mode of thinking is itself a historical phenomenon.* And so long as its timeless and nonempirical concepts fail to be understood historically, history itself remains incomprehensible.¹⁸¹

In short, Sohn-Rethel is able to disclose

the origin of the pure intellectual concepts from the spatio-temporal reality of social being, their character as reflections of the abstraction enshrined in money, hence their nature as offshoots from the reification upon which hinges the cohesion of exchange society, their essential use as forms of socialised thinking, their antithetic relation to manual labour, their accessory link with the class division of society.¹⁸²

Concerning the role and form the natural sciences may assume in a post-capitalist society, we can conclude with Ortlieb that

As natural sciences expand the possibilities of human action, they constitute a useful tool that we should not renounce. But “natural science as the religion of our times” (Pietschmann), which elevates to a propriety of nature itself the regularity produced by the objective form of knowledge and sets up as a worldview a nature ruled by laws, determining what we see and do not see, this science will not survive the modern age. The image of “nature” was always a socially constituted image; and *we do not see why a society freed from all abstract-universal and unconscious forms would still need a unitary image of nature, mandatory for everyone in the same way and at all times.*¹⁸³

Despite all its unquestionable merits, Sohn-Rethelian theory presents, as we saw in section 5, obvious limitations stemming fundamentally from its equation of labour with the metabolism with nature. Sohn-Rethel’s definition of capitalism as a “society of appropriation” transfers the capitalist specificity to the sphere of circulation – to the

“exploitation” through the appropriation of the products of labour by the non-workers – and moves the real abstraction from the sphere of production to the sphere of exchange. Therefore, what differentiates capitalism is not (“abstract”) labour but precisely the fact of the social synthesis not being performed, in his view, by labour (!) but by the process of commodity exchange. It is not abstract labour and value that impose themselves as the dominant mode of production; rather, it is the “logic” of the market that invades (an ontologised) production.

Sohn-Rethel ends up not realising that the capitalist process of production is *simultaneously*: a process of material production (of goods) and a process of production of value, i.e., a process of “valorisation of value” through the subsumption of “living labour”. Thus, it is not the “market” that becomes co-extensive with society but “abstract labour” and commodity *production*.

Instead of abolishing labour, Sohn-Rethel intends to “plan” it and allocate it in a “conscious” matter, as opposed to the “anarchy” of the market, which effects that quantification “indirectly and in an unconscious matter” as a result of the “social exchange process”.¹⁸⁴ By ontologising labour, the author is even able of concluding that Taylorism itself is already a crucial step towards socialism (!): if “his analysis [Taylor’s] was done in the service of capital [...], the method need not serve this objective, nor be wielded by capital as a means of enforcing its control over labour. *It could even be a method operated by the workers themselves*”.¹⁸⁵ We are here before the most “exoteric” core of Sohn-Rethelian theory, to use an expression of NVC.

Besides that, and lastly, we should note that it is not only “*intellectual labour*” which constitutes a social *a priori*. In Marx, (abstract) labour *tout court* and the commodity constitute an *a priori* from the root: they express simultaneously particular social relations and forms of thought.¹⁸⁶ Thus, the “form of thought” of all “modern monetary subjects”¹⁸⁷ constitutes an (unconscious) *a priori* marked by the “commodity form”, value, labour and the (ir)rationality inherent to them, which determines and frames their daily actions and behaviours. By ontologising labour, Sohn-Rethel has to move the specificity of capitalism to the realm of exchange and to an “intellectual labour” in the service of the “ruling class”.

Notes

¹ A Portuguese version of this article was published in *Sinal de Menos*, No. 9, 2013.

² Alfred Sohn-Rethel, *Trabalho Espiritual e Corporal – Para a Epistemologia da História Ocidental*, (João Pessoa: UFPB, Mestrado em Economia, 1995/1989) at: <<http://nunomiguelmachado.files.wordpress.com/2012/01/sohn-rethel-1.pdf>> [translation of the 3rd German edition] 1.

