

CRITICAL REALISM AND THE ONTOLOGICAL CRITIQUE OF ECONOMICS METHODOLOGY*

Álvaro Martins Siqueira –
Master's degree student.
School of Economics, São
Paulo State University.
Rod. Araraquara-Jaú km 1,
14800-901, Araraquara/SP,
Brazil;
e-mail: alvaromsiqueira@
gmail.com



The objective of this paper is to defend the importance of ontological critique of the mainstream economics. To do so, we examine the methodological arguments of Tony Lawson who, inspired by the critical realism philosophy, advocates in favor of realistic, non-deductive and ontology-aware economics to solve problems of contemporary economic theory. This article proposes that, although correct in the logic of its argument, Lawson's critique of the mainstream is not able to explain the social reasons for its existence and reproduction. And if so, Lawson's critique is not ontological. It can be stated that a project of generally reorienting economics methodology is impossible in case the social reason for its orthodox existence is maintained. Some substantial insights can be found in the Marx's ontological critique of capitalism and also in the Critical Realism philosophy. Therefore, we propose an explanation for the enduring deductivism and empirical realism in economics from a Marxist perspective.

Keywords: Critical Realism; Ontological critique; Economics methodology

КРИТИЧЕСКИЙ РЕАЛИЗМ И ОНТОЛОГИЧЕСКАЯ КРИТИКА МЕТОДОЛОГИИ ЭКОНОМИКИ

Альваро Мартинс Секьера –
студент-магистр.
Школа экономики, Госу-
дарственный университет
Сан-Паулу.
Rod. Araraquara-Jaú km 1,
14800-901, Araraquara, Сан-
Паулу, Бразилия;
e-mail: alvaromsiqueira@
gmail.com

Автор отстаивает тезис о необходимости онтологической критики основных тенденций в современной экономике. Автор исследует методологические аргументы Тони Лоусона, который, основываясь на положениях критического реализма, защищает модель реалистической, не-дедуктивной, учитывающей онтологические предпосылки науки экономики. Эта модель призвана помочь в решении актуальных проблем экономической теории. Автор полагает, что критика Лоусона, будучи логически корректной, все же неспособна объяснить социальные предпосылки существования и воспроизводства науки экономики. А следовательно, эта критика не является онтологической. Автор полагает, что проект полной переориентации экономической методологии невозможен до тех пор, пока сохраняются социальные предпосылки для ее классической версии. В этой связи чрезвычайно продуктивными представляются онтологическая критика капитализма К. Марксом, а также философия критического реализма. Таким образом, автор предлагает марксистское обоснование дедуктивизма и эмпирического реализма в экономике.

Ключевые слова: критический реализм, онтологическая критика, экономическая методология

* The author acknowledges CAPES for the financial support.



1. Notes on philosophy of science, economics and ontology

The philosophy of science dating from the early twentieth century undergone a large-scale attempt to prove that legit scientific thought was free from the so-called¹ metaphysical propositions. This same positivist philosophy, however, was based on two dogmas: (i) the belief in some fundamental division between synthetic (grounded in facts) and analytic (grounded in meaning independently of fact) truths and (ii) the reductionist dogma according to which each meaningful statement is equivalent to a logical construct on terms that refer to immediate experience [Quine, 1951]. It's well known that such a positivist conception was unable to purge what was labeled as metaphysics. Even in the hard sciences, the removal of trans-empiric knowledge from scientific theory or non-scientific practices revealed itself to be impossible.

Quine also perceived the logical-philosophic repercussion of abandoning these two positivist dogmas and so to accept that the world can't be explained solely by facts, but must also be subjectively interpreted. In his words, abandoning two dogmas promotes "a blurring of the supposed boundary between speculative metaphysics and the natural science" and also, "a shift towards pragmatism" [Quine, 1951, p. 20]. Quine's conjecture was impressively accurate. A declared anti-positivist, pragmatic and relativistic tendency has prevailed since then, and its expansion culminated in dispelling the solid trust that positivist principles conveyed to most science disciplines. Three important contributions to this trend are those of Kuhn, Lakatos and Popper, being the formers well known for their relativistic understanding of the growth of knowledge. In economics, however, or at least in its mainstream, some positivist claims are still very powerful [Caldwell, 1982].

