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WHY IS THIS 'SCHOOL' CALLED NEOCLASSICAL ECONOMICS? CLASSICISM AND NEOCLASSICISM IN HISTORICAL CONTEXT

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Why is this 'school' called neoclassical economics? Classicism and neoclassicism in historical context

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Abstract:

This article addresses the origins of the term "neoclassical" economics, and the subsequent use of the term. It is argued that the present use of the term "neoclassical" economics is different from its original meaning when it was first introduced by Thorstein Veblen, who used it to denote a methodological inconsistency between vision and method, as Tony Lawson argues. I also argue here that the original meaning of the term, and its present use, are both contradictory with the original meaning of "classical political economy". In fact, if we follow the original meaning of the term "classical political economy", as a surplus approach concerned with the reproduction and distribution of the economic surplus, we find that many of those who are critical of "neoclassical economics" are actually in line with the classical perspective, to the extent that they also develop a surplus approach.

Keywords: Classical, Neoclassical, closed system, surplus, marginalism

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Introduction

Tony Lawson (2013) recently provided a stimulating and provocative account of neoclassical economics. According to Lawson (2013), neoclassical economics is characterised by a methodological inconsistency. Drawing upon Thorstein Veblen's (1900) usage of the term "neo-classical", Lawson (2013: 981) argues that neoclassical economists adopt "a taxonomic orientation in the form of deductivism at the level of method" which is inconsistent with the "historical processual ontology of unfolding causal sequence at the level of events". That is, neoclassical economists are a group of economists who employ deductivist methods which presuppose closed systems (that is, systems in which regularities of the form "if event X then event Y" are ubiquitous) while simultaneously acknowledging that the social realm is a dynamic and evolving open system.

Lawson (1997, 2003a) characterises mainstream economics as an uncritical commitment to the use of mathematico-deductivist methods, which presuppose closed systems, and are therefore inappropriate for the analysis of open systems such as the social realm. Many authors have criticised Lawson for failing to note that many mainstream economics acknowledge that the social realm is an open system – see Fleetwood (1999), Lewis (2004), Graça Moura and Martins (2008) and Fullbrook (2009) for some of those critiques, and for some responses to those critiques. We can now see that the social realm is an open system, are simply what Lawson (2013) calls neoclassical economists. Thus Lawson (2013: 975) notes that "the group under focus here is not the set of mathematical deductivist modellers *per se*, but that subset of the latter who at some level simultaneously accept a historical or causal-processual ontology."

Lawson's conclusion is that the term "neoclassical economics" ultimately denotes a methodological inconsistency. I will argue that this happens primarily because "neoclassical economics" suggests a false idea of continuity with classical political economy, a continuity which, in truth, does not exist. In fact, the conception of "classical economics" that Veblen adopts does not characterise adequately the classical project. Classical political economy was, in fact, when properly understood, an approach which shared many commonalities with Veblen's own approach. As I shall argue, there is nothing in Veblen's approach that makes it incompatible with classical political economy, as defined by Karl Marx. Quite the contrary, classical political economy is an approach centred on the production and distribution of the surplus which is continued by Marx and Veblen, who pointed out how a given social class appropriates part of the surplus produced by another class. The surplus approach stands in stark contrast to the scarcity approach that was developed after the marginal revolution, which focuses on scarcity rather than on the surplus. I will argue that the term neoclassical, if used to denote any tradition at all, should be used to denote a tradition that somehow continues the classical surplus approach. And if the continuous use of the term "neoclassical" to denote the project usually associated with it throughout the twentieth century makes the proposed usage problematic, then the term should be dropped in order to avoid confusion, as Lawson (2013) suggests.

Neoclassical economics and closed systems

When employing the term "neo-classical" economics, Veblen (1900) intends to identify a tension between what he calls the "teleological" premises and "taxonomic" method of "classical economics" on the one hand, and the new developments brought by authors who draw upon classical economics in order to study evolutionary processes on the other hand.

The classical method, according to Veblen, consists in finding uniformities, which assume the form of a "natural law", while presupposing a teleological conception according to which the economy tends to a normal position. According to the classical method so defined, economic science consists in a taxonomic exercise, that is, in the identification of natural laws, which characterise the normal position, in order to then inspect whether existing reality fits or not into those natural laws, or normal position of the economy.

Veblen advances instead an evolutionary approach, where social reality is seen as a process of change, which cannot be aptly characterised in terms of natural laws. However, Veblen (1900) also notes that some authors who adopt the classical method seem to presuppose an evolutionary, rather than a teleological, conception of reality. As Lawson (2013: 967) explains, Veblen (1900: 261-262) identifies the work of Alfred Marshall as the "best work" which engages in the study of evolutionary processes drawing upon the classical approach, and sees the contribution of John Neville Keynes as the "maturest exposition" of the methodology which underpins the perspective adopted by Marshall.

