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PROCESS AND ORDER IN CLASSICAL AND MARGINALIST ECONOMICS

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Abstract:

In this article I compare the classical theory of value with the theory of value that emerged after the marginal revolution, taking into account the underlying conceptions of process and order that are implicit in each theory. In classical political economy, the economy is conceived of as a continuous process of reproduction, wherein a surplus is distributed through various social classes. After the classical period, the notion of reproduction is replaced with the notion of equilibrium, while the analysis of society in terms of social classes is replaced by methodological individualism. Value also starts to be seen in terms of marginal utility, rather than cost of production. This transformation brought important changes to the implicit philosophical conceptions of process and order that have underpinned the dominant economic doctrine from the classical period until today, leading to the marginalist belief that market exchange is always the most efficient coordinating mechanism of the economy. The classical perspective, however, contains a broader conception of socio-economic reproduction, which is consistent with different institutional arrangements.

Keywords: Process, order, reproduction, exchange, value.

JEL Classification: B41

1. Introduction

The classical political economists studied the economy and society in terms of the continuous reproduction and distribution of the surplus, where the surplus is the part of production which is not necessary for the reproduction of the existing economic system. The distribution of the surplus takes place according to the social class in which each individual is placed. This approach is developed by such authors as William Petty, Richard Cantillon, François Quesnay, Adam Smith and David Ricardo.

In the contributions of these authors, process is a notion implicit in the conceptualisation of socio-economic reproduction. And social order is a notion implicit in the organisation of society into social classes, which is essential to understanding the reproduction process. However, the notions of process and order are not explicitly elaborated from a philosophical point of view. For the classical authors, the social class is mainly an economic category used to explain the distribution of the surplus when addressing the circuit of socio-economic reproduction.

Whilst notions such as process and order remain unelaborated in the classical perspective, the latter can, however, be a useful starting point for the philosophical development of the notions of process and order. This can be done, and has indeed been done by Karl Marx, who developed a dialectical conception of socio-economic reproduction clearly underpinned by the notion of process – David Harvey (1982) indeed notes that for Marx capital is a process, not a "thing". Furthermore, Marx uses the notion of social class not just to denote merely an economic category when addressing the functional distribution of income, but actually as what we may term a sociological category, with a conception of social structure that already contains a more elaborated conception of socio-economic order.

The marginal revolution brings a definitive turning point of a route that had already started after Ricardo, in which the notion of reproduction is replaced with the notion of equilibrium, and the notion of social class is replaced by methodological individualism. The theory of value and distribution is absolutely central to this transition, with important consequences for the implicit conceptualisation of process and order in the economic theory that emerges after the marginal revolution.

After the marginal revolution, the dominant economic theory adopts the view that value depends upon subjective preferences, which are revealed only in market exchange, and market prices in particular. Thus, market exchange is seen as the only mechanism which can coordinate the vast amount of disperse information concerning subjective preferences, so that socio-economic order emerges.

In the classical perspective, in contrast, value depends upon objective factors, such as the cost of production measured in terms of human labour, which can be found not only through market exchange, but also in the objective cost accounting of different institutions of various configurations. The classical objective conception of value means that prices and other elements which may be seen as essential to socio-economic order can then be found in various institutional settings, where market exchange is only one institution amongst others, opening thus the way to the consideration of various institutional arrangements in which socio-economic order may exist.

I shall begin by characterising the key theoretical features of classical political economy in the next section, and the key theoretical features of marginalist economics in the subsequent section. Afterwards, in the remaining sections of the article, I will address the underlying notions of process and order that are implicit in each conception.

2. The classical period

According to classical economic theory, political economy consists of the study of the circuit of socio-economic reproduction. In the classical analysis, human activity is explained using such notions as habit and custom, which are central to understanding socio-economic reproduction, and socio-economic order. The classical economic theory does not address how order arises out of individual interaction, and assumes a given social structure, in which society is structured into social classes.

The central analytical concept of classical analysis is the surplus, which is the part of production which is not necessary for the reproduction of the existing economic system. The surplus can be used in order to expand the existing economic system, leading to economic growth, or for the consumption of luxury commodities, that is, commodities which are not necessary for the reproduction of the economic system.

A key question that arises in this connection concerns the definition of the surplus. In an economy where different commodities are produced, the value of the commodities is essential for comparing commodities, and defining the surplus. Classical authors took land and labour as the original sources of value. The relative emphasis on land or labour varied across the classical authors. Petty and Cantillon found it useful to measure labour in terms of the quantity of land that is necessary to maintain a labourer for a given amount of time. Quesnay also focused on land, and indeed took agriculture to be the source of the whole surplus produced in an economy.

Smith starts a new stage in classical analysis, where the emphasis is switched from land to labour. Smith refers to the labour that can be purchased using a given commodity (commanded labour) as the measure of value in exchange, while noting, however, that the source of value comes from the labour spent in the production of the commodity (embodied labour), a fact that, according to Smith, can be seen in a clearer way in primitive societies where virtually no capital is used.