Throughout Fullbrook [2008] and Lawon [1997; 2003], among other papers, Tony Lawson argues in favor of a realistic, non-deductive, and ontology²-aware economics to solve some serious problems of the discipline. Likewise, he is against the dominant mode of reasoning inside modern economics, which is essentially formalistic modelling. This reasoning is grounded in an empirical realistic or, in this sense, a positivistic conception of reality, *i.e.*, the understanding that reality can be adequately expressed in terms of empirical relations. This philosophical conception is the centre of Lawson's critical realist criticism.

¹ Though they are very different things, all substantive ontological questions were designed as metaphysics by neopositivism [Lukács, 1984].

² By "ontology" Lawson refers to "the study (or a theory) of being or existence, a concern with the nature and structure of the 'stuff' of reality" [2003, p. 12].



The referred procedure is known within critical realism³ as explanatory critique, but we would like to endorse the logical consistency of also identifying it as an ontological critique. As stated by Roy Bhaskar [1975, p. 133], the explanatory critique implies the refutation of a theory or account about a specific object, but it also entails an explanation of the reproduction of the account or theory as something accepted, despite the availability of better alternative theories and accounts. It, then, “allows one to show the account to be both false and necessary”. Such a possibility is only available to the social sciences by virtue of the theoretical-dependent existence of social structures, (...) wherein it may be possible to transform a set of structures through facilitating a change in the manner in which each is understood. Specifically, it lies within the potential of social science both to identify discrepancies between social objects and general beliefs about and expectations of, or relevant to, those objects and also to provide an explanation of such discrepancies, *i.e.* to identify the social causes responsible [Lawson, 1997, p. 277–278].

Transforming social reality through criticizing the fundamental conceptions that underlie social practices, is undoubtedly the basis of Marx’s analysis of capitalism; furthermore, it also underpins all radical theoretical contributions in social sciences. Thus, the claim that the same central elements of the explanatory critique can be found also in the ontological critique defended by the Marxist philosopher György Lukács is not an implausible one. In fact, there are many intersections between Lukács’ and the Critical Realism positions, as argued by Duayer & Medeiros [2005]. The compatibility of the ontological and explanatory critique can be observed by comparing the already presented notion of explanatory criticism with the synthesis made by Medeiros [2013], in which ontological criticism refers, in fact, to a triple critical procedure:

- (1) the demonstration of the falsity of the criticized beliefs or theories;
- (2) the simultaneous presentation of an alternative and more comprehensive explanation of the causality of phenomena previously signified through the beliefs or theories in question;
- (3) an indication of the real causes that lead to the production and support of misconceptions, misrepresentations and or illusions, as well as the social conditions that provide the criticism itself [Medeiros, 2013, p. 35–36].

Here we would like to emphasize the possibility, which is crucial in our view, to “provide an explanation of such discrepancies, *i. e.*, to identify the social causes responsible” or the “indication of the real causes that lead

³ Critical realism is a movement in philosophy and the human sciences that intends to offer a real alternative against both positivism and post modernism. It is “closely associated with – in the sense of identified with or emanating from – though by no means restricted to – the work of Roy Bhaskar” [Archer *et al*, 1998, p. ix].



to the production and support of misconceptions, misrepresentations and or illusions”. If Lawson provides in fact ontological critique of the methods used in the mainstream of economics, then his argument must also contain the description of the reason for the reproduction of these inappropriate, misused or wrong methods. That is to say, his criticism needs to show the real elements that require such empirical ontology in economics.

2. Lawson’s critique of deductivism in economics

It is in *Economics and Reality* (1997) that Lawson’s critical view gets more straightforward while drawing insights from the Bhaskar’s Critical Realism writings; for that reason, this book is the starting point of this analysis. The main argument can be transcribed into two propositions: (1) the problems and failures of modern economic science result from the widespread and uncritical acceptance of a wrong conception of science; and (2) these problems and failures can be solved by replacing this conception with a more appropriate one, an explicitly realistic orientation [Lawson, 1997, p. 15].