For Veblen (1900), "neo-classical" economists adopt a method (the classical method) which is inconsistent with the processual nature of reality which they seem to accept. Drawing upon Veblen's original usage of the term "neo-classical", Lawson (2013) argues that the term can be best used to characterise economists who adopt a "classical" taxonomic approach, of finding natural laws from which specific events can be deduced while nevertheless possessing a "new" vision of reality according to which "social reality is a historical process of cumulative causation" (Lawson 2013: 971).

Hence, the prefix "neo" denotes a new vision of reality, informed by an evolutionary perspective, while the term "classical" refers to the influence that the old taxonomic approach still has on economists like Marshall and Keynes. Marshall, like Veblen, was influenced by the evolutionary perspective of Herbert Spencer and Charles Darwin, which brought the "new" elements that Marshall included in his "neo-classical" approach, leading to a tension between a "new" evolutionary perspective, and a "classical" taxonomic approach.

As Lawson (2013: 971) also notes, Veblen (1909: 620-622) sees the marginalist approach of authors like John Bates Clark as "a branch or derivative of the English classical economists of the nineteenth century", with the difference being that the marginalists adhere more consistently to the postulates of the classical method. That is, the marginalists adopt more consistently a taxonomic approach while presupposing a teleological conception of reality. Marshall's approach is "neo-classical" in the sense that it moves beyond other marginalist authors who did not go beyond the classical teleological conception.

There is, however, an important methodological difference that emerges with the marginal revolution, namely the adoption of differential calculus. Differential calculus had already been applied within economics in the first half of the nineteenth century by authors like Johann Heinrich Von Thünen and Augustin Cournot. In his *Principles of Economics*, Marshall (1890) refers to Cournot's principle of continuity and Von Thünen's principle of substitution as key elements of his approach. At the end of the preface of the first edition of his *Principles*, Marshall notes that under the guidance of Cournot (and also Von Thünen, to a lesser extent), he learned to focus not so much on aggregate quantities, as the classical authors did (and his student John Maynard Keynes

would also do) but rather on increments of quantities, and on the stable equilibrium between marginal increments of demand and of the cost of production.

In his *Industry and Trade*, Marshall notes that the method of focusing on marginal increments, which Cournot and Von Thünen used, is an application of Newton's and Leibniz's differential calculus. Newton and Leibniz studied cases of infinitesimal changes, and reached the conclusion that we can focus on the direct effect of an increment, while neglecting the indirect effects which occur due to the impact of a given increment on another increment. Marshall argued that we can thus focus on the direct effect of a change in "X" on "Y", while neglecting the indirect effect, such as the effect of "X" on another variable "Z" which in turn has an influence on "Y".

Since the increments Newton and Leibniz were considering were infinitesimally small, the impact of an infinitesimally small increment (of "X" on "Z") on another infinitesimally small increment (of "Z" on "Y") was, as Marshall says, a second order of smalls, and thus a very small thing of a very small thing, which can be neglected. Following the method of Newton and Leibniz, Marshall argued that if the period of time is small enough so that the changes are small, we can focus on the direct effect of "X" on "Y" while assuming everything else (the indirect effects which take place through other variables "Z") to remain constant, for a time, in a pound called *ceteris paribus* – see Martins (2013: Chapter 1) for a discussion.

As Marshall explains, his method of focusing on direct effects while assuming that everything else remains constant presupposes that we can focus on constant conjunctions of the form "if X then Y", while neglecting other conditions "Z". Lawson (1997) designates systems in which constant conjunctions of this kind are ubiquitous as closed systems. Lawson (1997) further explains that mainstream economics can be best understood as a commitment to mathematical-deductivist methods which presuppose closed systems, that is, presuppose constant conjunctions of the form "if X then Y".

Differential calculus, which leads us to focus on the effect of a given marginal change "X" on another variable "Y" became widespread in mainstream economics, in fields such as microeconomics (where it is used in utility maximization, profit maximization and cost minimization), econometrics (where it is used in estimation techniques such as the least squares method, the method of maximum likelihood, and the generalized method of moments), and macroeconomics (where optimisation techniques are often used, not least when searching for microeconomic microfoundations based on utility maximization). Other mathematical tools developed

within mainstream economics, such as fixed point theorems (widely used in game theory and general equilibrium theory) presuppose closed systems too – see Lawson (2003a: Ch. 10) or Martins (2013: Ch. 5) for a discussion.

Drawing upon Veblen's (1900) original definition of neoclassical economics, Lawson (2013) suggests that neoclassical economics can be best characterised as an inconsistency between a taxonomic approach which includes the use of mathematicodeductivist methods which presuppose closed systems on the one hand, and a processual conception of reality that presupposes open systems on the other hand. The recognition that the world is an open system follows from Marshall's endorsement of an evolutionary perspective. The emphasis on closed systems, in turn, follows from Marshall's method of focusing on the direct effects of "X" on "Y", which allowed Marshall to focus on the partial (or particular) equilibrium of a given market, while neglecting other effects, which were assumed to be infinitesimally small, for a certain amount of time at least. In particular, Marshall was able to define supply and demand curves which are assumed to be independent of one another, as long as everything else remains constant, for a time, in a pound called *ceteris paribus*.