From this point onwards, we have an important difference between two different conceptions, with significant implications. Ricardo, following the previous classical authors, adopts a conception of value that finds its roots in the (re)production process. Hence, Ricardo takes value to be generated through the incorporation of labour in the (re)production process, and criticises Smith for his references to commanded labour. Malthus, in contrast, adopts a conception of value that finds its roots in market exchange, namely commanded labour, that is, how much labour can be purchased in the market using a given commodity, and argues that this is Smith's position too.

A central difference that emerges between Ricardo and Malthus (and the subsequent economic theory) in this process concerns the role of supply and demand. For Ricardo (as for Smith), the natural price is determined by the conditions of production. Supply and demand, in contrast, influence only the variations of the market price around the natural price in an accidental, that is, non-systematic, way. For Malthus, in contrast, supply and demand influence not only the variations of the market price, but also the underlying natural price. In fact, for Malthus the natural price is measured in commanded labour, and thus must be found in market exchange, in a context where the forces of supply and demand play a systematic role.

Throughout the nineteenth century, the more influential branch of political economy followed essentially Malthus' position on this matter. Hence, market exchange takes centre stage, rather than the (re)production process, as it was the case for the classical authors from Petty to Ricardo. Supply and demand start to be seen as the central aspect for an explanation of value. For Smith and Ricardo, effectual demand is not an independent force, since it is defined with reference to a given natural price (it is the demand of those who can pay the natural price), and the natural price is, in turn, determined by the conditions of production. From Malthus onwards, demand starts to be seen as an independent factor that, together with supply, is an ultimate and independent determinant of prices.

An important aspect that appears subsequently is the continuous introduction of subjective elements in the explanation of value. Indeed, once demand is seen as an independent factor, it starts to be seen, quite naturally, as a force which is greatly influenced by independent factors such as subjective preferences. But subjective elements start also to be introduced in the explanation of the cost of production. Nassau William Senior introduced the notion of abstinence, and also took the first postulate of political economy to be the idea that each agent desires to obtain additional wealth with as little sacrifice as possible. Notions like sacrifice start to play a central role in authors like John Stuart Mill and John Elliot Cairnes when explaining the cost of production. And notions such as subjective desires start to play a central role in the explanation of demand, through authors like Hermann Heinrich Gossen and Jules Dupuit, who anticipated many of the ideas that emerged subsequently with the marginal revolution. The emphasis on market exchange and subjective elements is further consolidated with the marginal revolution, leading to the definitive abandonment of the classical emphasis on the process of reproduction, and on the objective basis of value.

3. The marginal revolution

By the time the marginal revolution occurs, Karl Marx was the only influential author still developing the classical approach, taking value to be determined by the labour which is socially necessary to reproduce a commodity under the existing mode of production. Marx designates the period from Petty to Ricardo as “classical political economy", characterised by a concern with the underlying causes of value, to be found in the (re)production process, and designates the period after Ricardo as "vulgar economy", characterised by the study of superficial phenomena such as supply and demand while focusing on market exchange and subjective phenomena.

The marginal revolution, brought about by William Stanley Jevons, Carl Menger, and Léon Walras, further consolidated a subjectivist approach to value, where value is seen in terms of subjective preferences. Alfred Marshall developed the same ideas at the same time, but published later. Unlike Jevons, who was critical of classical political economy, Marshall argued that his approach was in continuity with classical political economy. However, Marshall took classical political economy to be essentially what Marx called "vulgar" economy, and placed the emphasis on supply and demand analysis.

Thorstein Veblen (1900) coined the term "neo-classical" in order to designate the contributions which were influenced both by the then "new" developments in evolutionary theory brought about by Charles Darwin and Herbert Spencer, and by "classical" economics construed according to Marshall's interpretation and taking Mill and Cairnes as its key exponents. Veblen took Marshall's contribution to be representative of the best work done within the "neo-classical" school. Marshall's *Principles of Economics* became indeed the key book used to teach economics, and shaped what came to be called neoclassical economics.

A central aspect that is developed within the neoclassical approach is differential calculus. Differential calculus had already been employed by Johann Heinrich von Thünen and Augustin Cournot, two authors who influenced decisively Marshall's methodology. But it is only after the marginal revolution that it becomes widely used, not least to formulate supply and demand curves drawing upon the notions of marginal cost and marginal utility, defined in differential terms.

Marshall saw the use of differential calculus as an important way of analysing the effect of a marginal change of a given variable on another variable while assuming everything else constant. This allowed Marshall to focus on separated parts of the economy (while assuming everything else to remain constant) through his method of particular (or partial) equilibrium. Marshall's method, influenced by differential calculus, leads to the consolidation of the switch from the classical analysis of the reproduction of a whole, to an analysis centred on the equilibrium between different parts.

In classical political economy, the mathematical technique used (when used at all) was not on calculus, but rather arithmetic, since the emphasis was on aggregate quantities that are reproduced in the economy as a whole, rather than on marginal changes in quantities demanded and supplied that lead to the formation of marginal utility and marginal cost and govern the equilibrium between different parts.

