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HAS HAYEK REFUTED MARKET SOCIALISM?

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ABSTRACT

What is typical of Hayek's challenge concerning socialism is that he always maintained that this question was for economic theory to decide. Sketching the historical background of what has come to be known as the "socialist calculation debate" (section 1), I try to link this debate with the Menger-Wieser *Zurechnungsproblem* and show that the Pareto-Barone approach has determined the theoretical form of this economic controversy. I then go on to explore Hayek's 'inapplicability' argument (section 2) and try to show how it is related to Mises' 'logical impossibility' argument. This is followed by an examination of Hayek's second argument (section 3), which I refer to as 'the evolutionary argument'. I display what is the specific gist of this argument and connect it tightly to the first one. I then discuss certain methodological issues (section 4) pertaining to the allegedly radical difference between Mises' arguments and Hayek's tentative refutation of socialism. Here I challenge the received view that Mises based his case on the 'impossibility *in principle*' of socialism, whereas Hayek's own position was to challenge the 'possibility *in practice*' of a centrally planned economy. This reading (especially by Willem Keizer) of Hayek's contribution to the debate seems to me misguided and unwarranted. I attempt to propose, on the contrary, that both lines of reasoning involve the same kind of arguments since both of them should be interpreted as impossibility theorems. Finally (section 5) I try to give an appropriate and adequate answer to the question raised in the title of this paper.

Hayek was indissolubly both an economist *and* a philosopher. Yet he was no moralist: Hayek considered political economy as a *bona fide* scientific enterprise. But, for him, this enterprise would bear fruit only if adequate attention was given to epistemological issues and methodological analyses. This does not mean that the distinction between science and philosophy loses its meaning in the Hayekian canon. It simply means that some of the most important questions in economic theory have, for Hayek, dimensions that are *both* scientific *and* philosophical. Hayek's contributions to economic theory and economic philosophy form a unity once one systematically interprets Hayek's as anchored on a central, if not unique, project: articulating a *refutation of socialism*. It is no exaggeration to say that the rationale of the whole of Hayek's intellectual activity – his theory of prices, of capital, of commercial cycles, his work on legal theory, his neurophysiological psychology, the history of economic thought, his astute anthropological analyses, his work in evolutionary biology, in sociology, political science and demography – these all bear the stamp, directly or indirectly, of different dimensions of the same overlying preoccupation: to prove or establish that socialism was a mistake. For Hayek, the critique of socialism is the common denominator that allows him to create a convergence between different avenues of research which otherwise would have led to disparate ends. In the intellectual life of Hayek, there was the equivalent of an obsession with socialism. But was it an ideologist's obsession? I intend to present the argument that it wasn't and that, for Hayek, the critique of socialism was unquestionably the central and most pressing task in the whole field of political economy *insofar as this discipline can be considered as an genuine science*. It was not Hayek who initiated this debate, however. He had inherited it from Mises and then relaunched it on new terms. But to understand the real stakes of the debate that Hayek inherited, we have to go back further than to Mises, as I will now try to show in the first section of this paper. I will afterwards come to grips with Hayek twofold argument, then raise some methodological issues concerning those arguments and finally in closing try to answer "the" question that gives its title to this paper.

1.- Historical background

How has the question of socialism been raised from the start in the course of the history of economic ideas, and especially during the 19th and the 20th centuries? It is a mistake to think that, in looking at the Austrian tradition in particular, this question only surfaced in the debate on

the socialist calculation initiated by Mises in the early 1920s¹. We would get a much better idea of the situation if we were to recall that the confrontation between socialism and capitalism goes back at least as far as Böhm-Bawerk (1896)² et Bortkiewicz' critique of Marx. We also need to recall, as Alain Béraud has rightly pointed out (Béraud, 2000), that “(B)ehind the reference to a common terminology and to specific principles of which the most striking is the rejection of mathematical economics, the Austrian School was, from its beginnings, characterised by the diversity of its approaches and by profound ideological divergences” (Béraud 2000: 297) It is not without importance in this context to recognise that Wieser also rejected the liberalism espoused by Menger and Böhm-Bawerk. In his best-known work, *Der Natürliche Wert* (1889), Wieser studied the determinants of value in a communist-type economy in which private property did not exist and where prices reflected a social evaluation on the value of goods. His anti-liberalist bias was also evident in *Theorie der Gesellschaftlichen Wirtschaft* (1914), in which he attempted a reconciliation with the German Historicists. In this work, Wieser wrote that “The State, as an expression of the common will, has to take every measure necessary to protect the collective interest against ‘the despotic powers of capitalism’”.

As a matter of fact, the economics of socialism was, from the start, closely associated with the ‘imputation’ problem (that Wieser had called ‘*Zurechnung*’ – hence the phrase ‘the *Zurechnungsproblem*’ by which this technical question later came to be known in economic theory). We have to recall that this was a central issue firstly for Menger himself and certainly subsequently for all in the Austrian School. Indeed Menger wrote in the *Grundzüge* that the consumers’ valuations ‘impute’ value to commodities that are produced, these being the means by which their needs can be satisfied. And since producers’ goods are only means to the production and sale of consumer goods, the values of the factors of production will in turn be determined by and equal to the anticipated value consumers assign to the goods that they consume. “In short”, writes Rothbard, “values are ‘imputed’ back to the prices of the factors of production; the rents of Champagne land are high because the consumers value the champagne

¹ Detailed narrations of the socialist calculation debate can be found in Vaughn (1980), Lavoie (1985), Kirzner (1988), Caldwell (1988) and Keizer (1994). But they all begin their story with Mises.