These problems and failures relate directly to what can be called theory-practice inconsistencies in economics. They refer to those situations in which economic theory claims to do one thing, but in practice does (and most of the time must do) something different. The most problematic examples and accounts listed by Lawson are, at the level of method, the act of contradicting the classical theory of inference in econometrics when economists “run” countless regressions until the estimates are acceptable, in addition to stipulating *ad hoc* revisions of coefficients after unsuccessful forecasts. As to inconsistency at the level of social theory, Lawson demonstrates how the theory, especially the orthodox, intends to explain or incorporate categories (such as choice, social relations, uncertainty, change, among others) that are incompatible with their most central assumptions. And there is also the paradoxical orthodoxy accusation of the uselessness, inefficiency of the methodological debate itself – despite their engagement in this debate [Lawson, 1997, p. 5–13].

Such inconsistencies, conformed within mainstream, can be attributed to the dominant set of methods or ways of proceeding called deductivism⁴, which is, as Lawson says, simultaneously “fundamental to the mainstream” and “irrelevant to the analysis of social phenomena” [Lawson, 1997, p. 16]. The deductive mode of explanation can be assigned to any theory or theoretical tradition that is driven by the conception of laws as events

⁴ By deductivism Lawson means “the collection of theories (of science, explanation, scientific progress, and so forth) that is erected upon the event regularity conception” and upon the understanding that causal laws are to be “assessed (confirmed, corroborated, falsified, tested)” by the actual instance of affairs [Lawson, 1997, p. 17].



regularities. This method has its classical formulation in the covering-law models and expresses empirical regularities of the type “whenever event *x* occurs, then the event *y* occurs”.

However, the regularities assumed by this type of conception do not usually happen spontaneously. Except for astronomy, sciences must artificially set the conditions in which these regularities take place, *i.e.*, they must assume that reality is such that it can be characterized “by an ubiquity of closed systems” [Lawson, 1997, p. 19]. The ontology required in this case is that of empirical realism, according to which the world (or at least what is relevant in it) is properly expressed in empirical events and their correlation. In other words, the pursue of those regularities implies that economics must adopt ontological conception of empirical realism.

And such regularities require, in turn, both extrinsic and intrinsic closing conditions. The extrinsic closure condition is satisfied by the absence or isolation (by assumption) of external influences on the model, *i. e.*, for such regularity to be apprehended, it is necessary to neutralize the effect of other external conditions on “*y*”. This clarifies, according to Lawson [1997, p. 77–78], the orthodox persistency with the hypotheses of “closed” economies and isolated individuals.

But even the extrinsic closure condition is not sufficient by itself to ensure that “whenever *x*, then *y*”, since each individual in the analysis can behave differently within the same extrinsic conditions – and it is clear if possible to recognize their faculty of making choices which are not always predicted by the economic rational choice theory [Lawson, 1997, p. 78–79]. So as to “solve” this, the intrinsic closing condition predicts the absence or constancy of the internal structures in the model, which guarantees a stable and predictable response from the initial conditions given – a normalized output resulting from the theory’s chosen key factors. The rationality hypothesis of the agents, for example, ensures that the response of individuals to any economic input is passive and regular.

Being those the conditions, so that a discipline, namely economics, can obtain meaningful results in terms of constant conjunctions of events, it follows that the results of scientific activity cannot be universally meaningful. On the contrary, in order to maintain the regularity discovered they cannot abandon the applied closure conditions. For this reason, the results of economic science achieved through closed systems are not expressed in the form “whenever event *x*, then event *y*”, but in the form “whenever event *x*, then event *y* always follows, as long as conditions *e* hold” [Lawson, 1997, p. 27–28].

Summing up, the deductive archetype of scientific activity presupposes the conditions that are incompatible with its own (social) object of study. And according to Lawson [2003], the ability of people to act through choices or alternatives implies the need of a structured, and not atomized



conception of reality. Moreover, if in order to know the structures underlying the phenomena, science must employ a non-deductive mode of reasoning, we can conclude, with Lawson, that the empirical-realist project, “in its economic disguise is, as a general approach, seen to be misguided” [1997, p. 32].

Now even if the presented argument is correct and strong enough to disturb part of confidence in the mainstream, as it appears to be, we should disagree with the assumption that an uncritical acceptance of deductivism explains accurately both diffusion and reproduction of this apparently mistaken perspective. In other words, we agree that the logical problems and failures derived from a misconception of science could be solved by adopting an explicitly critical-realistic perspective, as in the proposition(2) above, but it does not seem possible to say that “it is easy enough to see that the problems reviewed in Chapter 1 [the theory-practice inconsistencies] *all turn upon an uncritical acceptance* of certain results of positivism” [Lawson, 1997, p. 36].