³ Alfred Sohn-Rethel, *Intellectual and Manual Labour – A Critique of Epistemology* (London: The Macmillan Press Ltd, 1978/1970) xiii.

⁴ Sohn-Rethel, *Intellectual and Manual Labour* xiii.

⁵ Sohn-Rethel, *Intellectual and Manual Labour* xiv.

⁶ Cf. Sohn-Rethel, *Intellectual and Manual Labour*.

⁷ Anselm Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?”, in *La pensée-marchandise*, Alfred Sohn-Rethel (Broissieux: Éditions du Croquant, 2010) 7-8.

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- ⁸ Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?” 8.
- ⁹ Cf. Anselm Jappe, *As Aventuras da Mercadoria – Para uma nova crítica do valor* (Lisboa: Antígona, 2006) 209-210.
- ¹⁰ Sohn-Rethel, *Intellectual and Manual Labour* 4.
- ¹¹ Sohn-Rethel, *Intellectual and Manual Labour* 7.
- ¹² Sohn-Rethel, *Intellectual and Manual Labour* 7.
- ¹³ Sohn-Rethel, *Intellectual and Manual Labour* 5.
- ¹⁴ Sohn-Rethel, *Intellectual and Manual Labour* 6-7.
- ¹⁵ Sohn-Rethel, *Intellectual and Manual Labour* 7.
- ¹⁶ Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?” 25.
- ¹⁷ Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?” 26.
- ¹⁸ Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?” 29.
- ¹⁹ Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?” 29.
- ²⁰ Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?” 27, emphasis added.
- ²¹ Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?” 8.
- ²² Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?” 9.
- ²³ Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?” 9, emphasis added.
- ²⁴ Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?” 9, emphasis added.
- ²⁵ Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?” 9.
- ²⁶ Cf. Moishe Postone, *Time, Labor and Social Domination – A Reinterpretation of Marx’s Critical Theory* (Cambridge: Cambridge University Press, 2003).
- ²⁷ Sohn-Rethel, *Trabalho Espiritual e Corporal* 6.
- ²⁸ Sohn-Rethel, *Trabalho Espiritual e Corporal* 7, emphasis added.
- ²⁹ Sohn-Rethel, *Trabalho Espiritual e Corporal* 14.
- ³⁰ Sohn-Rethel, *Intellectual and Manual Labour* 76.
- ³¹ Sohn-Rethel, *Intellectual and Manual Labour* 77. Jappe expresses a similar view: “the theme of fetishism exists in a latent form in Kant’s thought [...]. Value is an a priori form, in the Kantian sense, because all objectivity manifests itself through it: it is a reticule of which the individual is not aware, but which precedes all perception and constitutes his objects. The Kantian *a priori* is a non-historical ontologisation and individualisation of value that, in modern society, is the real *a priori*, but a social, non-natural, *a priori*”. Thus, the “analysis of the categories of socialisation as preliminary forms to all other questions leads to a theory of social mediation that might help to overcome the traditional objectivist and subjectivist theories”. Jappe, *As Aventuras da Mercadoria* 171.