After the marginal revolution, the notion of order appears now subsumed under the notion of equilibrium, be it Marshall's particular (or partial) equilibrium, or Walras' general equilibrium. The tendency to focus on equilibrium between different parts had already been present after Ricardo, in the writers that Marx labelled as "vulgar" economists, and their supply and demand analysis where subjective elements were already central. But it is only after the marginal revolution that subjectivism and equilibrium are definitely embraced as the central elements to be employed in economic theorising.

The emphasis on subjective phenomena, which explain the interaction of human individuals in market exchange, leads to a tendency to focus less on such notions as habit and custom, which were the essential ingredients in the classical understanding of socio-economic order. Order is now explained in terms of the interaction of several constituents of a system that reaches, or tends to, a given equilibrium.

But the neoclassical approach to equilibrium, through which order is explained, contains several problems. Marshall (1890, 1919) formulated supply and demand curves drawing upon differential calculus, and noted that if we presuppose infinitesimal changes, we may focus on the effect of a given change on another change while assuming everything else remains constant. But in economics we are not concerned with infinitesimally small changes, and the use of supply and demand curves applies only to very specific cases, as Piero Sraffa (1925, 1926) shown.

John Maynard Keynes (1936) criticised also the use of supply and demand curves when explaining labour markets and capital markets. The equilibrium between the demand for capital and the supply of capital cannot be explained using supply and demand curves in order to determine the price of capital (the interest rate), Keynes (1936) argued, because those curves are constructed presupposing a given level of income. But a change in any curve will entail a change in the level of income, and thus a change in the other curve. Thus, we cannot apply the Marshallian method of focusing on a given change while assuming that everything else remains constant. Likewise, we cannot use curves of supply and demand to explain the price of labour (the wage rate), since the changes in wages which those curves are meant to explain change also the level of income, and thus the curves which we are using as supposedly independent data in the first place.

The circularity and logical inconsistency of the neoclassical notion of equilibrium between supply and demand appeared again in the Cambridge controversies in the theory of capital, where Sraffa (1960) and Joan Robinson (1953-4) shown that the neoclassical production function, and the notion of marginal productivity of capital it entails, cannot be used to determine the interest rate, since the interest rate would be needed first to aggregate capital from different time periods – see Harcourt (1972) and Cohen and Harcourt (2003) for a discussion. Sraffa's reasoning can also be applied to Austrian capital theory, as Sraffa (1932) indeed done when criticising Friedrich Hayek, who had tried to build upon the Austrian capital theory of Eugene Böhm-Bawerk for studying production, while drawing upon the notion of subjective time preference in order to explain the interest rate.

As Sraffa notes in his unpublished manuscripts, the fundamental problem of marginalism is that it depends upon the presupposition that there must be marginal changes while everything else remains constant, so that marginal value (be it marginal utility or marginal cost) is found, and used to determine prices through supply and demand analysis. This may be a reasonable assumption in physics when studying infinitesimally small changes (and even there Sraffa had doubts, given the results of quantum physics that challenged Newtonian physics), but it is certainly not a reasonable assumption in economics.

Given the complex and interconnected nature of the socio-economic world, Sraffa thought that the most appropriate methodology, rather than looking at marginal changes that take place in a given interval of time, is to look at the conditions for the reproduction of the system as a whole at a given moment in time – see Martins (2013: Ch. 2) for a discussion. Socio-economic processes are too complex to be explained in terms of mechanical changes while assuming everything else to remain constant, as in marginalist analysis.

Sraffa thought that the most appropriate framework is to look at the more general conditions for the reproduction of the socio-economic process, without studying the specific way in which the economy may move towards a given equilibrium or another, which is too complex a task to be undertaken without taking into account the specific historical and institutional contingencies at stake. Sraffa also thought that this method, of looking at the conditions for the reproduction of the economic process as a whole, was the classical method, which was developed by Marx, but abandoned by the "vulgar" and marginalist economists, both of the Austrian and the neoclassical strand.

4. Process and reproduction

The problem Sraffa identifies in marginalist theory is a specific case of a more general problem debated in philosophy since Heraclitus at least, which concerns the possibility of achieving knowledge of an interconnected whole which is in (or indeed consists of) a process of permanent change. Plato tried to solve this problem by looking not at the particular manifestations of this ever changing process, but rather at the underlying forms, structures, or ideas, that are reproduced through this process of change. In the Platonic view, order appears then in the timeless structures, forms or universal ideas that are actualised through a permanent process of change. Aristotle developed this idea too, but stressed that forms are abstracted from concrete objects.

Sraffa's solution, which consists in looking at the conditions of possibility for the permanent process of reproduction of socio-economic activity, shares some similarities with this philosophical tradition initiated with Plato. However, there is no evidence that Sraffa made any explicit connection to this philosophical tradition, which was, however, quite influential in Cambridge for a considerable amount of time – see Martins (2013: Ch. 9).

It is quite the contrary with Walras, who explicitly stated that his method was based on the Platonic philosophy which, according to Walras, consists in studying universals, rather than the corporeal entities in which those universals become manifest. Walras noted that a central part of his approach was the tatonnement process of trial and error through which prices are reached, and order is ensured by the existence of a general equilibrium determined by pure theory (at the level of universal ideas).