In our view, this last statement has an important place in Lawson’s argument against mainstream, for it involves an indication of the causes behind dominance of the wrong methodological conceptions in economics. Thus, a closer look at this point is taken in the next section with the purpose of showing some problems within Lawson’s explanation concerning the maintenance methods back grounded by empirical ontology.

3. Flaws in the account of mainstream methods or the incomplete ontological critique

We shall begin this section by remembering that constancy of events desired by economic orthodoxy rarely occurs in the social world. To obtain it, then, economists, academic or not, need to adopt research and analysis procedures that cannot extend economics knowledge about the being of economic relations to any degree. Under these methodological conditions, the social explanation that appropriately apprehends its object of study is impossible – what does not immediately mean that this explanation itself is impossible. The highlighting of the deductivism’s limits is important because it indicates that a scientific explanation, in order to be adequate to its social object, must be essentially distinct from its covering-law design [Lawson, 1997, p. 36].

The inconsistencies pointed out by Lawson show that the practices the official discourse would name coherent and simultaneously significant to economic relations are not only unlikely, but logically unachievable while social science is dependent on *ceteris paribus* conditions for simulating closing systems. Since the official procedures demanded by economics



orthodoxy do not really reveal social structures, the economists who wish to explain effectively something of the social world have no other alternative than embracing the intuition of the extra-official practices. In Lawson's words, "they more or less have to if they are to hold any hope of illuminating social phenomena, of producing relevant economic research" [Lawson, 1997, p. 37].

Considering all previous arguments claiming that there is no guarantee of substantial understanding of the social world through the official stance (and neither by the "extra-official" or intuitive ones, whose limit is the eventual, contingent, unexpected or unjustified success), what can explain the enormous engagement in this mode of reasoning? The explanation of the real cause of beliefs with purpose of transforming their very source is the distinctive possibility recognized by an explanatory or ontological critique. Lawson, however, argues that there are numerous reasons which explain the official stance:

In some cases it will be sheer *opportunism*. Given the significant pressure within the academy to conform, to go with the mainstream, some economists may well feel obliged to submit to rhetoric, if not actual techniques and practices, rooted in the dominant post-Humean paradigm. Some of it will be simply *self-misrepresentation* [Lawson, 1997, p. 37].

It is quite alarming that a crucial aspect of the analysis is related to the lack of character and reasoning skills of economists, being those ultimately individual aspects. Lawson's position here is endorsed by what he says about the untouchability of the misguided official methods which, under the light of the tendencies and counter-tendencies at stake in the social world, could hardly provide the basis for the formulation of practices appropriate for this world. The explanation for their untouchability, he says,

Is simply an unwillingness even to question certain fundamental methods regarded as proper, an orientation turning on the continuing neglect of ontological enquiry. Such is the prestige of deductivist methods for some, a prestige founded upon an erroneous perception of the generality of their successes in the natural realm, that the record of failure so far in the social realm does little to dent this endeavor to preserve with them, or to appear to do so, or at least to acknowledge the correctness of doing so [Lawson, 1997, p. 37].

What is defended here is not that things such as opportunism, misinterpretation, or a sincere uneasiness in face of something like methodological self-criticism, are necessarily false. From a critical-realistic perspective, however, these aspects are not sufficient or adequate to explain a posture that reveals itself as a major trend within the discipline. Actually, through this rhetorical explanation Lawson gives way to other types of science conceptions such as Kuhn's [1970 (1962)], for example.



The latter's conception of scientific community is one that entails that there are no rational analysis tools to compare competing paradigms, since each paradigm is based on its own world conceptions.

As new paradigms usually emerge with few scientific results, it is not possible to analyze other ones based on new paradigms conceptions, only retrospectively, after the paradigms showed to be more successful in the puzzle-solving activity of normal science. Thus, when old paradigms are not able to sustain their empirical explanation power and the Kuhnian scientific community has to choose a substitute paradigm, this crucial decision cannot be made on rational grounds or criteria. It turns out that paradigms, especially the new ones (*e. g.* Critical Realism in economics), are incommensurable and there is no way to satisfactorily test the new paradigm candidates for their problem-solving ability: for the scientific community, the ultimate criterion of choice would be faith. On this, Kuhn states that.