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- ³² Sohn-Rethel, *Intellectual and Manual Labour* 77.
- ³³ Sohn-Rethel, *Trabalho Espiritual e Corporal* 37.
- ³⁴ Sohn-Rethel, *Trabalho Espiritual e Corporal* 38.
- ³⁵ Sohn-Rethel, *Trabalho Espiritual e Corporal* 39.
- ³⁶ Cf. Sohn-Rethel, *Intellectual and Manual Labour* 28.
- ³⁷ Alfred Sohn-Rethel, “Exposição sobre a teoria da socialização funcional - Uma carta a Theodor W. Adorno”, in *Trabalho Espiritual e Corporal – Para a Epistemologia da História Ocidental*, (João Pessoa: UFPB, Mestrado em Economia, 1995/1989) 89, emphasis added.
- ³⁸ Alfred Sohn-Rethel, “Para a liquidação crítica do apriorismo - Uma pesquisa materialista”, in *Trabalho Espiritual e Corporal – Para a Epistemologia da História Ocidental*, (João Pessoa: UFPB, Mestrado em Economia, 1995/1989) 98-99, emphasis added.
- ³⁹ Cf. Sohn-Rethel, “Para a liquidação crítica do apriorismo” 101-123.
- ⁴⁰ “Reification can be found in commodity exchange but it is impossible to explain it [reification] with reference to it [exchange]. Its origin and source is to be found in exploitation.” Sohn-Rethel, “Para a liquidação crítica do apriorismo” 104. Or in another place: “The constitutive synthesis, to which all theoretical knowledge can be traced back logically and genetically, is the reification and material socialization effected by exploitation.” Sohn-Rethel, “Para a liquidação crítica do apriorismo” 118.
- ⁴¹ Cf. Sohn-Rethel, *Intellectual and Manual Labour* 35-57.
- ⁴² This work was to be followed by several other books that, unfortunately, were not translated from the German. Cf. Monika Reinfelder and Phil Slater, “Intellectual and Manual Labour: An Introduction to Alfred Sohn-Rethel”, *Capital & Class* 6 (1978): 137-139.
- ⁴³ Sohn-Rethel, *Intellectual and Manual Labour* 19.
- ⁴⁴ Sohn-Rethel, *Intellectual and Manual Labour* 20.
- ⁴⁵ Sohn-Rethel, *Intellectual and Manual Labour* 20.
- ⁴⁶ Sohn-Rethel, *Intellectual and Manual Labour* 23.
- ⁴⁷ Sohn-Rethel, *Intellectual and Manual Labour* 27.
- ⁴⁸ Sohn-Rethel, *Intellectual and Manual Labour* 29.
- ⁴⁹ Sohn-Rethel, *Intellectual and Manual Labour* 26.
- ⁵⁰ Sohn-Rethel, *Intellectual and Manual Labour* 27.
- ⁵¹ Sohn-Rethel, *Intellectual and Manual Labour* 23.
- ⁵² Sohn-Rethel, *Intellectual and Manual Labour* 33.
- ⁵³ Sohn-Rethel, *Intellectual and Manual Labour* 40.
- ⁵⁴ Sohn-Rethel, *Intellectual and Manual Labour* 42.

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- ⁵⁵ Sohn-Rethel, *Intellectual and Manual Labour* 42.
- ⁵⁶ Sohn-Rethel, *Intellectual and Manual Labour* 42-43.
- ⁵⁷ Sohn-Rethel, *Intellectual and Manual Labour* 43.
- ⁵⁸ Sohn-Rethel, *Intellectual and Manual Labour* 44.
- ⁵⁹ Sohn-Rethel, *Intellectual and Manual Labour* 43-44.
- ⁶⁰ Sohn-Rethel, *Intellectual and Manual Labour* 45.
- ⁶¹ Sohn-Rethel, *Intellectual and Manual Labour* 45.
- ⁶² Sohn-Rethel, *Intellectual and Manual Labour* 46.
- ⁶³ Sohn-Rethel, *Intellectual and Manual Labour* 47.
- ⁶⁴ Sohn-Rethel, *Intellectual and Manual Labour* 47.
- ⁶⁵ Sohn-Rethel, *Intellectual and Manual Labour* 48.
- ⁶⁶ Sohn-Rethel, *Trabalho Espiritual e Corporal* 30.
- ⁶⁷ Alfred Sohn-Rethel, "Science as alienated consciousness", in *Radical Science Essays*, edited by Les Levidow (London: Free Association Books, 1986/1975) 128-129.
- ⁶⁸ Sohn-Rethel, *Intellectual and Manual Labour* 53, emphasis in the original.
- ⁶⁹ Sohn-Rethel, *Intellectual and Manual Labour* 51.
- ⁷⁰ Sohn-Rethel, *Intellectual and Manual Labour* 56.
- ⁷¹ Sohn-Rethel, *Intellectual and Manual Labour* 57, emphasis added.
- ⁷² Sohn-Rethel, *Intellectual and Manual Labour* 57.
- ⁷³ Sohn-Rethel, *Intellectual and Manual Labour* 57.
- ⁷⁴ Sohn-Rethel, *Intellectual and Manual Labour* 57.
- ⁷⁵ Sohn-Rethel, *Intellectual and Manual Labour* 61.
- ⁷⁶ Sohn-Rethel, *Intellectual and Manual Labour* 62.
- ⁷⁷ Sohn-Rethel, *Intellectual and Manual Labour* 64.
- ⁷⁸ Sohn-Rethel, *Intellectual and Manual Labour* 64-65.
- ⁷⁹ Sohn-Rethel, *Trabalho Espiritual e Corporal* 35.
- ⁸⁰ Sohn-Rethel, *Intellectual and Manual Labour* 76.
- ⁸¹ Sohn-Rethel, *Intellectual and Manual Labour* 66.
- ⁸² Sohn-Rethel, *Intellectual and Manual Labour* 67.
- ⁸³ Sohn-Rethel, *Intellectual and Manual Labour* 69.

