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The Rationality Principle and Classical Economics

by
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It is frequently repeated that the rationality principle is the fundamental principle of economics and it is so much so that the same principle is equivalently designated as the «economic principle»[1]. However, it is often the doom of fundamental principles that they are so intimately associated with the science itself that those who practice this science rarely take notice of their presence and of their role. Consequently, it is not surprising not to find any entry for "rationality" or for "rationality principle" in virtually any treaties on economy. If rational behaviour is the object of economics like living organism is the object of biology, specific references could hardly be expected in either of these sciences to what is nothing but the affirmation of the very existence of their subject matter.

It is a bit more surprising however to discover so little about this principle in books on the history of economic thought. If the rationality principle is really the fundamental principle of economics, it would be interesting to point out *when* this principle started to play this fundamental role in this science. It is clear that such a principle did not play any role in Aristotelian economics nor in medieval economics and its role was apparently very limited in mercantilism. So the question «when did it start to play such a decisive role?» seems to be a relevant one. Even though it would be difficult to find a specific answer to this question by economists, it seems highly probable that if a precise moment had to be designated, the more usual answer would be that it is with the marginalist revolution that this principle started to play such a role. After all, marginalist microeconomics was based on a systematic analysis of rational choice. As said by Dan Hausman in the first sentence of the first chapter of his last book: "Microeconomics portrays individual agents as choosing rationally" (Hausman, 1992, p. 13). No doubt that this is absolutely true, but what about classical economics which can hardly be characterised as microeconomics? Did classical economics also portray individual agents as choosing rationally? If the rationality principle is really the fundamental principle of economics in general, should not classical economics have been also guided by it? Is this manifested in their works and if it is, to what extent?

The Rationality Principle...

It is such questions that I would like to clarify with the present paper. But first what do we mean exactly by the rationality principle? It is the principle according to which people act rationally in the sense that they tend to adopt means which, according to them, are oriented towards the satisfaction of their goals. This principle postulates that people are rational or, more modestly, it supposes that people are not stupid. If people have any goals, why should we think that they are stupid enough to refrain taking means which, according to them, are oriented towards the satisfaction of these goals? Construed in such a general way, it seems that any analyst of economic questions since Aristotle would have agreed with it. It is clear indeed that Aristotle depicted his head of families as people who managed to adopt means that tended to provide the sane life they wanted for their family. But the question is not whether the analyst agrees that people behave in such a way, but whether the acknowledgement of this fact played the decisive role of a fundamental principle in economist's analysis. Once the question is put this way, it is clear that it was not the case with Aristotle. Ethical considerations were decisive for him when it comes to propose some thesis about the proper amount of goods to be exchanged, whereas for the followers of Jevons or Walras it was the very fact that people manage to get the most they can from any transactions which allowed economists to develop their theses about what is going on in economic world. Jevons, for example, in his preliminary philosophical considerations claims that various economic laws can be deduced from a few basic "axioms" among which the first is that "every person will choose the greater apparent good" (1957, p. 18). Walras, for his part, when it comes to analyse the cause and not only the characters of exchanges, is forced to «suppose» that exchangers «proceed to exchange in such a way that the largest total sum of possible needs are satisfied» (1952, p. 77, my translation). Menger, whatever his differences with Jevons and Walras, based his analysis on a quite similar principle. For example, he concludes the first step of his chapter on exchange by noting that the "principle that leads men to exchange is the same principle that guides them in their economic activity as a whole; it is the endeavour to ensure the fullest possible satisfaction of their needs." (1976, p. 180). It is true that these early formulations of the rationality principle are a bit fluctuating: reference is made either to choice or to action which is oriented either towards a greater good or towards a maximal satisfaction of needs and the use of proper means is not always explicit, but what is important is the fact that the principle is explicitly formulated as the key which allows to draw conclusions about the economic phenomenon to be explained. Given this principle, the economist can safely conclude that the exchangers will do so and so and that the consequence on prices will be such and such.