The man who embraces a new paradigm at an early stage must often do so in defiance of the evidence provided by problem-solving. He must, that is, have faith that the new paradigm will succeed with the many large problems that confront it, knowing only that the older paradigm has failed with a few. A decision of that kind can only be made on faith [Kuhn, 1970, p. 158].

Once one does not explain the real causes or conditions for the occurrence of the criticized perspectives, there would be room for relativistic accounts of these perspectives, as the Kuhn's one. According to his scheme it can be inferred that the selection of a dominant paradigm has its conclusive instance in the belief of the subjects about the paradigm. Although logically conceivable, this kind of account is certainly not compatible with the conception of science advocated by Lawson, critical realism, or Marxism⁵. It is important then to avoid drawing from arguments involving "prestige", "pressure within academy", or "opportunism", as it will be indicated forward.

⁵ It should be noted that to support any philosophically realistic conception one must assume that objects have properties and causal structures that are determined by the very nature of that object, and not by the belief that subjects have in those properties. A very familiar case to political economy concerns the Marxist and marginalist theories of value. If in Marx's theory of value it exists as something intrinsic to the object, in marginalist theory value only exists through its recognition. A realistic scientific conception thus understands that the objects of immediate study exist independently and prior to their investigation. That is why an adequate interpretation for objects cannot depend ultimately on beliefs about them, but on the objects themselves. Consequently, a methodologic-philosophical scheme such as Kuhn's, in which the validity of paradigms depends more on apprehension (beliefs, faith) than on the objects themselves, presents an irremediable restraint to realistic scientific positions – even though this relativistic philosophy is paradoxically popular within subgroups of economic heterodoxy that defend realism for their discipline.



Lawson, of course, is not defending anything similar to relativistic philosophy of science. We believe Lawson does not accomplish a complete ontological critique of the mainstream ontology, but he demonstrates problems within that ontology and presents a better one. A very interesting formulation about the reproduction or resistance of the wrong methods in economics is sufficient to observe that, if the problem is not fully answered, it is entirely addressed. Lawson suggests that the points of tension found within the mainstream social theory are required by the empirical ontology itself in which the positivist method of inference is sustained.

For, just as any theory of knowledge presupposes an ontology (which, in the case of positivism, consists in atomistic events given in experience) so it also presupposes a social theory, i.e. some account of human agency and institutions. Specifically, these must be of a form to enable knowledge of the specified type to be achieved. Positivism, then, supports a conception of human agents as passive sensors of atomistic events and recorders of their constant conjunctions [Lawson, 1997, p. 39].

Lawson then endorses that despite claiming to completely reject ontological (so-called metaphysical) conceptions of reality, positivism itself had a concealed ontological conception [Medeiros, 2013, p. 5]. Also, he advocates the rejection of the usual positivist dichotomy between facts and values the same way as Bhaskar [1998]. Nevertheless, it seems that the criticism could take advantage of a further narrowing of the relation between scientifically dominant conceptions and ontology. More precisely, Lawson's main arguments apparently still suppose that very fundamental scientific tensions can be resolved from within economic discipline, what would imply an unlikely autonomy between economic science and concrete social tendencies.

Thus, despite Lawson's strong argument about the implicit and problematic ontological conceptions that lead to logical problems in theory, the discussion seems unable to advance further in the explanation of these false but socially necessary ideas and conceptions. This obstruction is more evident when the casualty (and not causality) of the criticized process needs to be stressed, as can be seen in a subsequent passage.

And just as the positivist conception of science is uncritically accepted in much of contemporary economics so is the associated specification of human agent as the passive receptor of atomistic events goes relatively unchallenged [Lawson, 1997, p. 39].