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- ⁸⁴ Sohn-Rethel, *Intellectual and Manual Labour* 73.
- ⁸⁵ Sohn-Rethel, *Intellectual and Manual Labour* 72.
- ⁸⁶ Sohn-Rethel, *Intellectual and Manual Labour* 71.
- ⁸⁷ Sohn-Rethel, *Intellectual and Manual Labour* 72.
- ⁸⁸ Sohn-Rethel, *Intellectual and Manual Labour* 78.
- ⁸⁹ Sohn-Rethel, *Intellectual and Manual Labour* 74.
- ⁹⁰ Sohn-Rethel, *Intellectual and Manual Labour* 78.
- ⁹¹ Sohn-Rethel, *Intellectual and Manual Labour* 83.
- ⁹² Sohn-Rethel, *Intellectual and Manual Labour* 83-84.
- ⁹³ Cf. Alfred Sohn-Rethel, "Historical Materialist Theory of Knowledge", *Marxism Today* (1965) at: <http://nunomiguelmachado.files.wordpress.com/2012/01/sohn-rethel-2.pdf> .
- ⁹⁴ Sohn-Rethel, "Historical Materialist Theory of Knowledge" 2.
- ⁹⁵ Sohn-Rethel, "Historical Materialist Theory of Knowledge" 3.
- ⁹⁶ Thomson quoted in Sohn-Rethel, *Intellectual and Manual Labour* 95.
- ⁹⁷ Sohn-Rethel, *Intellectual and Manual Labour* 58-59.
- ⁹⁸ Sohn-Rethel, *Intellectual and Manual Labour* 96.
- ⁹⁹ Sohn-Rethel, *Intellectual and Manual Labour* 98.
- ¹⁰⁰ Sohn-Rethel, *Intellectual and Manual Labour* 98-99.
- ¹⁰¹ Sohn-Rethel, *Intellectual and Manual Labour* 96.
- ¹⁰² Sohn-Rethel, *Intellectual and Manual Labour* 65.
- ¹⁰³ Thomson quoted in Sohn-Rethel, "Science as alienated consciousness"123.
- ¹⁰⁴ Sohn-Rethel, *Intellectual and Manual Labour* 101.
- ¹⁰⁵ Sohn-Rethel, *Intellectual and Manual Labour* 102.
- ¹⁰⁶ Sohn-Rethel, *Trabalho Espiritual e Corporal* 54.
- ¹⁰⁷ Sohn-Rethel, *Intellectual and Manual Labour* 104-105.
- ¹⁰⁸ Sohn-Rethel, *Intellectual and Manual Labour* 106-107.
- ¹⁰⁹ Sohn-Rethel, *Intellectual and Manual Labour* 110.
- ¹¹⁰ Sohn-Rethel, "Science as alienated consciousness" 134.
- ¹¹¹ Sohn-Rethel, *Intellectual and Manual Labour* 112.
- ¹¹² Sohn-Rethel, *Intellectual and Manual Labour* 112-113.

¹¹³ Sohn-Rethel, *Intellectual and Manual Labour* 113.