Despite this methodological similarity, Walras' conception is very different from the classical approach Sraffa is recovering. Walras conception of equilibrium maintains a teleological orientation to economic theorising. The notion of order that is implicit in equilibrium analysis presupposes a final rest state towards which the economy and society are permanently tending. For the classical authors, in contrast, the notion of order was included in their analysis of the process of reproduction, which could lead to a progressive, stationary or declining state of society. The classical analysis of the conditions for economic and social reproduction which spring out of a given socio-economic order need not presuppose a final, stationary state, which is only a particular situation that may, or may not, occur.

However, Walras' approach is also quite different from that adopted by his followers, who neglected his philosophical method and social concerns (the same happened with Marshall). Walras' pure economic theory was seen, for a time at least, as the ideal framework to avoid the inconsistencies pointed out by Sraffa to marginalist analysis. Thus, as Cohen and Harcourt (2003) note, after conceding defeat on the Sraffa/Robinson assault to the neoclassical production function, neoclassical economics developed following Walrasian general equilibrium analysis.

But Walras' general equilibrium analysis suffered from inconsistencies too. Walras wanted to explain value in terms of the interaction between supply and demand, in marginalist fashion. But he also wanted to define a long period rate of return on capital, a procedure which is certainly in line with his Platonic method of focusing the more persistent forces of the economic system. However, as Sraffa (1960) shown, if we have a system of simultaneous equations aimed at finding prices, once we have also a uniform rate of return, prices are already determined in terms of cost of production (including the surplus, which we know if we know the uniform rate of return), and there is no need of a marginalist supply and demand analysis framework for finding them. Walras' method conflates thus two different approaches, leading to an overdetermined system.

The solution found to this problem by Kenneth Arrow, Gérard Debreu and Lionel McKenzie was to neglect the more persistent forces of the system, while presupposing highly unrealistic assumptions concerning stability and human behaviour, drawing upon fixed point theorems, a mathematical technique that (at the time) had been recently applied by John Nash to game theory.

Walras adopted an idealist philosophy, and was not as concerned with concrete reality in the same degree as Marshall, for example, was. But Walras method, where equilibrium is an ideal state that may never be reached through the tatonnement process of trial and error, is still much more realistic than the Arrow-Debreu-McKenzie approach to general equilibrium, where an economy jumps from a given equilibrium to the next one. If we use mathematics to describe not just the ideal equilibrium state, as Walras did, but also the tatonnement process of reaching equilibrium, as done in twentieth-century neoclassical analysis (see also Samuelson, 1947), we readily find that general equilibrium is highly unstable, and a very poor explanation of the persistence of order in the economic system – see also Lawson (2003) on the uncritical reliance of mainstream economics on mathematico-deductivist methods.

The continuing use of the marginalist framework entails problematic assumptions concerning not only production, but also distribution. Under the marginalist framework, distribution can be explained in terms of the marginal productivity of labour and capital. Thus, the market for labour and capital, and its supply and demand curves governed by laws of marginal cost and marginal utility, explain the distribution of income in the marginalist framework.

For this reason, John Bates Clark (1899, 1907), drawing upon the marginalist framework centred on final rest states rather than on processes, argued that marginalist productivity theory provides an analytical solution to the problem of the distribution of income, since each class (landlords, capitalists or workers) receives according to the marginal productivity of the factor of production it provides.

Clark was criticised by Veblen (1908), who possessed a conception according to which capital is the result of the accumulated collective knowledge of a community, and thus cannot be imputed to a specific individual or class within the community. For Veblen, the collective knowledge accumulated by a community through time is far more important for its technological capabilities, and its very survival, than the specific material objects which are produced using such collective knowledge – see Cohen (2014) for a discussion.

For Veblen, the surplus produced by the community is also a result of this accumulated collective knowledge, and so its distribution cannot be explained by laws of marginal productivity. Rather, Veblen sees the appropriation of capital and surplus by a leisure class as a phenomenon connected to historical and institutional factors, which takes different shapes in different stages of economic evolution. Veblen's conception of capital as collective knowledge stands in stark contrast with marginalist analysis, where knowledge, as all subjective phenomena, is a property of each individual, which is revealed in market exchange through individual interaction.

The difficulties surrounding marginalist theory identified in the Cambridge controversies in the theory of capital are indeed part of a longstanding tension between marginalist supply and demand analysis on the one hand, and approaches such as the classical, Marxian, Institutionalist and post-Keynesian one, approaches where the distribution of the surplus depends upon broader institutional factors that cannot be reduced to market marginal productivities or marginal utilities to be found solely in market exchange.

5. Order without equilibrium

The changes in the conception of order that emerges after the marginal revolution spring not only from the emphasis on equilibrium rather than reproduction, but also from the fact that, in the marginalist approach, subjective preferences are the key to understanding value. As Luigi Pasinetti (1993) notes, the shift from the classical labour theory of value to the marginal utility theory of value had important implications for the conceptualisation of society. Labour can be, and often is, a social activity, that takes place within the (re)production process, in a conception where the social class is the central unit of analysis.