The emphasis of this section is, once again, that despite the important and necessary challenge that Lawson's critical realistic project for economics presents to mainstream hegemony, an imperative step for consciously reorienting practices and ideas – even scientific ones – is indicating the social structures in need of them. To do so is to recognize



that science is, after all, never made in an ontological vacuum, but always cultural, social, and linguistically mediated. It seems therefore impossible to imagine an axiological neutrality in it. The important question that arises from this claim is: ‘how would it be possible, then, to explain those anti-realistic positions?’ [Duayer; Medeiros; Paineira, 2001, p. 27]. In the next and final section, we expect to contribute to Lawson’s important critical arguments, but from a Marxist perspective.

4. For an ontological critique of some enduring tendencies of positivism in Economics

Before attempting to provide an explanation for the enduring positivism and empirical realism and their correlated conceptions in economics, it seems appropriate to suggest that Lawson’s incomplete account on them may be related to an overestimation of some results of the critical realism’s *transformational model of social activity*. By doing so we expect to illustrate our more “pessimistic” approach on the feasibility of ontological turn from within economics discipline in a better way.

The original formulation of the transformational model can be found in Bhaskar [1998], but direct contribution and commentaries can be found in Archer et. al [1998] and Collier [1994]. Applications of the model can be found in Lawson [2003], specifically in his Chapter Five. For our aim, as cited above, it is enough to mention the transformational model of social activity as a theoretical recognition of social structures as both dependent upon, and condition to, human activity and ideas. Bhaskar [1998] presents the model as an alternative to other three models of social activity, showing how the adoption of these three ones results in more or less voluntarist or determinist conceptions.

One of the conclusions of the transformational model can be synthesized as it follows: the existence of social structures, different from that of natural structures, depends upon practices that reproduce them (e. g. banking systems are only imaginable in societies that use their services); and human agency, in turn, requires conceptions and general ideas that make them feasible (e.g. banking activities such as using credit cards require a reasonable knowledge about a pre-existing banking structure and credit conditions). In this sense, it can be said that the existence of social structures, unlike that of natural ones, depends on previous ideas that allow their reproduction. In short, structures of the social realm are not only relatively enduring, but also theoretically-dependent.

This notion of theoretically-dependent social structures, demonstrated by Bhaskar [1998] is fundamental to many critical realism and theoretically radical claims. Even if not explicitly and in different terminology,



the recognition of this aspect of social structures is what makes radical theoretical contributions reasonable. Still, from this Lawson seems to draw, in most of his recent works, a strong confidence in his broad (and correct, we would add) criticism, as if the desired ontological turn (especially inside economics) could rely mostly on internalistic reasoning – for in his explanation the deductivism problem appears to be grounded mostly in an acritical acceptance of positivism.

Instead of considering the deductivism phenomena in economics as a misunderstanding or an acritical result, our argument is that it currently answers a necessary tendency inside the capitalist society. More precisely, the objective here is to stress that the continuing commitment to such unfitting conceptions is required by a set of dominant social structures from which science is never autonomous. Marx already demonstrated in *The Capital* and *The German Ideology* that the real grounds for the criticized conceptions are the practical needs of a specific social class [Monfardini, 2016, p. 141]. This section is, thus, an attempt to contribute to Lawson's and other critical stances against economic methodology by underlining that, even regarding very abstract issues as methodological procedures, real change in social realm cannot arise solely from change in the dominant ideas or conceptions⁶. As Marx reminds us, “ideas cannot carry anything out at all. In order to carry out ideas men are needed who dispose of a certain practical force” [Marx, 1956, p. 160].

The explanation of the commitment to positivism in economics can be elaborated from the Lukács' enquiry about neopositivism. In short, it will be argued that positivistic fundamental developments produce a state of affairs in science that allows economics discipline to embrace the realization of a social mission that is the output of the complex of social practices. The non-linear developments of social needs or the active responses of science do not interfere in the importance of the current social mission, and the latter, as reminds Lukács [1984, p. 350], is the prevailing moment.

⁶ It is clear that Lawson is not defending such claim, but there is enough textual evidence to support that the ontological turn in economics would require only the acceptance of the failures of positivism and the persuasion to embrace a different methodology: “[...] But once the blinkers of positivism are thrown off it must become easier to adapt the policy process to exploring the real possibilities for human betterment. In short, if the cost of accepting the framework here elaborated is an abandonment of much of the output of the contemporary discipline of economics, the gain includes not only the possibility of an emergent science of economics, but a firmer basis, a more appropriate and coherent framework than hitherto possessed, for exploring how to make the world a more secure, facilitating and empowering place, more at one with our liabilities and potentialities as needy, creative and purposive social human beings” [Lawson, 1997, p. 281].