¹¹⁴ Sohn-Rethel, *Intellectual and Manual Labour* 113. Kurz emphasizes also the decisive role played by the “political economy of firearms” in the implementation of abstract labour and monetary relations: “commodity production and monetary economy as basic elements of capitalism received a decisive impulse in the beginning of the modern era with the triggering of the military and armaments’ economy. [...] In order to fund armaments’ industries and bastions, giant armies and war, the states had to squeeze the most out of their population and this, correspondingly to the matter at hand, in an equally new way: instead of the former taxes levied in kind, monetary taxation. People were thus forced to ‘earn money’ in order to be able to pay their taxes to the state.” Robert Kurz, “Canhões e Capitalismo – A revolução militar como origem da modernidade” (1997), at: <http://obeco.planetaclix.pt/rkurz2.htm>.

¹¹⁵ Sohn-Rethel, *Intellectual and Manual Labour* 117.

¹¹⁶ Sohn-Rethel, *Intellectual and Manual Labour* 123.

¹¹⁷ Sohn-Rethel, *Intellectual and Manual Labour* 125.

¹¹⁸ Sohn-Rethel, *Intellectual and Manual Labour* 127.

¹¹⁹ Sohn-Rethel, *Intellectual and Manual Labour* 128.

¹²⁰ Sohn-Rethel, *Intellectual and Manual Labour* 129-130.

¹²¹ Sohn-Rethel, *Intellectual and Manual Labour* 130.

¹²² Sohn-Rethel, *Intellectual and Manual Labour* 131-132.

¹²³ Sohn-Rethel, *Intellectual and Manual Labour* 132.

¹²⁴ Sohn-Rethel, *Intellectual and Manual Labour* 132.

¹²⁵ Sohn-Rethel, *Intellectual and Manual Labour* 133-134.

¹²⁶ Sohn-Rethel, *Intellectual and Manual Labour* 177.

¹²⁷ Sohn-Rethel, *Intellectual and Manual Labour* 181.

¹²⁸ Sohn-Rethel, *Intellectual and Manual Labour* 183-184.

¹²⁹ Sohn-Rethel, *Intellectual and Manual Labour* 184.

¹³⁰ Sohn-Rethel, *Intellectual and Manual Labour* 135.

¹³¹ Robert Kurz, “A Substância do Capital – O trabalho abstracto como metafísica real social e o limite interno absoluto da valorização. Primeira Parte: A qualidade histórico-social negativa da abstracção ‘trabalho’”, *Exit! Krise und Kritik der Warengesellschaft* 1 (2004), at: <http://nunomiguelmachado.files.wordpress.com/2012/01/r-kurz.pdf>.

¹³² This current is associated to authors like Moishe Postone (USA), Jean-Marie Vincent (France) and – in the German speaking countries – to the Krisis and Exit! Groups (Robert Kurz, Anselm Jappe, Roswitha Scholz, Claus Peter Ortlieb, Norbert Trenkle, Ernst Lohoff, Franz Schandl, etc.). A vast number of articles, books and interviews from these authors – including several English translations – are available on the Internet in the websites: <http://www.exit-online.org/> and <http://www.krisis.org/>. Nonetheless, aside

from the German original texts, Portuguese in clearly the language in which more material is made available: <http://obeco.planetaclix.pt/>.

¹³³ Postone, *Time, Labor and Social Domination*.

¹³⁴ Cf. Jappe, *As Aventuras da Mercadoria* 211-212 and Jappe, “Pourquoi lire Sohn-Rethel aujourd’hui?”.

¹³⁵ Sohn-Rethel, *Trabalho Espiritual e Corporal* 26.

¹³⁶ Sohn-Rethel, *Trabalho Espiritual e Corporal* 11, emphasis added.

¹³⁷ Sohn-Rethel, *Trabalho Espiritual e Corporal* 27-28, emphasis added.