Classical political economy and vulgar economy

Piero Sraffa (1925, 1926) showed the inconsistencies of Marshall's partial equilibrium analysis. In economics we are typically not concerned with infinitesimal increments. Thus, the marginalist method of focusing on marginal changes of a given factor while assuming everything else constant is misguided. In particular, Sraffa showed that it is not reasonable to assume that supply and demand curves are independent, although his critique can be applied to marginal analysis in general – see Martins (2013) for a discussion with reference to Sraffa's unpublished manuscripts.

Sraffa (1960) defines "classical political economy" according to Marx's original definition, which is very different from the definition of classical political economy adopted afterwards by Marshall, Veblen and Keynes. Marx (and Sraffa) used the term "classical political economy" in order to designate the approach of authors like William Petty, Richard Cantillon, François Quesnay, Adam Smith and David Ricardo, an approach which runs from the late seventeenth century to the early nineteenth century. Marx distinguishes this group of "classical" economists from the group he called "vulgar" economists, which includes such economists as Thomas Robert Malthus, John Stuart Mill, William Nassau Senior, John Elliot Cairnes, and most of the nineteenth

century economists often designated as "Ricardian" economists (who, according to Marx, were not really following Ricardo's classical approach, but rather "vulgarising" it).

Marx argues that the "classical" economists were concerned with the underlying causes of value, which are found in the objective process of production. The classical authors focused on objective entities when measuring cost, such as labour time, or the quantity of land which is necessary to sustain a labourer who engages in a certain quantity of working time. The "vulgar" economists from Malthus to Cairnes, in contrast, can be identified as those who, instead of looking at the underlying causes of value, focused on superficial phenomena, like supply and demand, and adopted a subjective conception of cost, which makes it difficult to compare costs that cannot be objectively measured.

The emphasis on subjective aspects is connected to the use of supply and demand as the ultimate determinants of value. In order to achieve a conception where supply and demand are ultimate and independent forces, the vulgar economists conceptualised supply and demand as forces driven by subjective desires, which are exogenously given. For the classical authors, in contrast, effective demand was not an independent or exogenous force, since it was defined with reference to the natural price, which in turn depends upon the objective conditions of production (and hence Marx preferred to use the term "prices of production", rather than "natural prices"), and consists in the cost of production, which includes wages, profits and rent.

The classical claim that prices tend to the cost of production presupposes that there is no full employment. If demand exceeds supply, the market price exceeds the natural price (that is, the cost of production). But since labour is available for further production (that is, there is no full employment of labour), more goods can be produced in order to satisfy existing demand, and prices return to the cost of production, as Ricardo argued. If supply exceeds demand, in turn, the market price will be below the natural price, and a smaller quantity of goods will be produced (increasing the unemployment of labour) and the market price tends towards the natural price again. Supply and demand are not determinants of value, but rather forces that merely lead the market price to fluctuate around the natural price, that is, the cost of production, as Ricardo argued when elaborating upon Smith's perspective.

Walras criticised Ricardo's assumption that more goods can be produced when demand exceeds supply, thus presupposing full employment, as do the marginalist authors in general. But if supply cannot be increased in order to offset the increase in prices caused by an increase in demand, then we are left with supply and demand as the ultimate determinants of value, as Malthus argued in his exchanges with Ricardo. Vulgar economy developed a subjective explanation of supply and demand as exogenous factors, explained by biological and psychological laws, that is, by universal laws pertaining to land and the human mind.

If we follow Marx's interpretation of classical political economy, we find that the marginal revolution only consolidated the subjective supply and demand analysis that was already being developed within nineteenth century "vulgar economy". The great break of continuity in economic theory does not occur in the marginal revolution, since the marginalist authors were merely continuing the supply and demand analysis of the classical authors. Rather, the great break within economic theory occurs when economists like Malthus argue that value is determined ultimately by supply and demand, and when costs start to be measured using subjective elements like "abstinence" (a notion introduced by Senior) or "sacrifice" (a notion used by Cairnes), in contrast with the classical approach where value is explained in terms of objective costs to be found in the process of production (such as the quantity of land necessary to sustain the labourer, or labour time).

Thus, the emphasis on subjective elements was already present in nineteenth century "vulgar economy", much before the marginal revolution. While "vulgar" economists like Senior and Cairnes introduced notions such as "abstinence" or "sacrifice" when explaining costs and supply, the marginal revolution undertaken by Carl Menger, Stanley Jevons, Léon Walras and Alfred Marshall led to the development of subjective elements pertaining to demand, which had already been developed before by Hermann Heinrich Gossen and Jules Dupuit.