² Eugen von Böhm-Bawerk, “Zum Abschluss des Marxschen Systems” in *Staatwissenschaftliche Arbeiten: Festgaben für Karl Knies*, ed. Otto von Boenigk (Berlin: Haering, 1896). Trad.: *Karl Marx and the Close of His System* (London: Fisher Unwin, 1898); reprinted in *Karl Marx and the Close of His System and Böhm-Bawerk's Criticism of Marx*, ed. Paul Sweezy (New York: Kelly, 1949; reprint., 1975).

highly, and not the other way round. ‘Costs’ of resources are reflections of the value of products foregone” (Rothbard: 738) - which means that all costs are opportunity costs. For Rothbard, Wieser’s *Zurechnungsproblem* became most relevant during the well-known debate over the Mises-Hayek demonstration that socialist governments cannot calculate economically. He adds that it was Joseph Schumpeter that brusquely dismissed this contention with the statement that economic calculation under socialism follows from the elementary proposition that consumers in evaluating (“demanding”) consumer’s goods *ipso facto* also evaluate the means of production which enter into the production of these goods” (Schumpeter, 1942, p. 175). As Rothbard aptly remarks, “Hayek’s perceptive reply points out that the ‘*ipso facto*’ assumes complete knowledge of values, demands, scarcities, etc. to be ‘given’ to everyone, thereby ignoring the reality of the universal lack of complete knowledge, as well as the necessary function of the market economy, and the market price system, in conveying knowledge to all its participants (Hayek, 1945)” (Rothbard 1998: 739). I will follow this line of reasoning as I do think that, from the Menger-Wieser *Zurechnungsproblem* to Hayek’s “computational argument” against socialism, there is a link to be made.

But there is obviously no question that it was Mises and not only Hayek who made the most important contributions to this debate. We have to recall, however, that the debate in which they played such an important role occurred at two points in time, explaining why they had to follow two different strategies of argumentation. But it needs to be stress that this unique debate was defined within a context in which the epistemological and methodological parameters were set up first of all by Pareto and Barone. Vilfredo Pareto wrote as an economist in the framework of pure economics and raised the problem in purely analytical terms, which led him to treat socialism as a “pure type of economic organisation” (Steiner 1999: 171)³. Enrico Barone followed Pareto’s ideas and developed them further in 1908⁴. Pareto and Barone have demonstrated the formal equivalence between the optimal allocation of resources in the socialist economic system and the equilibrium in the perfectly competitive market economy. In both cases,

³ Vilfredo Pareto *Cours d’Economie Politique*, vol. 2 (Lausanne: Librairie de l’Université, 1897), pp. 364 and follow. pages.

⁴ Enrico Barone, “Il Ministro della Produzione nello Stato Collettivista”, *Giornale degli Economisti*, vol. 37, September/October 1908, pp. 267-293, 391-414. V. Appendix A in Hayek, ed., (1935). This article became important in the debate when Dickinson referred to it (v. Dickinson, 1933).

the solution is to be found in the system of simultaneous equations defined by Walrasian-type general equilibrium. In other words, this theorem proves the existence of a general equilibrium in socialist regimes if the planning authorities have at their disposal all the relevant information and if, based on this information, they satisfy the conditions of equilibrium.

But to follow the debate further on, it is obviously crucial to know precisely what meaning is given to the term “socialism”. Coined by Leroux in 1831, “socialism” is, on the conceptual level, a hazy notion, a “cluster concept”, a reality which cannot be defined by a complete list of necessary and sufficient conditions since it refers in reality to a number of different ideas interrelated by “family relationships”. These can be characterised or defined in various ways. “Capitalism” is likewise a concept requiring definition, raising the same kinds of problems. Marx, for example, characterised the mode of production in capitalist society by the six following specific traits: private ownership, market, exchange, competition, wages and labour relations. Given what we have just indicated, it is worth noting that what is being questioned in the debate on socialism is, in its broadest sense, the legitimacy – an ethical-political problem – and the appropriateness - a theoretical problem – for intervention by the State in the economy. It is this theoretical problem of appropriateness from the point of view of economic theory which we focus on in our next section. The other problem will be discussed in the following one.

But, before going on with this double analysis, I would like to insist that the question of the appropriateness of what Hayek referred to as socio-economic “statism” is, in its simplest form, reduced to the theoretical debate led by Mises and Hayek, since appropriateness is, in reality, reduced to economic *efficiency*⁵. This means that even if we were to concede that Hayek’s demonstration was relatively convincing in this context, we could not therefore conclude that the question of efficiency – of productive capability – would constitute the only question relevant to be discussed in economic theory in order to evaluate the comparative advantages of socialism and capitalism. The debate on the socialist calculation therefore presupposes a semantic reductionism which isn’t obvious: socialism is only defined in this

⁵ Indeed the question of socialism was formulated from the start as a question concerning the « efficiency » of an economic regime in which private ownership of the means of production would not be permitted and within which, for that matter, every economic decision would be taken by what Lange called a « Central Planning Board ». This way of asking the question was by no means limited to Austrian thinkers. Indeed if Mises and Hayek have argued that efficient resource allocation is impossible under socialism, later on Friedman and many others showed themselves to be of the same opinion.

debate as an economic system characterised by the abolition of the means of production as private property. This conceptual reductionism, which set the stage in a very specific way for how the whole question would later be formally analysed within the General Equilibrium Theory, was essentially attributable to Pareto⁶.

Given this historical back-drop, I propose to re-examine Hayek's contentions, focusing more specifically on the strictly methodological dimensions of Hayek's anti-socialist doctrine. It is widely recognised that the Hayek's reflections were a continuation of Mises' work on the socialist calculation (Mises, 1920). The departure-point of Hayek's reasoning can be found in the work he edited in 1935 to put on record the background and the current status of the debate as he saw it himself at that time. Before rearticulating Hayek's reasoning schematically in order to bring out its methodological dimensions, two comments should be made to provide a perspective on the Hayekian approach to the question of socialism. First, we should mention that Hayek did not in any way approach socialism as a regime that had either been attained or that was in the process of being constructed. Certainly, he reflected on what had actually happened since the Bolshevik revolution in Russia, the concrete forms the Soviet-style economy took until the fall of the Berlin Wall in 1989 and the 1992 implosion of the USSR. Hence the question: What kind of socialism was Hayek considering in his critique? Hayek do not participate in this debate as an observer of the socio-political scene or as an analyst of economic conditions emerging in the 20th century – any more than Mises had done so before him. For Hayek, it would have been inconceivable to compare the socialist regime foreseen by the socialist theoreticians (an ideal type) with the capitalist regime as it could be observed empirically (a concrete and specific phenomenon). Neither would it have been methodologically appropriate to compare capitalism as an ideal type with socialism as it has been applied in the country of the Soviets or elsewhere on the planet. To avoid falling into this trap, two alternative ideal types, two *theoretical models*, needed to be posited: capitalism as represented by the economic theory of liberalism *versus* socialism as the partisans of the planned economy conceived it.