¹³⁸ It should be noted however that, with the exception of David Black, “On Philosophic Battles of Ideas, Past and Present” (2010) at: <http://www.usmarxisthumanists.org/wp-content/uploads/pdf/black-on-philosophic-battles-of-ideas-20100817.pdf> and Alberto Toscano, “The Open Secret of Real Abstraction”, *Rethinking Marxism* 20.2 (2008): 273-287, most authors do not even realise this question, accepting in an uncritical manner Sohn-Rethel’s theses (cf. Nancy Harstock, “Social Life and Social Science: The Significance of the Naturalist/Intentionalist Dispute”, *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association, Volume Two: Symposia and Invited Papers* (1980): 325-345; Norberto Muniz, “O conhecimento científico como falsa consciência necessária”, *Cadernos de Ciência & Tecnologia* 12.1-3 (1995): 29-38; Eleutério Prado, “A abstração mercantil e a teoria neoclássica” (2009) at: <http://eleuterioprado.files.wordpress.com/2010/07/baixar-texto-4.pdf>; Philipp Wolf, “The *A Priori* of Money: Alfred Sohn-Rethel and Literature”, *Tropismes* 9 (1999): 179-191). Even Galvan, in that which is by far the best introduction to Sohn-Rethelian thought, stands also trapped in an (exclusive) identification of the real abstraction with commodity *exchange*: “the space-time of the real abstraction is the market.” Cesare Giuseppe Galvan, *Moeda e Ciência – Ensaios sobre a teoria de Sohn-Rethel* (Recife: Author’s Edition, 2001) 31. Follari argues equally about the central role of exchange in the capitalist social synthesis, since the “the process of circulation is more universal than labour.” Roberto Follari, “Los Rostros de Sohn-Rethel”, *Herramienta* 44 (2009), at: <http://www.herramienta.com.ar/revista-herramienta-n-44/los-rostros-de-sohn-rethel>. Augusto considers Sohn-Rethel’s ontology of labour to be a “positive aspect” (!), since it allows an approximation to the “Lukásian approach.” André Guimarães Augusto, “Gênese da Ciência em Lukács e Sohn-Rethel: proposta de uma síntese a partir da categoria da emergência” (2011) at: <http://www.uff.br/niepmarxmarxismo/MM2011/TrabalhosPDF/AMC131F.pdf> 11. In our opinion, however, and despite its unquestionable merits and pioneer character, the ontologisation of labour – as well as the identification of the proletariat with the “subject-object” of history (Hegelian *Geist*) – is precisely also one of the main weaknesses of Lukács’ work (cf. Postone, *Time, Labor and Social Domination* 72-83).

¹³⁹ Kurz, “A Substância do Capital” 25-26.

¹⁴⁰ Kurz, “A Substância do Capital” 44.

¹⁴¹ Kurz, “A Substância do Capital” 44.

¹⁴² Kurz, “A Substância do Capital” 25.

¹⁴³ Kurz, “A Substância do Capital” 25.

¹⁴⁴ Kurz, “A Substância do Capital” 26.

¹⁴⁵ Kurz, “A Substância do Capital” 26.

¹⁴⁶ Postone, *Time, Labor and Social Domination* 177.

¹⁴⁷ Postone, *Time, Labor and Social Domination* 178.

¹⁴⁸ Postone, *Time, Labor and Social Domination* 178, emphasis added.

¹⁴⁹ Postone, *Time, Labor and Social Domination* 178.

¹⁵⁰ Postone, *Time, Labor and Social Domination* 179.

¹⁵¹ Postone, *Time, Labor and Social Domination* 178.

¹⁵² Norbert Trenkle, “O que é o valor? A que se deve a crise?” (1998) at: <http://nunomiguelmachado.files.wordpress.com/2012/01/n-trenkle1.pdf>> 4.

¹⁵³ Trenkle, “O que é o valor?” 2.

¹⁵⁴ Trenkle, “O que é o valor?” 3.

¹⁵⁵ Trenkle, “O que é o valor?” 5.

¹⁵⁶ Trenkle, “O que é o valor?” 5, emphasis added.

¹⁵⁷ Trenkle, “O que é o valor?” 6.

¹⁵⁸ Trenkle, “O que é o valor?” 6.

¹⁵⁹ Trenkle, “O que é o valor?” 6.