Under Marx's conception, the term "classical" thus denotes a realist approach, concerned with underlying causes (consistent with a structured ontology such as the one advocated by Lawson). Marx, unlike Veblen, does not see the classical approach as a taxonomic approach to science in which the latter adopts natural laws. Such a description would fit more easily into what Marx called "vulgar economy". In fact, the notion of "natural law" appears especially in the nineteenth century "vulgar economy". Veblen's characterisation of "classical" economy corresponds thus to what Marx called "vulgar economy", which was indeed a taxonomic exercise aimed at identifying "natural laws", which were seen as universal biological and psychological laws.

Effectively, Veblen refers often to the English "classical economists of the nineteenth century". But the dominant school of economic thought in nineteenth century England was the vulgar approach that runs from Malthus to Cairnes, which is often called "classical political economy", under the assumption that it includes the work of Smith and Ricardo. But classical political economy, as defined by Marx, is not circumscribed to England since it includes Quesnay and the physiocrats, and is essentially an eighteenth century school, if we adopt an extended view of the period and include Petty's contribution in the late seventeenth century, and Ricardo's contribution in the early nineteenth century. Veblen's reference to the English classical economists of the nineteenth century can then be seen as a confirmation that he means by "classical" what Marx meant by "vulgar".

Deductive economics and critical economics

Marshall claims to be developing Ricardo's framework. But when so doing, Marshall draws upon John Stuart Mill's development of Ricardo's perspective, which had replaced Ricardo's objective costs with subjective elements. Marshall's "neoclassical" approach attempted to develop the marginalist ideas while incorporating the subjective conception of cost of the vulgar economists within his notion of "real cost", and illustrated well that there need be no great difference between the vulgar economists (who were called "classical" economists by Marshall) and the marginalists.

Effectively, when F.Y. Edgeworth (1881: 16) argues that "the first principle of Economics is that every agent is actuated only by self-interest", he is only restating Senior's (1836: 138) first postulate of economics, according to which each economic agent "desires to obtain additional wealth with as little sacrifice as possible." After Senior, economics is already on its course to become a theory grounded on subjective notions. Those subjective notions are, in turn, the basis for the deduction of economic laws. After the development of the vulgar conception, economics becomes not only a subjectivist science, but also a deductivist science.

The vulgar conception, and the marginalist developments it received, were much criticized by authors of the Historical Schools, not only in Germany, but also in Brittain. Cliffe Leslie criticized the subjectivist and deductivist approach of the vulgar economists, and their attempt to explain economic reality in terms of the subjective desire for wealth stressed by Senior. Gustav von Schmoller, a leading member of the German Historical School who had a great influence on Veblen, also criticized (or in fact responded to the criticisms of) Carl Menger.

Marshall was sympathetic towards the "inductive" approach defended by the Historical School, while arguing that the inductive method, defended by the Historical School, should be combined with the deductive method, advocated by the vulgar economists and the marginalists. Thus, Veblen sees Marshall's contribution as part of the "best work" done by authors who follow the "neo-classical" approach, which can be more aptly characterized as the "neo-vulgar" approach if we adopt Marx's definition of classical political economy.

But even if Marshall's contribution is, according to Veblen, representative of the "best work" done within neoclassical economics, it remains very much committed to the deductive methods of the vulgar economists, further developed by the marginalists. Indeed, Marshall himself stresses that his work is in continuity with the contributions of authors of the "vulgar" period like John Stuart Mill, who in turn had interpreted Smith and Ricardo in subjective terms. Nineteenth century vulgar economy engaged in generalisations of a teleological kind, in order to engage in deductive exercises grounded on those generalisations. This method was continued by the marginalists, while also focusing on subjective elements as the basis for the construction of economic theory.

We can then see why Veblen did not see too much of a difference between the "vulgar" economists (who he called "classical" economists) and marginal utility theory, other than the fact that the latter sticks more consistently to teleological premises. The method used by the marginalists was the same method used by the "vulgar" economists, namely the *deductive* method. The basis for deduction was a series of universal postulates on the human mind and biological laws. In vulgar economy, Senior's contribution provides the more systematic account of the underlying postulates used for deduction. After the marginal revolution, the utility function becomes the most important basis for the deduction.

The emphasis of the classical authors was not on deduction based on universal psychological and biological laws. Rather, the classical authors focused on the conditions of possibility for the reproduction of economic activity. The method of focusing on the conditions of possibility for a given activity can be designated as a *critical* (or transcendental) method – see Lawson (2003a: Ch. 2) for a discussion. It is

critical (or transcendental) in the sense that it does not consist in merely deducing based on given premises or postulates, but rather in criticising (or transcending) those premises or postulates, in order to question their adequacy.

It was in this sense that Immanuel Kant (who also influenced Veblen) used the term "critical" when studying the conditions of possibility of the activity for the production of knowledge. Marx drew upon this critical method when studying classical political economy. But while Kant adopted a critical (or transcendental) *idealism*, by focusing on the human mind, Marx adopted a critical (or transcendental) *realism*, by focusing on the actual conditions for the reproduction of socio-economic activity. In this process, Marx defined classical political economy more clearly in terms of the conditions of possibility for the reproduction of socio-economic activity.