⁶ This perspective still today sets the terms of reference of the whole discussion around market socialism, by, among others, such advocates of market socialism as Bardan, Roemer, Stiglitz and Van Parijs. In this regard, what Nove wrote is paradigmatic : « Let us provisionally accept the following as a definition of socialism : a society may be seen to be a socialist one if the major part of the means of production of goods and services are not in private hands, but are in some sense socially owned and operated, by state, socialized or cooperative enterprises » (Nove 1987: 398).

Secondly, one has to recognise that, for Hayek, the question of socialism is one to be raised and answered by the *science* of economics. By this I do not want to assert that Hayek was unaware of the political-ethical motive of this debate or also of its ideological or philosophical dimensions. Yet, for Hayek, it was essential that the debate be formulated in terms of economic theory and that it could, if necessary, be broached by appealing to purely scientific terms. In this context, we must remember that Marx himself (in contrast, for example, to the socialist utopians like Saint-Simon, Proudhon and especially Fourier - see Kolakowski 1981 for a detailed analysis of these thinkers) never provided any specifics about the day-to-day functioning of the socialist society, of the State or of the economy, for that matter. Indeed the question of socialism in practice, its concrete “feasibility”, is nowhere discussed by Marx. But it needs to be said that Marx spoke of socialism in scientific terms : it is a matter of fact that he wrote about “ scientific socialism ” as opposed to “ utopian socialism ”. Marx himself, in a sense, was setting the terms of the debate at an abstract, general and theoretical level: he was himself raising a question that he thought ought to be studied *scientifically* by economic theory.

Mises himself adopted the theoretical perspective, attempting to prove on logical grounds the impossibility of undertaking a rational economic calculus without starting out with market prices for first order and for capital goods, in other words without the means of production being private property. The socialist counterargument was also framed in the very same terms: Lange, Lerner and Dickinson thought they had “proved” that, if one takes as granted the formalism of the General Equilibrium Theory, the demonstration could then be made, apparently straightforwardly, that the centralised allocation of resources is “logically possible”, contrary to what Mises wrote – or, more precisely, contrary to what was thought to be the gist of Mises’s argument against socialism⁷. It is generally recognised that Hayek’s viewpoint in that particular debate differed significantly from Mises’s own angle. Before addressing the question of whether Hayek “deviates” from Mises’s point of view, as it has been said, I will sketch as accurately as possible Hayek’s line of reasoning, which is twofold. This is why I will now distinguish sharply

⁷ Nowadays, of course, socialists are somewhat more cautious in their conclusions. For instance, Nove writes that even if the socialist question had been answered « at the formal level » by Lange, Lerner, Dickinson, “(...) there were and are major practical obstacles in realizing their socialist models, which are anchored (as are so many of the neoclassicals’) in static equilibrium assumptions, and it is unclear why either the central planning board or the managers in Lange’s model should act out their parts in the prescribed manner” (Nove 1987: 407).

Hayek's pure economic argument and Hayek's more philosophical argument but also show how they link up together. Afterwards, and before asking myself whether Hayek has been successful in refuting socialism, I will raise some methodological issues concerning Hayek's innovative approach to the question.

2.- Hayek's 'impracticability' argument

In a centrally planned socialist economy, where private ownership of the means of production has been abolished⁸, there is no market for production and capital goods – and if there is no market, then there are no real economic prices, for this kind of pricing can only be fixed within an economy based on economic exchange. As a logical consequence of this, it can be said that rational economic decisions are not possible, for such rational decisions about production can only be based on the consideration of all available options and all situational constraints, and, therefore on the calculation of opportunity costs. But what was this part of the debate really about? There has been an important historical debate over this issue because this argument, first articulated by Mises, was criticised and rejected by economists such as Oskar Lange (1936) et Henry Dickinson (1933), who found that “market socialism” was a possibility (and a real one, at least for the consumption process) and that market socialism was effectively resolving the legitimate problem raised by Mises. Instead of having markets fixing the prices, it was considered that the market process could be *simulated* in order to identify “accounting” (ie, book-keeping) prices. This simulation would be done, following Dickinson, by using General Equilibrium Theory. The technical work to be done here would involve only the calculation of an algebraic solution to the problem of a complicated system of simultaneous equations. This would insure that supply would match demand in all markets, but also that prices would be the same as average marginal costs. This gave rise to the “computation problem”⁹. Robbins (1932) and Hayek (1935b) argued that a precise economic calculus of this kind was in fact

⁸ As said earlier, this is the standard definition which both Mises and Hayek are using. Most but not all the socialist models which Hayek analysed retain two other crucial traits: “freedom of choice in consumption and continued freedom of the choice of occupation” (Hayek, 1935a: 63).

⁹ Lavoie thinks that we should only speak here of a ‘calculation’ problem, not of a ‘computation’ problem. For Hayek, Pareto had established once and for all that the use of a system of simultaneous equations to explain price determination in a market would never make a “numerical calculation of prices” (Hayek, 1940: 117) possible. See also the following note below.

mathematically unfeasible because it would rapidly prove to be too complex¹⁰. But then Lange put an end to this particular controversy by propounding what came to be called the “competitive solution”. In this latter approach of the calculation problem, the economist, theoretically simulating the working of the real market while advancing by trial and error, would himself, using accounting prices only as first approximations, increasingly come to know the effective clearing prices, anticipating in his planning what the right level of economic activity would have to be if supply was in fact to equalise demand in each and every market.