The notion of social order can then be easily combined with the classical economic theory, where the latter can also be used to explain how the production and distribution of the economic surplus leads to contradictions and changes in social order, as Marx does. Marx focuses on the conditions of possibility for socio-economic reproduction to take place. In so doing, he takes socio-economic structures as already pre-existing entities, which contain already a given socio-economic order that is expressed in the mode of production and the organisation of society into social classes.

In the marginalist approach, in contrast, value depends upon subjective preferences, rather than the cost of production measured in terms of human labour. But subjective preferences, in the marginalist approach, are known only by the individual. Since subjective utility, the source of value, is an irreducibly subjective notion that only each individual knows, the only way to find subjective utility is by looking at market exchange, which is the process through which subjective preferences become manifest. For this reason, Samuelson (1947) developed an approach where subjective utility is whatever becomes revealed in choice, a perspective which replaced Marshall's as the most influential neoclassical approach.

The emphasis on subjective preferences that only each individual knows (or at least is in a better position for trying to find out) leads to a theory that takes the individual as the central unit of analysis. When the human individual is the central unit of analysis, as in the schools of economic thought stemming from the marginal revolution, notions of process and order must be developed taking methodological individualism as a starting point.

Furthermore, since only the individual knows her or his subjective utility, market exchange becomes the fundamental process through which preferences become manifest. Thus, market exchange, and the prices that are formed therein, is essential for socio-economic coordination to take place. For this reason, market exchange, rather than the process of reproduction, becomes the central organising concept of economic theory.

In neoclassical economics, market prices provide essential information for the process of achieving equilibrium. But there are also attempts to explain order without resorting to the notion of equilibrium within the marginalist framework. Hayek, developing the Austrian approach following the lead of Menger, provided a conception where order is explained without reference to an equilibrium rest state defined in mathematical terms, in contrast to what marginalists other than Menger, such as Jevons, Walras or Marshall, did – see, for example, Steve Fleetwood (1996).

Hayek argues that order emerges through a process of trial and error, such as that which we find in market exchange, where prices and rules of behaviour become central for the coordination of individual activity. Hayek notes that each individual is in a better position for finding out her or his preferences than anyone else, and that the process of decentralised market exchange is the ideal vehicle for preferences to become manifest. In particular, the information concerning subjective preferences appears codified in market prices, enabling individual action to take place guided by price signals.

Human beings, having limited computational capabilities, cannot possibly coordinate the vast amount of information disperse throughout the economy, especially because much of the information cannot be codified much less processed. Socio-economic order can spontaneously emerge because this vast amount of information influences market prices, which provide signals that enable human action to take place even when there is only partial knowledge of the relevant aspects at stake. Order emerges as a result of human activity, but not of human design, and is explained in terms of the continuous process of market competition, rather than in terms of an equilibrium rest state towards which the economy and society would be tending to.

The centrality of the market to this process springs from an assumption shared by all marginalists, namely that value depends upon subjective preferences which only each individual knows (or is in a better position for finding out), and hence only becomes revealed when a market transaction takes place. It is not only prices, but also human well-being that depends on subjective utility which only each individual knows (or is in a better position for finding out). This aspect is stressed even more after Lionel

Robbins (1932) argued against the possibility of interpersonal comparisons of individual utility. Marshall, like Henry Sidgwick before him, and Arthur Cecil Pigou after him, had a conception where interpersonal comparisons of utility were possible. Pigou articulated this conception more explicitly, noting that since individuals with lower incomes have a higher marginal utility, redistribution of income from individuals with higher income towards individuals with lower income would increase overall utility.

Marshall (1890) had also gone as far as arguing, against Jevons, that economics is primarily a science of human activities, rather than a science of human wants, opening the door for a more objective study of human agency and human well-being. But the conception that prevailed is Robbins', according to which there can be no interpersonal comparisons of utility. And since the market is the only mechanism which provides information on these subjective elements, the market is essential for socio-economic order.

If we follow the classical conception, however, we reach quite different conclusions. The classical conception provides not only an objective approach to value, but also an objective approach to the study of human well-being, which has been developed more recently by Amartya Sen. Sen (1982) criticises the use of subjective utility as a measure of human well-being, or the belief that there can be no interpersonal comparisons of well-being – see Martins (2013) for a more detailed discussion. Drawing upon several classical authors like Smith and Marx, Sen develops a multidimensional (and Aristotelian) conception of human well-being, where human well-being depends upon the objective human functionings that can be achieved, which constitute the set of human capabilities. From a classical perspective, human well-being is not an irreducibly subjective phenomenon.

Nor is value an irreducibly subjective phenomenon. In the classical conception, prices tend to the cost of production, which includes the surplus. But the cost of production, and the surplus, can be objectively measured, for example in terms of the human labour that is necessary to reproduce a given commodity under the existing socio-technological conditions, or in terms of the quantity of land which is necessary to sustain production (including labourers). Even if we accept that price signals are absolutely essential for the coordination of socio-economic activity, in the classical conception we are not constrained to assuming that markets are the only institutional framework for finding out price signals. If prices can be obtained with objective data concerning costs of production, they can be found not only through market exchange, but also through other institutional processes, such as the cost accounting exercise of a company which also provides an objective basis for, for example, setting prices administratively.