Marx drew not only upon Kant's critical method (while subjecting Kant's own idealism to a critique), but also upon Friedrich Hegel's philosophy, according to which everything is *internally related*. Lawson (1997, 2003a) defines an internal relation as a relation which is constitutive of the related entities. The problem raised by internal relations concerns our possibility of gaining knowledge of a reality which is deeply interconnected. Our mind can only grasp a part of reality, but each part is always related to the whole. So when studying any aspect of reality, we are always missing its relations to some other parts of reality, since it is impossible for our mind to grasp the whole *qua* whole.

In order to address this problem, Lawson (1997) distinguishes between abstraction and isolation. Abstraction consists in focusing on a given part of reality while taking into account that it is related to other parts of reality we are abstracting from. Isolation consists in focusing on a given part of reality without taking into account its relations to other parts of reality. Marshall (who was also influenced by Hegel) addressed the problem of internal relations by isolating the direct effects from the indirect effects, that is, focusing on a part of reality while assuming that it is not affected (for a time, at least) by the other aspects of reality which are assumed to remain constant. In so doing, Marshall engaged in what Lawson calls isolation.

Marx, in contrast, addressed the problem of internal relations by engaging in abstraction, as Lawson (1997) notes. Because Marx's analysis is based on abstraction, Marx could not provide exact mathematical formulations which are assumed to be independent from everything else, such as Marshall's supply and demand curves which are used to determine exactly prices and quantities. Rather, Marx provided only an analysis of the underlying tendencies of capitalism, and even his explanation of prices of production was only an approximation.

Marx had a firm grasp of differential calculus, as one can see by his mathematical manuscripts preserved by Friedrich Engels (who gave them great importance). But like the classical authors, Marx used only arithmetic in his economics. Arithmetic, unlike calculus, deals with aggregate magnitudes rather than with marginal changes. When focusing on marginal changes using differential calculus, Marshall and the marginalists were led to focus on the effect of a given variable X on another variable Y while assuming everything else remains constant. Notions such as the principle of substitution (of one variable by another) are based on this method of focusing on two variables while assuming everything else remains constant.

Marx, and the classical authors, did not focus on marginal changes between some variables while assuming everything else remains constant. Marx, like the classical authors, looked at the reproduction of the system as a whole. Thus, Marx and the classical authors simply focus on what happens on average, over a long period of time, while focusing on aggregate quantities, rather than looking at marginal changes. The method of focusing on aggregate quantities was the method that Marshall abandoned (and Kalecki and Keynes recovered afterwards), when Marshall decided to focus on incremental changes instead.

The normal position and the reproduction of economic activity

The classical method, of focusing on an average, normal position, which is seen as the condition of possibility for socio-economic reproduction, is often seen as the key source of inconsistency between the classical approach, and Veblen's approach. So much it is so that the notion of a "normal position" is often seen as one of the key aspects of the classical approach maintained by Marshall which prevented him from developing his own evolutionary vision.

However, this assessment springs from a failure to understand the notion of a normal position. The notion of a "normal position" refers merely to the conditions of possibility for the reproduction of socio-economic activity, in a context where the word "normal" could be replaced by other words such as "habitual", "customary" or "conventional". As Lawson (1997, 2003a) explains when developing the (critical realist) transformational model of social activity, the conditions of possibility for the reproduction of human activity are the social structures, including social positions each

attached to given social rules. Those social structures are not only the condition of possibility for the reproduction of human activity, which they facilitate and constrain, but are themselves also reproduced and transformed through human activity (just as the human agent is also transformed in this process).

Those conditions of possibility include the more persistent elements of socioeconomic life, which provide a stable basis for human activity, without which human action is simply impossible. Thus, when the classical authors refer to the notion of a "necessary" or "natural" price (which could also be called a "normal" price, as Marshall does), they are not referring to a teleological natural law, but only to the habitual, customary or conventional price which enables the reproduction of the economic system. Thus Marx writes:

The price of production includes the average profit. And what we call price of production is the same thing that Adam Smith calls 'natural price', Ricardo 'price of production' or 'cost of production', and the Physiocrats 'prix nécessaire', though none of this people explained the difference between price of production and value. We call it price of production because in the long term it is the condition of supply, the condition for the reproduction of commodities, in each particular sphere of production.

(Marx 1894: 300)

The "necessary" or "natural" price is merely the ordinary or average price found *ex post* within the process of economic reproduction. When engaging in economic activity, human agents possess certain expectations as to what constitutes a natural or normal price, informed by habit and custom acquired in past transactions. Because human agents are creatures of habit, the price that persists on average reaches a significance of its own, as a conventional price set by habit and custom.

However, because economic reality is a continuous process of change, it cannot be ensured that the market price is always equal to the natural price. The market price will often deviate from what convention dictates. But the classical authors never believed that an exact account could be given of the way in which the market price oscillates around the necessary or natural price. Even notions such as gravitation refer only to a vague process of fluctuation around what convention dictates.