For Oskar Lange (Lange & Taylor, 1936-7), the socialist calculation problem could be broken down into two separate parts, each related to one specific dimension of the market process. Because the market operates to fix prices, there is therefore a problem with the real nature of prices. Lange clearly considered that Mises was completely misguided when he argued that market prices were necessary. But Lange’s demonstration seemed to Hayek (1982) to be too weak and superficial to be really convincing. Nevertheless, to Lange’s way of thinking, because Robbins (1932) and Hayek (1935b) had theoretically presupposed the very possibility of a socialist calculus when targeting only its excessive practical complexity, the only problem that still remained seemed to be that of the allocation of rare resources to alternative uses, a problem

¹⁰ Hayek makes this point most clearly in *Scientism and Social Sciences*. Speaking of the Walrasian and Paretian systems of equations to represent the relation between the prices of the multifarious types of commodities in any economic system, he wrote: “but without knowledge of the numerical values of all the constants which occur in it and which we never do know, this does not enable us to predict the precise results which any particular change will have” (Hayek 1979, p. 75). Hayek referred to Pareto in a note: “Pareto himself has clearly seen this. After stating the nature of the factors determining the prices in his system of equations, he adds (*Manuel d’économie politique*, 2d ed. [1927], pp. 233-34).” It may be mentioned here that this determination in no way has the purpose of arriving at a numerical calculation of prices. Let’s make the most favourable assumptions for such a calculation; let’s assume that we have triumphed over all the difficulties of finding the data of the problem and that we know the ophelemities of all the different commodities for each individual, and all the conditions of production of all the commodities, etc. This is already an absurd hypothesis to make. Yet it is not sufficient to make the solution of the problem possible. We have seen that in the case of 100 persons and 700 commodities there will be 70,699 conditions (actually a great number of circumstances which we have so far neglected will still increase that number); we shall, therefore, have to solve a system of 70,699 equations. This in practice exceeds the power of algebraic analysis, and this is even more true if one contemplates the fantastic number of equations which one obtains for a population of forty million and several thousand commodities. In this case the roles would be changed: it would be not mathematics that would assist political economy, but political economy that would assist mathematics. In other words, if one really could know all these equations, the only means to solve them which is available to human powers is to observe the practical solution given by the market” (*ibid.*, p. 75, note 8). If only to prove the importance Hayek assigns to this, we can note that the very same Paretian argument is also used elsewhere by Hayek (see Hayek, 1939: 197-8, n.13; and Hayek, 1940: 117-8).

that, once again, Mises and Hayek said could be best resolved by the market process. Lange then argued that a “Central Planning Board” (CPB from now on) would do a better job since it would proceed by trial and error but would also have access to more complete information than any isolated individual capitalist entrepreneur could obtain. Lange’s argument boils down to the following reasoning, which I quote : “The economic problem is a problem of *choice* between alternatives. To solve the problem three data are needed: (1) a preference scale which guides the acts of choice; (2) knowledge of the ‘terms on which alternatives are offered’; and (3) information about the amount of resources available. Those three data being given, the problem of choice is solvable” (Lange & Taylor, 1936-7: 60).

Hayek did not contest the right of Lange to frame the question this way. He did indeed accept to consider that, given data of type 1, 2 and 3, then the “socialist calculation problem” can be solved, because this would mean that there exists a rational way to choose between alternative ends. But, according to Hayek, the problem is not actually solved by Lange because there is no argument in Lange’s line of reasoning to prove that the CPB can know the necessary data. The question, for Hayek, is precisely the following: Who has access to this information? If the information required to make rational economic choices is radically dispersed between actors in a market, we cannot just assume that a mechanism will exist that will put all this dispersed information together – as if it could be aggregated in a central super-brain. Even if we supposed that data of type 1 were unproblematic because the CPB would establish the scale of preferences or would observe what the preferences are in the market, the same cannot be said of data of type 3. Defining the overall quantity of resources needed for the economy to work properly is possible only if one can represent resources objectively, by using precise volume numbers of commodities which can be technologically transformed into other commodities. But Hayek stressed that the very notion of “resource” is tricky: it is a *subjective* notion and not an objective one, as Lange seemed to think. A resource is clearly something inside an individual’s “plan of action”, and resources, forming the “terms of the alternative” themselves, can only be defined by reference to a precise production function. Resources cannot be interpreted, as Lange did in his analysis, as if they were stable, fixed, identifiable in advance without a production plan, i.e., as objective data which a CPB could systematically list and then summate or aggregate as if they were just numerical facts referring to physical entities. For Hayek, resources are not just physical but first of all “intentional” entities.

What is at stake here is the very notion of “data” itself, and quite properly Hayek suggested that we should distinguish neatly between two meanings of the word “data”: “It [the word data] can be used legitimately either for the assumption, necessarily made hypothetically by the theorist, that certain facts exist which are not known to him, or for the assumption that particular facts will be known to specified persons and will have certain effects on their actions” (Hayek, 1982: 55). The first meaning is a completely theoretical one: we always have to assume that certain facts exist for sure most of the time by hypothesis, in economics as in all other sciences. The “data” we are then talking about refer to objective, even if hypothetical, matters of fact in the world, those putative facts explaining other observable ones. But the second meaning is a *practical* or a pragmatic one : the data we are talking about here are facts known only to particular individuals and they form individuals’ “subjective knowledge”. Following Hayek, Lange misses this conceptual difference and confounds the two kinds of data. It may be theoretically possible for a CPB to know or to suppose what the production functions are in a certain state of the national economy and, in this way, to determine what the value of commodities are in that economy. Even if Hayek doubted the achievability or ‘practicability’ of this approach to the calculation problem, one can imagine that, with the appropriate means, this could certainly be done “in principle” by having a super-computer solving thousands or even millions or billions of simultaneous algebraic equations, as intricate and complex this matter might be “for the human mind”, as Hayek wrote. But anyhow, this successful (by hypothesis) computation would not provide the CPB with the knowledge of any production technique that could be used in the transformation process of resources for producing economic goods. This ‘knowing how’ as opposed to knowledge as a ‘knowing that’ is a “tacit knowledge”, a concept Hayek (Hayek, 1968 [1978a]: 38) borrowed from Michael Polanyi (Polanyi 1951, 1969). In any market economy, this knowledge is of a very peculiar kind, so that only the particular entrepreneur can be said to have this kind of information, for it concerns the singular situation in which he/she finds himself/herself. This information is not of the kind economists as theoreticians or social engineers can have or can formulate and discuss, for it is not a conceptual, propositional or discursive knowledge. In the market economy, the entrepreneur possesses a local and situational knowledge which is necessary for the dynamics of the economy and which consequently cannot be dispensed with. It is easy to see that, if this is true, then socialist administrators acting as engineers of the economy and making up the CPB, cannot replace local

entrepreneurs—it will simply not work. Entrepreneurs have to count on, if not master for themselves, the precise technological knowledge that the production function requires. But beyond this, they have to know the prices of the resources they need if they are to make rational decisions and opt for profitable courses of actions. This kind of knowledge can never be available globally to any state that would be economically directed and governed by a CPB. Hayek’s argument, as was Mises’ argument, is a sort of impossibility theorem.