In this context, what can be said about the classical economists? Are they, like Aristotle and those mercantilists who contented themselves with making political recommendations to their government, just in tacit agreement with this relatively evident principle or are they, like the marginalist economists, deriving their analysis from such a principle in such a way that their conclusions have to hold or fall with it? While it is difficult to find by the classical economists such explicit acknowledgement of the crucial role of the rationality principle[2], my claim is that it is the second answer which is correct. An easy way to vindicate this view would be to refer to John Stuart Mill's famous passage where an economic man is described as "a being who desires to possess wealth, and who is capable of judging of the comparative efficiency of means for obtaining that end" (1948, p. 137) This formulation is very evocative of the rationality principle and it is even a brilliant anticipation of the foundations of a microeconomic analysis which, through Cairnes, was to find its way up to Robbins to become the standard epistemological justification of marginalist microeconomics. It is doubtful however that Mill's analysis could be presented as a typical characterisation of Smith and Ricardo's type of analysis which do not refer explicitly to such an economic man nor to his typical behaviour. However, even though it would be difficult to find in Smith and Ricardo's works such quasi explicit formulations of the rationality principle, I claim that the most representative conclusions of these economists rest on a systematic application of the rationality principle and that these conclusions would not be possible otherwise. It seems fair to say that the systematic application of this principle predates the so-called marginalist revolution by at least a century. More precisely, this principle started to play a crucial role when, in the second half of the XVIIIth century, economic theory ceased to be a branch of ethics (as it was with Aristotle and Aquinas) or a manifestation of political wisdom (as it was generally the case with the mercantilists) and became an *explanative* science.

...and the Classical Economists

Let us consider, for example, the argumentation of Turgot who, no later than 1766, established that what he called a "current price" *has* to prevail on a market (and not simply *should* prevail, as earlier "just price" theorists would have said): "If one of the wine sellers were offering only four quarts for a bushel, the owner of the wheat will not give it to this wine seller if he knows that another will give him six or eight quarts for the same bushel" (1970, p. 141, my translation). This sentence is not, like those of Jevons, Walras and Menger quoted above, the enunciation of a general principle presented as the source of any further development, but it nonetheless contains, in a nutshell, the central intuition on which all future price theories were based and this central intuition was nothing but the rationality principle. The point for Turgot was simply that people are rational in the sense that they are not stupid; consequently it was legitimate to presume that, once informed, they prefer to get more wine rather than less and that they will take the proper means (or, in the present case, they will make the proper deal) to obtain what they prefer.

It is true that Turgot implicitly referred to a theory of value which was somewhat closer to the marginalist utility theory of value than was the labour (or production cost) theory of value which more typically classical economists like Smith and Ricardo were committed to. This fact, however, does not imply that Smith and Ricardo's respective theories owe nothing to the rationality principle. On the contrary, look at how Smith explains why market prices will tend to oscillate around what he called a "natural price" (Smith, 1937, book I, ch. 7). In this theory, the rationality principle is, in a certain sense, literally implied by the very idea of a *natural price* which was defined as the price which is just sufficient to bring to the market the quantity of commodities required to satisfy the demand. Indeed, if he did not suppose that producers are rational fellows, how could Smith be so sure that a higher price would be operative in convincing some producers to produce more commodities and to bring more of them to the market? The role of the rationality principle is even clearer when we consider the way Smith argues that the market price tends to be brought in line with the natural price. Indeed, he explains that in the event of a supply of a commodity in excess of its demand the market price of this commodity would be below its natural price and that, consequently, either rents, wages or profits in this sector would be below their natural rates. Such a situation, according to

Smith, would impel landowners, workers or employers to draw part of their resources away from this market. But how could Smith be so sure that they would react in such a way if it is not because he postulates that people are not stupid enough to keep renting, working or investing if they are not paid an amount which is sufficient to convince them to stay in such an activity? And how could Smith know that such a withdrawal would cease as soon as the price went back to a satisfactory level if it is not because he postulates that people are not stupid enough to indefinitely keep divesting in an activity whose returns become more and more interesting? And how could he know that this withdrawal movement would produce this happy effect for the producers if it is not because he postulates that consumers are not stupid enough to stubbornly refuse paying a slightly higher but still reasonable price when they see that otherwise they can no longer find a sufficient amount of the commodity they need.