The same applies to categories such as wages, profits, rent or interest. The focus of the classical authors is on a customary level of these, which enables the reproduction of the economic process. For the classical authors, wages are at the subsistence level. But for the classical authors, subsistence meant more than merely biological survival. The subsistence level is the level that enables a level of consumption that is perceived by society as an acceptable standard of living given existing customs and habits.

For Veblen, the level of consumption also depends upon social factors, which lead to a given wage set by social factors too. And for Veblen, it is not only wages, but also profits and interest that are set by habituation:

It will be noted that the explanation here offered of depression makes it a malady of the affections. The discrepancy which discourages business men is a discrepancy between that nominal capitalization which they have set their hearts upon through habituation in the immediate past and that actual capitalizable value of their property which its current earning-capacity will warrant. But where the preconceptions of the business men engaged have, as commonly happens, in great part been fixed and legalized in the form of interest-bearing securities, this malady of the affections becomes extremely difficult to remedy, even though it be true that these legalized affections, preconceptions, or what not, center upon the metaphysical stability of the money unit.

(Veblen 1904: 114)

Habituation leads to expectations not only concerning what is a reasonable price, but also concerning what is a reasonable wage, profit or interest, as Veblen notes in this passage. As Veblen explains here, and Keynes also argued afterwards (and as Marshall had argued before both of them), crises and depressions occur precisely when those expectations are not met.

Profits and interest are part of the surplus, which is a central concept within classical political economy. When studying the reproduction of socio-economic activity, the emphasis of the classical authors and Marx is on the creation, extraction, distribution and use of the social surplus which takes place in this context. The social surplus is the part of production which is not used in the reproduction of the existing economic system, and can be used in order to expand the existing economic system (as investment) or in the consumption of luxury goods. The surplus is the central notion addressed by the classical authors and Marx.

As Quesnay argued long ago in his analysis of the circular process of reproduction, the dynamics of the economy depend on whether the surplus is used for productive activities or for the consumption of luxury goods. When the surplus is used in productive activities, the economy will grow, leading to socio-economic expansion (and, one may add, possibly transformation too, if there are technological or organizational innovations as a consequence of this expansion). If the surplus is used mainly in luxury, the economy will decline, leading to socio-economic contraction. The classical authors saw the economy as a dynamic entity, where the allocation of the surplus is the central aspect to explain. The case of simple reproduction at an unchanging scale is a particular case within classical analysis. The emphasis on a stationary state emerges only in vulgar economy, when the emphasis is placed on deduction based on unchanging biological and psychological laws.

Veblen's critique of the "classical" emphasis on a taxonomic exercise presupposing unchanging laws is an apt characterisation of vulgar economy, but not of classical political economy, where dynamic aspects are explained when addressing the reproduction and allocation of the surplus. In fact, once we interpret classical political economy properly (as an analysis of the reproduction and distribution of the surplus), we find that it is Veblen's own approach, rather than Marshall, which can be seen as a continuation of classical political economy.

The social surplus is also a central concept in Veblen's (1899, 1904, 1914, 1921) own contribution, which is centred on how the surplus is appropriated by a "leisure class" which uses the surplus in luxury (a point which is also central to all the classical authors), in a context where the process of production is controlled by the "captains of industry" who try to extract as much surplus as possible. The key to understanding the formation of a "leisure class" is the production and distribution of a surplus, as Veblen notes:

the technological basis for a pecuniary control of industry is given, in that the "roundabout process of production" yields an income above the subsistence of the workmen engaged in it, and the material equipment of appliances (crops, fruit-trees, live stock, mechanical contrivances) binds this roundabout process of industry to a more or less determinate place and routine, such as to make surveillance and control possible. So far as the workman under the new phase of technology is dependent for his living on the apparatus and the orderly sequence of the "roundabout process" his work may be controlled and the surplus yielded by his industry may be turned to account

(Veblen 1914: 150)

Veblen (1908) criticised John Bates Clark (1891) for his attempt to explain distribution in terms of marginal productivity. For Veblen, the surplus is a social product, which depends upon the collective knowledge of the community and its technological state, and its distribution depends upon institutional aspects.

The same happens in classical theory, where the distribution of the surplus also depends upon institutional aspects, such as the social class where a given agent is positioned. As Avi Cohen and Geoffrey Harcourt (2003) explain, the critique of marginal productivity theory undertaken by Sraffa (1960) and Joan Robinson (1953-4) was not only in line with Marx's development of classical political economy, but also with Veblen's own contribution, which consists in an analysis of the social and economic aspects surrounding the roundabout process of production and distribution of a surplus – see also Cohen (2014).

This process always presupposes a given technological phase, as Veblen stresses above. Changes in this technological phase will set into motion changes in the roundabout process of reproduction and distribution of the surplus. For this reason, authors like Clarence Ayres (1944, 1952) use the term "Veblenian dichotomy" when identifying technology as the driving force of change in Veblen's conception, and institutions as the driving force of stability (within what we may term a "normal position" sustained by what Veblen calls the "ceremonial" aspects of life).