Hayek’s economic argument, indeed a strong one, is a *theoretical* argument. Hayek uses in this context two main ideas which, as we just indicated, he borrowed from Michael Polanyi. First of all, we have to concede, following Polanyi, that not all social and economic orders are alike and that there are some which are more robust and efficient than others as far as allocation of rare resources to satisfy diverse needs are concerned. As Polanyi argued, more dynamic and efficient types of order are not *monocentric* but *polycentric*: these are strongly decentralized and form almost local orders, based on parameters unpredictable long in advance, but able to adequately solve the kind of problems that emerge in a particular situation (problems of particular economic conditions), their solutions being for that matter inevitably uncertain and temporary and having no general character.

The nature of the problems we are facing in societies where economic development is based on commerce and industry are such that the more the economic order is decentralized, the more this order becomes robust and extended. But then these problems can only be solved by local actors acting on their own perception of what the situation really is. The situational problems as perceived by entrepreneurs are not at all themselves theoretical problems, of course, and consequently they cannot be transposed into a mathematical model, as if it was possible to represent these elements fully in all their parameters. This is precisely why Polanyi talked of “tacit knowledge” to characterise this kind of situational awareness and rationality. This knowledge is not articulated in propositional formulas, it provides answers to “how to” questions” and not “why” questions: “know how” knowledge, in contrast with “know that” knowledge, is “personal knowledge”, as Polanyi liked to say. For that matter it is usually transmitted only at the local level to people living in analogous situations where, imitating what has already been done somewhere else, the know-how can be fruitfully transposed. Tacit knowledge concerns personal skills and takes time to be acquired. It boils down to singular problem-solving and practical ways of thinking, perception rules and behaviour principles that

people usually share living in groups or communities. Tacit knowledge corresponds to rules and principles that people follow without usually being aware that they are doing so or why they are doing so. People would be unable to formulate these rules and principles, just as they would be unable to justify this tacit knowledge if only they were able to articulate it at a conscious level—but they are not. People only know that the ways they are doing things either work appropriately or not, and they can know that, in the long run, these rule-governed behaviours normally provide the kind of results they are looking for, proving them to be right. No one can know in advance for how long this will in fact be the case because clearly it all depends on many contingencies. No one knows in advance what tomorrow will be made of, what the needs will be and what the general situation will be¹¹. The kind of knowledge each individual is using for himself or for his family during his lifetime cannot be stated in its totality and stored somewhere, and a CPB could operate like a super-brain if and only if* all these personal skills could be collected and placed into memory as “data” – but they can’t.

Following Polanyi, Hayek claimed that consequently, in order to be as efficient as possible or at least more efficient than any centrally planned economy, a social system taken as a whole has to be modelled as a system that has no clear centre of operations: the more numerous the interacting component parts of a dynamic social and economic system, the more cohesive, robust and productive the socio-economic “spontaneous order” will be. According to this last argument, the quality of a social and economic order, its efficiency and endurance, are a direct function of the amount of reliable knowledge that millions of individuals living together are capable of using in making their own personal decisions. The more rapidly they can exchange information pertaining to what they wish, what they need and what they are ready to pay for, and especially in terms of opportunity costs, the more they can increase their understanding of the situation they and others find themselves in and, for that matter, the more they are able to produce economic *coordination* between themselves. Like Polanyi, Hayek’s understanding of the market economy led him to argue for the primacy of “tacit knowledge” over speculative knowledge. As far as the efficient working of the economy is concerned, Hayek gave greater weight to practical knowledge than to theoretical knowledge, and priority to personal knowledge

¹¹ This argument has to my mind something to do with Popper’s own logical argument as developed in the preface of *Poverty of Historicism* (1976) where he proves that it is impossible to know in advance, i.e. today for instance, what will only be known tomorrow. Future knowledge is unforeseeable and as such unpredictable.

over the “bookish” sort of knowledge. This epistemological argument amounts to saying that, in all the social sciences, one has to start from the fact that the building blocks of the structures, the functions of which need to be explained, are individual human beings possessing a certain amount of information which will cause them to act as they choose¹². But this is not representational knowledge for any particular individual. Rather, it consists of skills, acquaintances or other kinds of personal knowledge, that is, diverse rule-governed practices that individuals master, to a certain degree, some being innate but many others being acquired through the educational system or by cultural transmission and imitation. Most of this knowledge, constituting sets of unconsciously acquired rules of perception and action, is said to be “tacit” because it is usually destined to remain more or less unarticulated, not formulated explicitly. This kind of knowledge is incorporated into very different systems of rules of perception and conduct, most of these rules being negative, and cannot be stored in a super-brain or any calculation device or machinery, however complex that may be. As Hayek insightfully remarked, “(S)uch spontaneous orders as those of societies, although they will often produce results similar to those which could be produced by a brain, are thus organised on principles different from those which govern the relations between a brain and the organism which it directs. Although the brain may be organised on principles similar to those on which a society is organised, society is not a brain and must not be represented as a sort of super-brain, because in it the acting parts and those between which the relations determining the structure are established are the same, and the ordering task is not deputized to any part in which a model is preformed” (Hayek 1967a, p. 74).

The core of Hayek’s inapplicability argument against centrally planned economy is therefore that the very nature of the economic knowledge necessary for the market economy to work well, or as efficiently as possible under particular economic conditions, is by nature practical, fragmented, dispersed, local and inaccessible to any single person in its totality¹³. This

¹² This corresponds to what Hayek called “constitutive ideas” as compared to “speculative” ones (see Hayek *Scientism and Social Sciences* (1942-4), now part of Hayek (1952).