Had I chosen the example of Ricardo's economics, it would have been still easier to illustrate this point. Let us take his famous rent theory as an example: how could Ricardo be so sure that the farmers exploiting land of a higher quality would freely accept to pay a rent to their landowner if not because he postulates that these farmers are not stupid enough to take trouble to move to land of such a lower quality that their net profit would not be higher than the profit they presently obtain even after paying the required rent? Similarly, the elegant Ricardian demonstrations of the limitations of the labour theory of value and of the comparative advantages in international trade (respectively in chapters I and VII of Ricardo, 1951) rest on the idea that people are rational. In the first case, it is implied that people are not stupid enough to keep producing in an industry whose rate of profit would fall below the rate offered by another one employing less capital proportionally. In the second case, it is implied that traders are not stupid enough to keep producing themselves a good that they can trade with another good that they can produce at a smaller cost.

Even the Marxian capitalists' compulsion to "increase their relative surplus value" according to a "law" of capitalism could not be understood if it was not postulated by Marx that these capitalists are rational enough to manage to be in position to cut their prices and to take away from their competitors a greater and greater share of a strictly limited market in order to maximise their profit. And when Marx revisits Ricardian analysis, as he did in his transformation theory[3], the role of the rationality principle is still crucial in explaining why prices will diverge from values. Marx's argument indeed implies (just as Ricardo's one) that capitalists are not stupid enough to keep investing in an industry where the rate of profit does not compare with the rate prevailing in other industries.

Classical vs marginalist economists

My point is not that Smith, Ricardo and Marx' theories are *explicitly* based on the rationality principle. I am not saying — that would be absurd — that they have systematically *analysed* the functioning of what is going on in the mind of landowners, workers, capitalists and consumers. This type of analysis was not systematically developed before the marginalists. My point is that their totally different type of theory — which essentially concern the distribution of production's surplus between classes rather than between individuals, *postulated* such a principle as a fundamental and necessary condition of their argument. But if it is legitimate to characterise the contribution of classical economists in such a way, what was revolutionary about the so-called marginalist revolution? The answer is surely that marginalist economists required much more from the rationality principle. They were not content, as were the classical economists, with invoking rationality as a general principle which permits us to understand the working of the mechanism responsible for the fact that the price level (or the level of any other economic variable) is determinate without being fixed by anybody.

They were directly interested in the economic agents' rational decisions themselves because they were convinced that it was only through such an investigation that they could understand the formation of value and have a correct idea of the price levels. Since the classical economists, for their part, claimed that value was explained only by costs of production, such an inquiry had no particular interest for them.

Furthermore, to have a precise idea of the decisions taken by economic agents implies that rationality is not seen as a simple disposition to adopt means which are supposed to be oriented towards the satisfaction of some goals; it rather must be seen as the propensity and capacity to *actually* maximise the level of an economic variable. Indeed, it is possible, at least in principle, for an economist, to determine what should be such an efficient economic action, but it is not possible to determine what would be the action resulting from the uncertain and possibly erratic decision of someone who is simply disposed to adopt means oriented towards the satisfaction of some goal. In other words, Jevons and Walras' conception of rationality presupposes that economic agents are both well informed and perfectly efficient when managing, as they systematically do, to satisfy univocal economic goals. With them, the rationality principle is turned into a full-fledged principle of effective maximisation of a very specific goal like revenue or profit.

Moreover, the determination of the result of such actions with the help of the rationality principle understood this way presupposes that these actions converge on a relatively stable point. In other words, it presupposes an equilibrium. But the existence of such a stable equilibrium, still more that the efficiency of the maximising agents, implies that the agents are not only well informed but that they are virtually omniscient. At least, they must be perfectly informed of all the variables which can affect their maximising decisions. Alternatively, to avoid providing these agents with complete omniscience, Walras introduced an auctioneer whose function was to indefectibly conduct the agents to take their decisions at the most appropriate time. Classical economics like Smith and Ricardo relied on a rationality principle as we have seen, but they never suppose that rational agents were infallible and omniscient maximisers. They never supposed such a thing because they were not really interested by the determination of an equilibrium point. As we have seen, they were rather interested by the mechanisms which explain the distribution of economic surplus between the different classes, but while such an interest did not imply that every agent behaves as a strict maximiser in such a way that a stable and determinable equilibrium become plausible, it nonetheless implies that agents tend to act in a rational way.