Lawson (2003a, 2003b, 2005) characterises the institutionalist school associated with Veblen as an approach centred on the forces that cause stability and the forces that cause change, and sees institutions and technology as two possible causes of stability and change. But Lawson (2003b, 2005) sees the "Veblenian dichotomy" as a result of a failure to distinguish between human agents and social structures. Drawing upon the transformational model of social activity, we can see more clearly that stability can be found at the level of social structures – I discuss the "Veblenian dichotomy" in more detail in Martins (2009). But this stability at the level of social structures (which is implicit in the classical notion of reproduction through custom and habit, and in Veblen's account of institutions, habits, and the ceremonial aspects of life) does not refer to teleological natural laws. It refers to the conditions of possibility of the process of reproduction and distribution of the surplus.

So there is nothing in Veblen's conception which makes it incompatible with classical political economy. Quite the contrary, Veblen's approach can be best interpreted as a further development of the surplus approach pioneered by the classical authors, an approach where economic transformation depends on whether the social surplus is used in productive activities, or in wasteful luxurious consumption, as argued by Quesnay, Smith, Marx and Veblen, amongst many others.

Should this school be called neoclassical economics?

The use of mathematico-deductivist methods was most successful in natural sciences like physics, and is often identified with proper science. Thus, mathematico-deductivist methods are widely used in economics, in order to make economics appear to be respectable science. Likewise, the term "neoclassical" commands a certain degree of respectability, and it suggests continuity with a "classical" and respected tradition. Terms like "classical" and "neoclassical" are also connected to contributions in other fields which are much appreciated, and have thus a favourable semantic connotation.

But the truth is that mainstream economics is neither scientific, nor "classical" in any sense. Science is essentially a critical exercise, where the conditions of possibility for a given phenomena are questioned and scrutinised. It does not consist merely in the use of mathematico-deductivist methods, as Lawson (1997, 2003a) shows. And the "classical" approach was very different from Marshall's interpretation of it. Marx used the term "classical" to denote a truly scientific endeavour, namely the explanation of the underlying structures behind the process of socio-economic reproduction and distribution of the surplus.

The reason why the term "neoclassical economics" is used in its contemporary sense is connected to the way in which classical political economy was reinterpreted in a different way than the way in which Marx defined it. For Marx, classical political economy includes those who studied the objective causes of value, and covers the period from Petty to Ricardo. Under such a description, Marx himself can also be seen as a classical economist, who indeed believed he had finally found the objective basis of value that the classical authors had been long searching for – see Martins (2013) on why Marx's description of classical political economy seems to be the more accurate description of the contributions of those authors.

Vulgar economy, in contrast, includes those who were concerned with subjective and superficial phenomena such as supply and demand, and covers the period from Malthus to Cairnes. Classical political economy was subsequently interpreted in terms of vulgar economy, which was believed to be its more advanced stage. Thus, the term "classical" is now used to designate the whole period from Petty to Cairnes, while interpreting all those contributions in line with vulgar economy, and with its emphasis on supply and demand analysis and subjective preferences.

For this reason, Marshall sees no great difference between his own study of the equilibrium between supply and demand, where both demand curves and supply curves depend upon subjective preferences, and the "classical" project so interpreted. Nor does Veblen, who uses the term "neo-classical" to designate the continuation of the "classical" project so construed, albeit already informed by an evolutionary vision such as the one that Marshall possessed.

Lawson (2013) is surely correct in pointing out that it is better to abandon the term "neoclassical economics" rather than using it in its present sense, which suggests a false idea of continuity with classical political economy. If we wanted to use the term "neoclassical economics" in an appropriate way, we would have to take into account the original meaning of the term "classical", and the historical context in which the terms "classical" and "neoclassical" appeared within economics.

In Veblen's writings, the term "neo-classical" is meant to designate a combination of "new" evolutionary ideas (such as the ones of Spencer and Darwin) with a "classical" approach. But once we realise that the classical approach is concerned with the reproduction and allocation of the surplus, we must then reach the conclusion that the author who pioneered the combination of a "new" evolutionary perspective with the classical surplus approach was not Marshall. Marshall certainly possessed many "new" evolutionary insights. But Marshall's theory is essentially a continuation of the supply and demand analysis that was designated by Marx as "vulgar economy", precisely in order to distinguish it from "classical political economy". Thus, Marshall's approach can be more aptly characterised as "neo-vulgar" economics, rather than "neo-classical" economics.

So who could be considered a "neoclassical" economist, in the sense of being an economist who combines the classical concern with the reproduction and distribution of the surplus on the one hand, with the new evolutionary insights brought by Spencer and Darwin on the other hand? In light of what was argued above, it seems that no one fits better into this category than Veblen himself. That is, if we follow the original usage of "classical" as defined by Marx, and at the same time try to make this usage compatible with the original usage of "neo-classical" as defined by Veblen, we find that no one fits better into the definition of "classical" and "neoclassical" than the authors who coined each term. So if words such as "classical" and "neoclassical" are to be used in

economics in any meaningful way, we reach the conclusion that Marx is the last classical economist, and Veblen is the first neoclassical economist.