¹³ This crucial fact has already been fully recognised by almost all Hayek’s critics and commentators. Indeed, connecting this Hayekian argument with the evolutionary one to which I will turn in the next section of my paper, Carlo Zappia has made this incidental but astute remark: “... in examining how competitive systems could deal with personal knowledge, Hayek realised that even competitive prices could not completely aggregate the knowledge dispersed throughout the system. His appreciation of the market order then shifted from the precise notion of equilibrium, which no longer implies Pareto -

information certainly cannot be held by a CPB such as the one socialists dream of. This is why, as Hayek insisted, it is absolutely crucial to see the difference “between an order which is brought about by the direction of a central organ such as the brain, and the formation of an order determined by the regularity of the actions towards each other of the elements of a structure ”. (Hayek 1967a: 73).

3.- Hayek’s evolutionary argument

The ‘inapplicability’ argument is not the only one Hayek used to show that socialism failed to solve the economic problem. In line with the purely economic argument, he also presented a more political argument, which contains its own methodological difficulties. This argument, which also has an ethical component, is consequentialist by nature and, this time, it concerns the *desirability* of socialism. For, in the supposition that socialism were attainable, would it for all that also be advantageous? Can we convince ourselves that the citizens would live better in a regime with a centrally planned economy? Doesn’t setting up an authority that would make all the consumption and production decisions carry major risks for the personal, economic and political freedoms of individuals living under such a regime? This argument is one of the weapons of the Hayekian arsenal. For Hayek, the argument derives as much from the political economy as the first one, even though, to support it, he uses sociological, political, anthropological and ultimately biological ideas. Hayek first put his pen to it in 1939 (Hayek, 1939), but it became full-blown and acquired all its weight with the publication of *The Road to Servitude* in 1944. This argument ended up by becoming, in 1960, evolutionary, and remained so up to the end; but it nevertheless underwent a complementary extended development in the framework of legal philosophy, as Hayek elaborated this in his trilogy *Law, Legislation and Liberty* (1973, 1976, 1979); finally, Hayek made it the core of his last work *The Fatal Conceit*, published in 1988¹⁴. This argument is closely related to Hayek’s anti-constructivism in economic and social issues and leans on a theory of spontaneous socio-economic orders.

optimality, or informational efficiency – to the more qualitative construct of spontaneous order – by means of which other conditions for market efficiency could be better pointed out” (Zappia 1999: 120-1).

¹⁴ There is a controversy over whether this last publication, written while Hayek was seriously ill, really reflects what he was thinking rather than the ideas of William Bartley, the first editorial director of Hayek’s *Collected Works*, in which, paradoxically, Hayek’s last book, *The Fatal Conceit - The Errors of*

What is at stake here is not whether socialism is ‘applicable’ or not but whether it is more enviable than liberalism. What seems to be representative of Hayek’s analysis of spontaneous social and economic order is that, as theoretical as it is from the start, when considered alongside the socialist calculation debate, it can be completely articulated only by stating the superiority allegation to which it is essentially linked. One can surely maintain as John Gray does, that there are no moral value judgment really at stake here (Gray, 1984: 33-4; 118-125) but it is hard to miss seeing that Hayek’s theoretical analysis serves to support a pre-eminence claim with respect to the market economy. Asserting that competitive economy is and should be considered as superior to centrally planned economy is *per se* a normative statement, but, as such, this has nothing to do with ethics. Hayek denied overtly that he is committed to the genetic or naturalistic fallacy. He writes: “I do not claim that the results of group selection of traditions are necessarily ‘good’ — any more than I claim that other things that have long survived in the course of evolution, such as cockroaches, have moral value” (Hayek, 1988: 27). But this in no way means that Hayek denies *eo ipso* the evolutionary superiority of the competitive economy over the planned economy. As a matter of fact, Hayek also denied that the extended society was bound to take place in History: he explicitly considered that this economic system “has not been deliberately invented, but that it has spontaneously grown up long before we had learnt to understand its operation” and he regarded it as “the result of a more or less accidental historical growth...” (Hayek, 1939: 215). Nevertheless Hayek undeniably saw “the price system as the best one” (*ibid.*). Time and time again Hayek insisted on the superior efficiency of capitalism over socialism. For instance, starting from the bare fact that “(T)he only known mechanism by which the knowledge of all can be utilized (is) the price mechanism” (Hayek, 1939: 196), and being perfectly aware of the fact that sometimes the price system is inapplicable and is being supplemented, he wrote: “The problem we are discussing is not, however, whether the price system must be supplemented, whether a substitute must be found where in the nature of the case it is inapplicable, but whether it ought to be supplanted where the conditions for its working exist

Socialism, appeared as the very first volume. Alan Ebenstein devoted Chapter 39 of his recent biography of Hayek (Ebenstein, 2001: 306-313) to describe how hard it has been for Hayek to write his last work, which he so much wanted to be of the highest quality. Ebenstein writes that, in the end, Hayek was dissatisfied with the result, adding that “He was also disappointed that he did not complete the work himself” (Ebenstein, 2001: 312). In his just-published work, Ebenstein discusses this controversy once again (Ebenstein 2003).

or can be created. The question is whether we can do better than by the spontaneous collaboration secured by the market, and not whether needed services, which cannot be priced and therefore will not be obtainable on the market, have to be provided in some other way” (Hayek, 1939: 197). This kind of argument can readily be characterised as forming a sub-category of “invisible hand explanations”, akin to the kind of extremal explanations one can find in evolutionary biology¹⁵.

In the socialist calculation debate, we must remember that Hayek was facing opponents who sought to establish “that not only was central direction of economic activity practicable” but that it would even be “superior to a system of competition” (Hayek, 1935a: 71). From the start, then, the terms of Hayek’s debate with socialist economists, as well as Mises’ theses, were given an orientation that was methodologically comparative. As we have already said, Hayek contrasted the form of order that results from an emergent evolutionary process to one that is “rationally constructed” by human beings, for example legislators. On that basis, Hayek’s analysis of spontaneous social and economic order really does serve to counter the arguments of “constructivistic rationalism” (Hayek 1973, pp. 8-11; Hayek 1979, p. xii) and undeniably includes as one of its essential elements the thesis that market economies are superior as forms of social order to all centrally planned economies. He preferred the term *catallaxy* to refer to competitive economy considered as a rule-based process and favouring the phrase ‘Rule of Law’ instead of ‘laissez-faire’ to characterise the underlying mechanism at work in such a process¹⁶. Hayek claimed that this economic system has to be considered wholly as a social spontaneous order because it is an evolutionary and unintentional process based on the price mechanism working in an appropriate institutional context. Consequently, the resulting social and economic order is never intended as such, nor is it controlled by anyone. But it surely can be argued that the consequences of the actions of each and every individual taking part in the process necessarily contribute to its aggregate result. This analysis therefore provides the basis not only for an argument in favour of the free market economy but also, as I have shown elsewhere

¹⁵ In my 2003 ESHET paper presented last year in Paris (Nadeau, 2003), I have asked myself whether this Hayekian optimality argument is truly consistent with the evolutionary standpoint, and my answer was affirmative.