6. Order within institutions

Several authors from Michal Kalecki (1971: Ch. 5) to Frederic Lee (1998) note the centrality of administrative prices for the economy, especially in the context of the emergence of large corporations. Lee (1998) identifies three most widely adopted pricing principles and resulting prices in modern capitalist economies: mark up prices, obtained by marking up normal average direct costs in order to generate a desired profit; normal cost prices, obtained by marking up average direct costs in order to cover shop expenses and enterprise expenses so as to obtain normal average total costs, and then marking up those normal average total costs in order to produce a certain amount of profit; and target rate of return prices, obtained by marking up normal average total costs so that a volume of profits leads to a specific rate of return on the business enterprise's capital assets. All the prices and costs in these three pricing procedures are measured in terms of normal output and normal capacity utilization.

The customary (or conventional) price administered by the firm and its competitors not only persists over extended periods of time but is also a central determinant of the price to be set in the following periods. This customary (or conventional) price is consistent with the objective natural price as defined in classical political economy, which is simply the ordinary or average price based on the cost of production, that persists through time and multiple transactions. This conventional price enables acting persons and organisations to form expectations, which guide the reproduction of economic activities.

It would indeed be difficult to explain the emergence and persistence of large capitalist companies and corporations, which undertake much of coordination through administrative processes that internalise their activities outside the context of market exchange, if the information necessary for socio-economic coordination could only be revealed in market exchange. As Kalecki (1987) notes, it is not only the socialist economies of the past, but also the capitalist economies (past and present), that are largely coordinated by planning. Certainly there were many important differences between the capitalist and socialist economies throughout the twentieth century, but the more substantial differences must be found elsewhere than on the reliance on administrative planning *per se*.

Even in sectors constituted by smaller firms or producers (including agriculture and extractive industries), the small firms and producers are part of a value chain where large companies set up prices for their commodities, and although prices in those sectors are often demand-determined rather than administrative prices, as Kalecki (1971: Ch. 5) notes, the mechanism of adjustment is often changes in quantities so as to conform to demand (including the destruction of what was produced) rather than changes in prices.

To be sure, market exchange certainly plays an important role in socio-economic coordination. But once we pass from a (marginalist) subjective conception of value towards a (classical) objective conception of value, we need not see the market as the only institution that can provide the necessary information about prices for socio-economic coordination. The classical framework, centred on the process of socio-economic reproduction, and assuming that prices can be objectively measured by looking at the process of (re)production, constitutes an economic theory which is compatible with various institutional frameworks, where the market is only one institution amongst many.

For this reason, Marx, drawing upon the classical perspective, was open to the possibility of various institutional arrangements, and indeed refused to give a final recipe for the design of a particular institutional arrangement which, according to Marx, would depend on the particular circumstances faced in each particular situation. Marx paid particular attention to joint-stock companies, which were at the time (and still are) key drivers of change in capitalism, not least through the internalisation of much of the coordination of economic activity within the administrative procedures of such large companies. Marx thought that this mode of functioning of large companies signalled the abandonment of capitalistic market exchange, leading to contradictions in capitalism, and contained the roots of a new mode of production – see Martins (2013: Ch. 15) for a discussion.

This leads us to the conclusion that the theory initiated by the classical authors (and developed by many others), centred on the reproduction process, provides a broader framework for the study of socio-economic order, since it does not assume that a specific socio-institutional setting such a market exchange is the only possible institutional setting for the coordination of socio-economic activities of production and distribution. If we add Sen's critique of the marginalist conception of human agency and human well-being to the analysis undertaken above, we reach the conclusion that it is not only in the fields of production and distribution, but also in the field of consumption, that we need not be limited to the results of marginalism when considering the various institutional settings in which socio-economic order may emerge.

This does not mean that the classical authors neglected the role of the market. Quite the contrary, the market played a central role in the coordination of economic activities for the classical authors. All that follows from what was argued above is that the underlying economic theory used by the classical authors is consistent with various institutional settings, as Marx saw quite clearly while drawing upon classical economic theory. Another different question is which of the various possible institutional arrangements was typically studied by the classical political economists. And while the classical authors based their analysis on the study of the (re)production process in general, market exchange is the specific institutional arrangement which they studied in more detail.

So much is it so that Smith is often credited as the foremost promoter of the market as the key for socio-economic coordination. Smith's metaphor of the "invisible hand" is often portrayed as an early account of how order emerges out of individual interaction through market exchange, which is cited approvingly by marginalist authors both of the neoclassical strand, and the Austrian strand.

But once we look at Smith's analysis, we do not find a conception where order emerges from the interaction of self-interest seekers in the context of market exchange.

Rather, Smith takes habit and custom to be central ingredients for the explanation of socio-economic order. And Smith does not simply advocate market exchange without reservations. His analysis is highly qualified by his overall theory of human agency, which is expressed in more detail in his *Theory of Moral Sentiments*. The latter book provides a central explanation of how social classes emerge and are reproduced, which can be fruitfully combined with Smith's own economic analysis that takes the social class as the central unit of analysis, as the other classical authors also did.