Concluding remarks

The claim that Marx is the last classical economist is not as contentious as the claim that Veblen is the first neoclassical economist. And the latter claim is certainly contradictory with the subsequent use of the word "neoclassical" following Veblen's introduction of the term. As Lawson (2013: 948) notes, the term was not only identified with Marshall, but also used by John Hicks and George Stigler to designate the orthodox research programme that emerged in the twentieth century. As Lawson (2013: 948) also notes, Maurice Dobb (who worked closely with Sraffa) thought that "counter-classical" would be a better term, since the orthodox approach developed throughout the twentieth century is radically at odds with classical political economy as defined by Marx, and subsequently interpreted by Sraffa and Dobb following Marx's original usage of the term – see Martins (2013) for a discussion.

But the term "neoclassical" became associated with the orthodox approach throughout the twentieth century, and was also used in this sense by critics of the orthodoxy, that is, by the heterodox economists. In such a context, Lawson (2013) suggests that the best strategy is to use the term to denote an inconsistency between reality and method, while pointing out how many economists who self-identify as heterodox economists (and thus see themselves as critics of neoclassical economics) incur in the same inconsistency, and are thus neoclassical economists too.

As Lawson (2013: 972) notes, the term "neoclassical" can be used to denote such an inconsistency even if we follow Marx's original interpretation of the term, since "classical" can be used in Marx's sense, in order to denote a scientific concern with underlying causes, and "neo" can be used to denote a commitment to the "new" mathematico-deductivist methods that emerged after the marginal revolution (such as differential calculus), and especially throughout the twentieth century. Under such a view, "neo" no longer means what Veblen meant, but "classical" means what Marx meant.

I have, however, some reservations about using the term "neoclassical" as a form of criticism. As noted above, a term such as "neoclassical" commands respectability, and suggests continuity with a "classical" tradition which is also respected. Furthermore, as noted above, terms like "classical" and "neoclassical" are also connected to contributions in other fields which are much appreciated, and have thus a favourable semantic connotation. In fact, I believe these are important reasons why the term "neoclassical" was strongly embraced by many orthodox economists as describing their own approach. The same happens with mathematico-deductivist methods: they are perceived as essential for proper science given their success in respected fields like physics, and thus their use commands a certain degree of respectability.

Now, when studying any field with a certain degree of complexity, it is not possible to have a full command of all the relevant issues at stake. Rather, much information is processed at a non-conscious level, in which words, and their semantic connotation, play an important role as a signal that directs us in certain paths. For this reason, John Maynard Keynes (1936; 297-298) thought that words, rather than numbers, were more appropriate tools for studying socio-economic phenomena: words enable us to keep at the back of our heads important information which cannot all be processed at a conscious level – see Martins (2013: Ch. 5) for a discussion. Thus, words such as "classical" and "neoclassical" are an important asset, so to speak, which give a strategic advantage to anyone who adopts them, and play an important role in establishing what Antonio Gramsci called "hegemony".

Of course, there is a psychological appeal in terms such as "critical" and "heterodox" too. They signal a non-conforming attitude which should be encouraged by anyone concerned with free-thinking. But I believe that the history of economics shows that the tendency of the majority, not least students who are uncertain about the validity of competing approaches, is to side with whatever looks established, and part of a respected tradition.

Furthermore, the monumental failure of mainstream economics did not change a context where important positions in the academia and other institutions are occupied by mainstream economists, not least because the heterodox traditions were not sufficiently organized around a common framework that can address the issues at stake. As Lawson (2003a) explains, the heterodox traditions share a common social ontology. But ontological commitments must be supplemented by more specific theories too, as Lawson also notes. The surplus approach is particularly appropriate for addressing problems which were raised after the crisis, such as problems of inequality and distribution, which have been increasingly in the public eye.

The classical surplus approach certainly helps systematizing many heterodox ideas which are extremely relevant for understanding the contemporary crisis, not least because those ideas are in fact based on a surplus approach too – see Martins (2013: Ch. 8) for a discussion. Terms such as "heterodox" are important to signal a critical attitude, but one must not give away a tradition which is useful for theoretical and strategic reasons, such as the surplus approach. More importantly, doing so is also an exercise of intellectual honesty, for the surplus approach is actually more in line with the heterodox approaches than with the mainstream scarcity theory – see Martins (2013: Ch. 8).

So I would argue that the more fruitful strategy is to recover the word "classical" (as Sraffa tried to do) as part of the surplus approach shared by Marx and Veblen. As for the word "neoclassical", ideally it should be recovered to, and could be used to denote Veblen's project, as argued above. But if the context of its use throughout the twentieth century made the word "neoclassical" lose its proper meaning, the word "neoclassical" should then be abandoned, and there are persuasive arguments for doing so, as Lawson (2013) convincingly argues.

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