¹⁶ “Laissez faire”, as it is usually understood, was for Hayek a “misleading and vague term” (Hayek, 1939: 219) and he preferred to differentiate the liberal or market based economy from planned economy by reference to the “Rule of Law”.

(Nadeau, 2004), against the very essence of the Welfare State, and especially the Welfare State of the Keynesian brand.

Basing himself on this shrewd analysis of catallaxy, Hayek put forward the theoretical claim that it manifestly forms a social order which is far superior to any kind of state-controlled social and economic order. Hayek was speaking here not only of an economic superiority in terms of efficiently allocated resources, but also of a social and political superiority in terms of the quality of life that such an economic order, based on the free market, makes possible for the large majority of people. Hayek always maintained as a core thesis of his economic theory and of his political philosophy that a socialist economy, that is, a social order generated by an interventionist state and governed or regulated by a decision centre, could lead to such undesirable results as limitations on human rights and liberties—if not to complete serfdom (Hayek, 1944; Hayek, 1988)¹⁷. The error of constructivistic rationalism is to assume that a designed economic order will necessarily be superior to an unplanned one just because it will be formed by and based on Reason. But, as Hayek points out, Reason itself is the product of evolution and should not be seen as capable of planning and directing evolution. More than that, economic planning by itself does not create order, if by “order” we mean, along with Hayek, “a state of affairs in which a multiplicity of elements of various kinds are so related to each other that we may learn from our acquaintance with some spatial or temporal part of the whole to form correct expectations concerning the rest, or at least expectations that have a good chance of being correct” (Hayek, 1973: 36). Human reason, and especially the product of individual minds of a small group of people, however inspired, wise, knowledgeable and thoughtful they may be, cannot by itself achieve an order that would be better than the one from which rationality itself progressively emerged. As one of Hayek’s commentator has argued, “[O]n the contrary, by disturbing the regularities based on impersonal rules which are the product of evolutionary learning, rationalist social engineering results, if not in chaos, at least in unworkable or unnecessary coercive organizational structures” (Dobuzinskis, 1989: 243).

Thus Hayek’s analysis ultimately offers up an *evolutionary* refutation of socialism. In its totality, it is again essentially a scientific question: for Hayek indeed “(T)he notion that, in the

¹⁷ For sure Hayek never wrote that socialism would necessarily lead to serfdom (he disputed this point with Samuelson who saw an “inevitability thesis” in Hayek’s argument: on this see Caldwell, 1997: 1868, note 7) and he never claimed that competitive economies would always give optimal results.

last resort, the whole debate is a matter of value judgment and not of facts has prevented professional students of the market order from stressing forcibly enough that socialism possibly do what it promises” (Hayek, 1988: 8). But the ultimate aim of the debate is not only to debunk the “fatal conceit” of socialism but to support the general argument that market economy is largely superior as an efficient socio-economic order to any kind of planned economic order. Catallaxy is held to be pre-eminent because it is more efficient, and it is said to be more efficient because it is alleged that no central political organism can adequately replace or even simulate the market pricing process. Hence, a full-fledged spontaneous social order will always be economically preferable to a full-blown collectivist planned one. This is surely Hayek's understanding of what the whole socialist calculation debate was about (Hayek, ed., 1935; Hayek, 1940). He avowedly claims, not on moral but on theoretical and empirical grounds, that a resolutely interventionist state is bound to fail as the source of social and economic order: it could not only lead progressively to serfdom, but it could also ultimately cause the collapse of the whole economy. This argument has to be considered not only as an integral part of Hayek's analysis *but as its boldest claim*. And it is also probably its most challengeable argument. It has indeed been submitted to fierce criticism (for instance by Dupuy, 1988 and 1992; Dobuzinkis, 1989; De Vlieghe, 1994; Jossa, 1994; Lukes, 1997, Steele, 1994; Zappia, 1999). It would seem then that if one adopts Hayek's evolutionary perspective, one could not prove that a social order based on market processes is obviously the best possible one: for instance Angelo Petroni wrote that “If anyone assumes an evolutionary point of view, where the individuals have a severely limited knowledge about the environment and their own rules of conduct, there is simply no room for saying that anything similar to optimality exists in Hayek's world” (Petroni, 1995: 119). Indeed, if social and economic orders are plainly contingent, that is, if they are the unintended and unforeseeable products of evolution in tradition of a struggle for the survival of the fittest, then the question of which is the optimal one is empirically irresolvable because we cannot predict which one will outlast all the others. If this holds, then advocating that market economies and liberal orders, as we now know them, are, on an absolute scale, the *best social and economic traditions there can be* is an untestable, thus a normative claim, and it can only be considered as the expression of an ideological preference.

But this reconstruction of Hayek's argument misses the methodological point, or so it seems to me. First of all we should stress that the kind of evolutionary argument Hayek is using

is part of what has been called by Gould and Lewontin the ‘adaptationist programme’, but it has nothing to do with what they called the ‘Panglossian paradigm’¹⁸. As long as we compare as ideal-types the centrally planned economy, on the one hand, with the competitive economy, on the other – that is, as long as we look at both to find out which has the comparative advantage relative to one another, and as long as we do not use any kind of absolute scale to compare their respective merits as social and economic systems, we can surely maintain, at least as a bold conjecture, that capitalism is superior in efficiency to socialism. This hypothesis has to be discussed on scientific grounds, considered for its explanatory robustness and its predictive power (if any) and judged at face value: surely, it cannot be dismissed from the start as logically flawed. From an evolutionary perspective, it could of course prove to be false: it is ultimately an empirical question. As a scientific conjecture, it is both disputable and refutable, on a conceptual and observational basis. It would clearly be a methodological muddle to reject it as intrinsically inconsistent or as logically incompatible with the socialist calculation theoretical argument. As such these two Hayekian arguments form, in my view, the two sides of one and the same coin.