A theory of social order must certainly include an analysis of the human individual, which is not totally determined by social structures. And by looking at Smith's broader analysis, we find a relational conception of human individuals which enables us to achieve a more complete account of the various possibilities for institutional arrangements.

7. Moral Sentiments and Socio-Economic Order

In his *Wealth of Nations*, Smith takes social classes as existing economic categories, which help explaining the distribution of income. Income is distributed according to the social position of the individual in a society structured in terms of social classes. Smith's analysis in the *Wealth of Nations* is not very different from that of other classical authors, from Petty to Ricardo, who use social class as an economic, rather than a sociological, category. But in his *Theory of Moral Sentiments*, the book which originally established Smith's reputation as a moral philosopher, we find elements for a more detailed explanation of Smith's perspective of how social classes emerge, leading to a given socio-economic order that is permanently reproduced by the process of social interaction.

The first element for this explanation is our tendency to admire those who possess greater wealth, and to sympathise with them. Smith writes:

"When we consider the condition of the great, in those delusive colours in which the imagination is apt to paint it, it seems to be almost the abstract idea of a perfect and happy state. It is the very state which, in all our waking dreams and idle reveries, we had sketched out to ourselves as the final object of all our desires. We feel, therefore, a peculiar sympathy with the satisfaction of those who are in it. We favour all their inclinations, and forward all their wishes. What pity, we think, that any thing should spoil and corrupt so agreeable a situation! We could even wish them immortal; and it seems hard to us, that death should at last put an end to such perfect enjoyment. It is cruel, we think, in Nature to compel them from their exalted stations to that humble, but hospitable home, which she has provided for all her children. Great King, live for ever! is the compliment, which, after the manner of eastern adulation, we should readily make them, if experience did not teach us its absurdity. (Smith 2002[1759]: 63)

We must stress that by "sympathy" Smith means the ability to put ourselves in the situation of another person. Thus, when we sympathise with "the great", we are imagining ourselves in such a situation, while feeling, albeit to a lesser extent, the emotions that we imagine to be associated with such a situation. That is, we obtain pleasant thoughts through such an act of imagination, which lead us to see the situation, and thus those who actually enjoy such a situation in reality, in favourable terms. This process leads to a tendency to respect and admire "the great", and the existing social structure. It is this tendency which explains the "order of society", characterised by the existence of social classes, as Smith writes:

“Upon this disposition of mankind, to go along with all the passions of the rich and the powerful, is founded the distinction of ranks, and the order of society. Our obsequiousness to our superiors more frequently arises from our admiration for the advantages of their situation, than from any private expectations of benefit from their good-will. Their benefits can extend but to a few. But their fortunes interest almost every body.” (Smith 2002[1759]): 63-64)

For understanding this point, we must note that, for Smith, the central element for explaining human behaviour is the notion of sympathy which is, as noted above, the ability to imagine ourselves in the situation of another person. In the post-marginalist world of contemporary mainstream economics, Smith is often interpreted as the author who argues that human agency, insofar as it has economic rationality, is driven solely by self-interest (which in mainstream economics is interpreted in terms of utility optimisation, in a context where preferences are never satisfied).

But this caricature of Smith cannot withstand scrutiny: the very first paragraph of the *Theory of Moral Sentiments* stresses how sympathy, rather than selfishness, is the key element of Smith’s analysis of human activity. Quite the contrary, Smith develops an hierarchical conception of human needs, where physiological needs are easily satisfied, and where positive sympathy from others (i.e., approbation) becomes the strongest of all desires:

“Though it is in order to supply the necessities and conveniencies of the body, that the advantages of external fortune are originally recommended to us, yet we cannot live long in the world without perceiving that the respect of our equals, our credit and rank in the society we live in, depend very much upon the degree in which we possess, or are supposed to possess, those advantages. The desire of becoming the proper objects of this respect, of deserving and obtaining this credit and rank among our equals, is, perhaps, the strongest of all our desires, and our anxiety to obtain the advantages of fortune is accordingly much more excited and irritated by this desire, than by that of supplying all the necessities and conveniencies of the body, which are always very easily supplied." (Smith 2002[1759]: 249)

Furthermore, habit and custom play a central role in Smith's explanation of socio-economic reproduction, and are essential ingredients to his understanding of socio-economic order. Habit and custom enable the achievement of security, which is the most important object of prudence:

"We suffer more, it has already been observed, when we fall from a better to a worse situation, than we ever enjoy when we rise from a worse to a better. Security, therefore, is the first and the principal object of prudence. It is averse to expose our health, our fortune, our rank, or reputation, to any sort of hazard. It is rather cautious than enterprising, and more anxious to preserve the advantages which we already possess, than forward to prompt us to the acquisition of still greater advantages. The methods of improving our fortune, which it principally recommends to us, are those which expose to no loss or hazard; real knowledge and skill in our trade or profession, assiduity and industry in the exercise of it, frugality, and even some degree of parsimony, in all our expences." (Smith 2002[1759]: 249)

Here we find a summary of Smith's perspective on prudence, the virtue which, in Smith's analysis, comes closer to what is commonly imputed to him when discussing his views on self-interest pursuit.