¹⁶⁰ Trenkle, “O que é o valor?” 6.

¹⁶¹ Trenkle, “O que é o valor?” 7.

¹⁶² Trenkle, “O que é o valor?” 7.

¹⁶³ Claus Peter Ortlieb, “Objectividade Inconsciente – Aspectos de uma crítica das ciências matemáticas da natureza”, *Krisis* 21-22 (1998) at: <http://nunomiguelmachado.files.wordpress.com/2012/01/cp-ortlieb.pdf>> 10.

¹⁶⁴ Ortlieb, “Objectividade Inconsciente” 10. Postone goes even further and claims that Sohn-Rethel does not put enough emphasis in the distinction between Ancient Greece and modern capitalist reality – in which the commodity form is totalising – and, therefore, between Greek philosophy and modern rationalism (Postone, *Time, Labor and Social Domination* 156). Furthermore, by putting exchange, instead of labour, at the centre of social synthesis he is not able to explain conveniently the forms of thought from the XIX and XX centuries associated to the fetishist capitalist process of *production* (Postone, *Time, Labor and Social Domination* 178-179). By excluding the implications of the commodity form for labour itself, he “restricts his social epistemology to a consideration of forms of static, abstract

mechanical thought” (Postone, *Time, Labor and Social Domination* 179), thereby escaping his scrutiny many of the forms of thought characteristic of modernity.

¹⁶⁵ Ortlieb, “Objectividade Inconsciente” 1.

¹⁶⁶ Ortlieb, “Objectividade Inconsciente” 4-7.

¹⁶⁷ Ortlieb, “Objectividade Inconsciente” 7.

¹⁶⁸ Ortlieb, “Objectividade Inconsciente” 8-9.

¹⁶⁹ Ortlieb, “Objectividade Inconsciente” 9.

¹⁷⁰ Sohn-Rethel, “Para a liquidação crítica do apriorismo” 119.

¹⁷¹ Sohn-Rethel, “Para a liquidação crítica do apriorismo” 119.

¹⁷² Sohn-Rethel, “Para a liquidação crítica do apriorismo” 122. Let us listen to Jappe: “Currency represented the same abstraction in relation to social activity than the concept in relation to thought. The conception itself of an individual subject that remains identical to himself before an external world in transformation [...] becomes widespread along with existence of value. In value, the individual has the experience of a non-empirical substance that remains identical as it goes through diverse manifestations or ‘incarnations’. In money, this real abstraction becomes ‘real’ in daily life. The disruption of ancient communities effected by money meant that, for the first time in history [...], the ‘individual’ arose, which conceives himself apart from the community.” Jappe, *As Aventuras da Mercadoria* 186-187.

¹⁷³ Ortlieb, “Objectividade Inconsciente” 10-11.

¹⁷⁴ Ortlieb, “Objectividade Inconsciente” 11.

¹⁷⁵ Ortlieb, “Objectividade Inconsciente” 11.

¹⁷⁶ Ortlieb, “Objectividade Inconsciente” 12.

¹⁷⁷ Ortlieb, “Objectividade Inconsciente” 13.

¹⁷⁸ Ortlieb, “Objectividade Inconsciente” 12.

¹⁷⁹ Sohn-Rethel, *Intellectual and Manual Labour* 200-201, emphasis added.

¹⁸⁰ Sohn-Rethel, *Intellectual and Manual Labour* 201.

¹⁸¹ Sohn-Rethel, *Intellectual and Manual Labour* 203, emphasis added.

¹⁸² Sohn-Rethel, *Intellectual and Manual Labour* 203.

¹⁸³ Ortlieb, “Objectividade Inconsciente” 14, emphasis added.

¹⁸⁴ Sohn-Rethel, *Intellectual and Manual Labour* 169.

¹⁸⁵ Sohn-Rethel, *Intellectual and Manual Labour* 170, emphasis added.

¹⁸⁶ Cf. Postone, *Time, Labor and Social Domination*.

¹⁸⁷ Cf. Kurz, “A Substância do Capital.”