One of the most powerful and controversial⁷ arguments in Lawson's critique is his objection to formalism (in the form of 'whenever x , then y '), the extensive and unnecessary use of formal models in economic science, which can be (and usually is) traced back to the early positivists. An unequivocal trait of this tradition is the rejection of ontology by principle or the conviction of its irrelevance. As Lukács indicates [1984, p. 345], the increasing mathematization of physics is, by itself, a huge progress in scientific methodology, but the problem arises when scientists must theoretically face the results of the mathematical reflection of reality.

Following Hartmann, quoted by Lukács [1984, p. 346], and also Marx [2013, p. 113], all quantitative determination is an amount of "something", with its own properties and logic. The substrate of quantity is always a premise of the mathematical determination. This qualitative side involves properties as density, pressure, labor, length, extension etc. In any mathematical reflection, these properties must be suspended the same way the use-value of the commodities' body must be abstracted in order to express abstract human labor. Obviously, this fact derived from the dual side of quantitative determination cannot be overlooked by any "intelligent physicist" [Lukács, 1984, p. 346], and Lukács points out two potential stances in the face of it.

One can assume an attitude of producing a critical reflection of reality, verifying, in each case, when the mathematical expression can be correctly applied and to which concrete object the expression is directed. The other attitude, on the other side, takes the mathematical reflection as the best approach possible, the ideal semantic expression of all scientifically interesting phenomena. Questionings that are not within those limits, that are directed to reality itself – notably the ontological enquiry meant by Lawson – are seen as pseudo-problems. Science in this conception then, behave disinterestedly in relation to those problems, but intends to manipulate the semantically correct expression of the manifest phenomena [Lukács, 1984, p. 347]. One of the consequences of this latter attitude is, in Lukács' words, the negation by principle that from the totality of sciences, from its inter-relations, from the reciprocal interchange of their results and from generalization of scientific methods or achievements may emerge an appropriate reflection of the reality itself, a world view [Lukács, 1984, p. 349].

Together with positivism, the neopositivism⁸ also renounces a world view, but now strictly negating the relationship of the sciences with reality itself. Moreover, the contemporary condition of science is no more that of

⁷ Two objections to Lawson's position here can be found in Hodgson [2006] and Edwards et al [2014]. Hodgson explicitly argues for some formalism in economics, while still agreeing with Lawson that economic science is not in a healthy state. Edwards et al debate Lawson's conception of "demi-regs", indicating an open debate inside critical realism about the importance of formalism.

⁸ With this term Lukács denotes the late theoretical figures of the positivism tradition [Duayer; Medeiros, 2005].



absolute submission to ecclesiastic power. Then, considering the problem in its abstract form, the decision of ontologically orienting knowledge achievements or neglecting its scientificity is under the very developments of philosophy and science.

This autonomy, however, exists only immediately. In reality, science is never completely autonomous in a way that its methodology or contents can always be determined by an automatic development. Indeed, it is not possible to detach general scientific positing of goals and their respective resolution from each specific dominant social needs or, as Lukács says, a respective social mission. The neglect of ontological enquiry served only to support the pragmatic tendency predicted by Quine – since the in itself was declared theoretically unachievable, the theory of knowledge became autonomous in the sense that statements needed to be classified as right or wrong independently of their consistency with the object.

The importance of the neopositivist claim of the unity of science should be recognized. Nevertheless, the proposed unity is one that takes the understanding of thing in itself as a starting point for the sophisticated quantitative reflections, not as an objective. On the contrary, it seems that the pragmatic tendency together with the resignation of a shared general world view emerging from the interchange of the different scientific disciplines makes the actual but unnecessary fragmentation of science easily conceivable. And as the contemporary science is no more a passive object of the social developments – but plays an active role in the improvement and establishing of the generalized management of those social developments – probably economics discipline is a very important case study. Although in full agreement with Lukács' [1984, p. 344] warning, that “it would be false to restrain this active role to sociology and economics”, their decisive performance is an unavoidable fact – just one example is the prevalence of economic criteria over decisions made in the face of the current environmental crisis, shown by many specialists to be a clear menace to all forms of life.