As noted in the passage above, Smith also argues that since we "suffer more" when we "fall from a better to a worse situation, than we ever enjoy when we rise from a worse to a better", then security "is the first and the principal object of prudence." This explains why there is a tendency to maintain and respect a given social structure through habit and custom, especially given the fact that, for Smith, the desire of becoming the proper objects of respect of others, while deserving and obtaining "credit and rank among our equals", is "the strongest of all our desires". The tendency to admire "the great", together with the anxiety generated by the fear of losing the security we presently enjoy, leads to the maintenance of a given social structure, a given socio-economic order. Thus, society will tolerate situations of unequal distribution of the surplus due to a preference for security, order, and a tendency to admire "the great".

The notes above give us a rough guidance for the institutional frameworks in which production and distribution may take place, maintaining the process of reproduction of a given socio-economic order. The desire to obtain "credit and rank among our equals", the strongest of all desires, appears in various institutional configurations, be it the internal structure of an organisation, or a market. Under more threatening environments, the desire for security increases. But, Smith explains, justice is the most essential element for the maintenance of the social order, and society cannot survive if justice does not exist. Thus Smith writes:

"Beneficence ... is less essential to the existence of society than justice. Society may subsist, though not in the most comfortable state, without beneficience; but the prevalence of injustice must utterly destroy it... [Beneficence] is the ornament which embellishes, not the foundation which supports the building, and which is, therefore, sufficient to recommend, but by no means necessary to impose. Justice, on the contrary, is the main pillar that upholds the whole edifice." (Smith 2002[1759]: 101)

Smith's analysis provides the elements for an explanation of the emergence of social order, which provided the underlying vision upon which the analysis of the *Wealth of Nations* is subsequently undertaken.

Smith's analysis of human agency is one in which human agency, including human reasoning, is supported by underlying moral sentiments, which are in turn shaped by an underlying social situation. In fact, Smith (1790[2002]: 15) writes that "Sympathy, therefore, does not arise so much from the view of the passion, as from that of the situation which excites it." By placing sympathy as the central human capability that structures his thought, Smith develops a conception of a relational human being who is influenced by the underlying social situation which shapes moral sentiments, habit and custom.

We find then that Smith, who is often seen as the classical author who would more easily conform into methodological individualism, possesses a conception of human agency that can actually be used to explain the emergence and reproduction of the socio-economic order characterised by social classes that is presupposed in classical political economy, and developed more explicitly by Marx. The classical explanation of socio-economic reproduction, which depends upon habit and custom, is a more general framework which can be applied to the study of market exchange, and to the study of other institutional arrangements too.

8. Concluding remarks

The classical authors focused on the reproduction of the economic process, and took a view of socio-economic order centred on the division of labour that takes place in production, and in society in general, in a context where habit and custom are essential to understanding socio-economic reproduction. This view was further developed by Marx, who maintained the classical emphasis on an objective conception of value, and an objective conception of human well-being.

After the marginal revolution, the classical conception of value, which for the classical authors was explained in terms of objective cost of production (including the surplus), is abandoned, and prices start to be explained in terms of marginal utility and marginal cost (where costs now include subjective elements such as abstinence and sacrifice). The marginalist theory of value leads to the need of focusing on marginal changes while assuming everything else to remain constant, so that marginal value can be found.

Such a need brings, in turn, several inconsistencies in the marginalist framework, since reality is a process of permanent change of an interconnected whole, where a marginal change that leaves everything else constant rarely happens, and its effects are also difficult to imagine. As Sraffa argues when criticising the marginalist framework, in a reality which is a process of continuous change, the best method consists in looking at the conditions of possibility for the reproduction of socio-economic activity at a given moment in time. In the classical framework recovered by Sraffa, the prices which enable the coordination of economic activity are the prices which are consistent with the continuous reproduction of the economic system as a whole. There is no need of positing marginal changes in order to find those prices.

Furthermore, the prices which enable the continuous reproduction of the economic system as a whole can also be found looking at objective data, as Sraffa (1960) shows. In the marginalist framework, value depends upon subjective preferences which are known only to each individual, and thus can only be found when they are revealed in market exchange. Since those prices are, in turn, seen as essential for the coordination of economic activity, the market takes centre stage as the fundamental institution in the explanation of socio-economic order.

But if we accept that prices can be found by looking at the process of (re)production, which is indeed a more realistic view if we look at a variety of institutions which undertake pricing procedures taking the cost of production into account, we find that there can be a variety of institutional arrangements that enable the process of reproduction under a given socio-economic order.

To be sure, the classical authors studied market exchange in much detail. But the economic theory they used to study prices and quantities can be applied to various institutional and historical contexts, from the medieval market to contemporary transnational corporations. And Smith's explanation of human behaviour in terms of habit and custom provides also the tools for explaining socio-economic order in various contexts other than market exchange.

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