Actually, not all marginalist economists were committed to a strictly maximising conception of rationality. It is clear that Carl Menger was much more sceptical about such a view than his two marginalist colleagues. Menger took too seriously the *subjective* character of economic choices for not being very sensible to the fact that needs and goals cannot be reduced to a unique economic variable and that the determination of proper means are frequently subject to error due to "defective knowledge" (1976, p. 148). Consequently, he was not, like Jevons and Walras, attracted by the virtue of calculus for determining maxima and equilibria. With the development of Austrian and Neo-classical schools, this divergence was more and more accentuated in such a way that the rationality principle itself became interpreted very differently by the main members of these two schools. In consequence of that, we are face today with two quite different versions of the rationality principle which are referred to by the same name in economic literature. To distinguish them, it will be helpful to refer respectively to "rationality-efficiency" and to "rationality-purposefulness". On the one hand, when a neo-classical economist considers an action rational if and only if it *actually maximises* a positively valued magnitude like utility or profit, this economist is referring to what I call rationality-efficiency. Pushed to its limit, this principle implies omniscience by the agents of all relevant variables and parameters since otherwise the efficiency of the rational decision is not warranted. On the other hand, when an Austrian economist considers an action rational if and only if it is oriented towards the satisfaction of the *agent's purpose*, this economist is referring to what I call rationality-purposefulness. Far from suggesting than the agents are omniscient, this last view tends to underscore the extension of ignorance and of error in human decisions as illustrated by many of Hayek and Lachmann's interventions on these questions. However, this does not reduce the importance of the rationality principle since, according to this view, what makes the rationality of an action is not its efficiency in maximally reaching a goal, it is the very fact of its orientation towards a goal, or, if we prefer, its purposefulness. Pushed to the limit as it is with Mises, this conception of rationality implies that any action whatsoever is rational since any action is purposeful if it is really an action.

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If I have briefly evoked this fundamental ambiguity of the notion of rationality and the kind of tension it generates, it was to illustrate the fact that with the classical economists this tension could not really arise. For Smith and Ricardo's theories, nothing more was required concerning economic agents' rationality than postulating that we may expect that, on the average and after some adjustments, they will manage to take care of their economic interest. Since these economists had not to derive any conclusion about the value of commodities by determining through exact calculation the level of an equilibrium, they had not, when it comes to determining this equilibrium, to enter into the debate on the relevance of postulating that economic agents, thanks to a perfect knowledge, are efficient enough to take regularly optimal decisions. It sounds reasonable to think that it might be essentially for this deceiving reason that we might still be hesitating to acknowledge that the economic analysis which has been developed by the classical economists would have not been possible had they not got grasped the idea, virtually unexploited until mid XVIIIth century, of founding their main conclusions on the rationality principle.

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[1] According to Fritz Machlup (1955, p. 16), “various names have been suggested for the fundamental postulates of economic theory: ‘economic principle,’ ‘maximisation principle,’ ‘assumption of rationality,’ ‘law of motivation,’ and others”.

[2] The only examples of such acknowledgement of this role that I know were kindly pointed out to me by William Coleman (University of Tasmania). The first one is a rather timid psycho-sociological observation by Smith referring to the prudence of those who would refrain from considerably increasing expenses in the absence of a parallel increase in revenue: "though the principles of common prudence do not always govern the conduct of every individual, they always influence that of the majority of every class or order" (Smith, 1937, p. 279). This passage was quoted in Coleman, 1995, p. 126 which, incidentally, is a nuanced assessment of the classical economists' perception of rationality. The second one, which can be found in a letter from Ricardo to Malthus, can be interpreted as implying that most economic propositions must postulate that people are not ignorant of their best interest: "It would be no answer to me to say that men were ignorant of the best and cheapest mode of conducting their business and paying their debts, because that is a question of fact not of science, and might be urged against almost every proposition in Political Economy" (Ricardo, 1952, vol VI, p. 64, quoted by Coleman in the review of another book).

[3] Marx, K., *The Capital*, Book III, sections I & II.

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