With this brief presentation of some arguments contained in Lukács's ontological critique of neopositivism, we hope to provide a basis for the development of an ontological critique of mainstream methods. It seems reasonable to argue that a commitment or acceptance of some positivistic notions are in consonance with a scientific knowledge simultaneously able both to apply the homogenizing mathematical reflection (again, an important methodological development in itself) and to pursue the positing of goals of a dominant social mission. Limited as it is, our contribution serves the purpose of defending that radical – not only Marxist – accounts of the economic mainstream can take advantage of the indication of real, intrinsic causes that lead to or facilitate the occurrence of social phenomena.



Список литературы / References

- Archer; Bhaskar; Collier; Lawson; Norrie, 1998 – Archer, M.; Bhaskar, R.; Collier, A.; Lawson, T.; Norrie, A. *Critical Realism. Essential Readings*. London: Routledge, 1998. 745 pp.
- Bhaskar, 1998 – Bhaskar, R. “Societies”, in: *The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences*. New York: Routledge, 1998, pp. 27–87.
- Bhaskar, 2008 – Bhaskar, R. *A Realist Theory of Science. With a new Introduction*. New York: Routledge, 2008. 277 pp.
- Caldwell, 1982 – Caldwell, B. *Beyond Positivism. Economic Methodology in the Twentieth Century*. London: George Allen & Unwin, 1982. 279 pp.
- Collier, 1994 – Collier, A. *Critical Realism. An Introduction to Roy Bhaskar’s Philosophy*. London: Verso, 1994. 276 pp.
- Duayer; Medeiros, 2005 – Duayer, M.; Medeiros, J. “Lukács’ Critical Ontology and Critical Realism”, *Journal of Critical Realism*, 2005, vol. 4, no. 2, pp. 395–425.
- Edwards; O’Mahoney; Vincent, 2014 – Edwards, P., O’Mahoney, J., Vincent, S. (eds.). *Studying Organizations Using Critical Realism: A Practical Guide*. Oxford: University Press, 2014. 376 pp.
- Fullbrook, 2008 – Fullbrook, E. (ed.). *Ontology and Economics. Tony Lawson and His Critics*. London: Routledge, 2008. 359 pp.
- Hodgson, 2006 – Hodgson, G. “The Problem of Formalism in Economics”, in: *Economics in the Shadows of Darwin and Marx. Essays on Institutional and Evolutionary Themes*. Cheltenham: Edward Elgar, 2006, pp. 116–136.
- Kuhn, 1970 – Kuhn, T. *The Structure of Scientific Revolutions*. Chicago: University Press, 1970. 210 pp.
- Lawson, 1997 – Lawson, T. *Economics and Reality*. New York: Routledge, 1997. 364 pp.
- Lawson, 2003 – Lawson, T. *Reorienting Economics*. New York: Routledge, 2003. 384 pp.
- Lukács, 1984 – Lukács, G. *Zur Ontologie des gesellschaftlichen Seins. Erster Halbband*. Darmstadt: Luchterhand, 1984. 690 pp.
- Lukács, 2012 – Lukács, G. *Para uma Ontologia do Ser Social. Vol. 1*. São Paulo: Boitempo, 2012, 326 pp.
- Marx, 2013 – Marx, K. *O Capital. Crítica da Economia Política. Livro. I*. São Paulo: Boitempo, 2013, 844 pp.
- Marx; Engels, 1956 – Marx K., Engels F. *The Holy Family or Critique of Critical Critique*. Moscow: Foreign Languages Publ. House, 1956. 299 pp.
- Medeiros, 2013 – Medeiros, J. *A Economia Diante do Horror Econômico. Uma Crítica Ontológica dos Surtos de Altruísmo da Ciência Econômica*. Niterói: Fluminense Federal University, 2013. 240 pp.
- Monfardini, 2016 – Monfardini, R. “O Capital e a Crítica Ontológica”, *Revista da Sociedade Brasileira de Economia Política*, 2016, no. 43, pp. 136–159.
- Quine, 1951 – Quine, W. “Main Trends in Recent Philosophy. Two Dogmas of Empiricism”, *The Philosophical Review*, 1951, vol. 60, no. 1, pp. 20–43.