4.- Methodological issues

It is worth of pointing out now that even if, for both Mises and Hayek, the socialist problem was first of all a matter of the efficiency of the economic process, what each of them was contending was quite different. But it is easy to miss what this difference really amounted to, and it is easy to misinterpret the underpinnings of their disagreement¹⁹. Willem Keizer was right

¹⁸ Gould and Lewontin (1979) distinguished between three forms of ‘adaptation’: “what physiologists call ‘adaptation’: the phenotypic plasticity that permits organisms to mould their form to prevailing circumstances during ontogeny (...) Physiological adaptations are not heritable, though the capacity to develop them presumably is” Secondly, we have a ‘heritable’ form of non-Darwinian adaptation in humans (and, in rudimentary ways, in a few other advanced social species) : cultural adaptation (with heritability imposed by learning). Much confused thinking in human sociobiology arises from a failure to distinguish this mode from Darwinian adaptation based on genetic variation ... Finally, we have adaptation arising from the conventional Darwinian mechanism of selection upon genetic variation » (p.264). Hayek was obviously speaking about the second kind of evolutionary adaptation by way of cultural selection.

¹⁹ Since Joseph Salerno (Salerno, 1990) and Murray Rothbard (Rothbard, 1991 and 1992) intervened in this debate, there are many researchers close to the Mises Institute of Auburn who consider that Hayek had “deviated” from the orthodox Austrian approach, even to the extent of belittling Mises’ argumentation, judged by many to be more rigorous, significant and of greater value than that of Hayek.

to insist that, from his first two contributions (Hayek, 1935a and 1935b), Hayek maintained his distance from Mises. Mises had sought to demonstrate the *logical impossibility* of the rational economic calculus in regimes with state ownership of the means of production. I recall that under such regimes there would supposedly be no money in circulation, and exchange would be *in natura*. Hayek intervened in the debate in a context in which the problematic had already moved ahead. In 1940, Hayek replied to Lange (Lange & Taylor, 1936-37) and to Dickinson (1933, 1939), both of whom had proposed the possibility of a “competitive socialism”, or, another term they used, of a “market socialism” to get around the anti-socialist argument made by Mises, and in criticising the idea of a money-less and price-less *in natura* economy. It was only at the stage of what has been called afterwards the ‘Lange-Dickinson-Lerner model’ that market socialism (“the competitive solution”) appeared on the front line, the Pareto-Barone model no longer requiring the market process to fix monetary process, since it was considered that the CPB had already resolved the issue of the calculation of simultaneous equations defining the general equilibrium model of the economy. Hayek therefore had very good reasons to think that the radical critique of socialism meant having to confront such an argument. Hayek no doubt believed that, in order to complete Mises’ critique, he would have to deconstruct the argument that the CPB could itself resolve the equations contained in the socialist model formulated within the framework of the Theory of General Equilibrium.

Certainly, as Keizer has pointed out, Hayek “rejects Lange’s statements that the Austrian critique is theoretically refuted by scientific proof that the principles of economic theory also apply to a socialist economy (as demonstrated by Barone)” (Keizer, 1994 : 218-9). Hayek was clear about this: both for Mises and for himself, such principles simply could not be applied in a socialist economy, and, for Hayek, this argument was, viewed from the methodological standpoint, not different from that already proposed by Wieser in 1884²⁰. Hayek spoke of “their”

Don Lavoie was perhaps the first to argue that, since 1935, Hayek had changed the course of the original debate towards the “computational problem”, while, in the Mises’ perspective, the question of socialism involved something much more fundamental, that is, the need for private property (Lavoie, 1985: 117). This was only rediscovered thanks to the “Austrian Revival” during the 1980s (Keizer, 1994: 221). To my mind, as I have indicated, the computational problem posed by the economy emerged concurrently with Menger and Wieser; Hayek can be seen rather as marking a return to the perspective of the original Austrian tradition.

²⁰ We should not lose sight of Hayek’s doctoral thesis, defended at the University of Vienna in 1923, which was precisely a study of the problem of imputation (Hayek, 1923). See also Hayek (1926).

argument in referring to both Mises and himself: he was therefore making no epistemological distinction between Mises and himself. For Hayek, “Lange in fact appropriated for himself the Austrians’ argument as a proof against *them*” (Keizer, 1994: 219). He therefore had no qualms in saying that such an approach was no longer socialist at all²¹. In elaborating on Mises’ critique, Hayek introduced two new elements into the debate: firstly, the subjectivity of costs (a central idea of Menger’s *Grundsätze*), and, secondly, the idea that the market is an epistemic process which allows for uncovering new knowledge, a discovery resulting from the process of competition between the different actors.²²

There can be no question but that this debate was crucial for the development of Hayek’s thought: both Mises and Hayek had become aware of what separated them from the “mainstream marginalist economists” (Keizer, 1994 : 225). For his part, Hayek explicitly situated his analysis of the market process as an epistemic or informational process with first his rejection of the static theory of general equilibrium, second, his rejection of socialism as a type of economic regime, but also, third, his rejection of Misesian *apriorism* as economic methodology (Hayek, 1937). There lies the difference between him and Mises. Today, it is generally recognised that Hayek took a significant new direction in his research programme during the debate on the socialist calculation. There can be no doubt in fact that, after participating in the debate and as a result of his very special role in the debate, Hayek later substantially changed his research orientation: his interest moved from economic questions to meta-economic, -sociological, -philosophical-political, -legal and -methodological issues. It is therefore plausible to suggest that this debate also served to make Hayek aware of what separated him from Mises himself, even if Hayek

²¹ As a corollary, Keizer recalls quite appropriately that Sweezy (1949) and Dobb (1969), two well-known Marxists, themselves rejected these competitive models as not being socialist. Roberts (1971) has presented the case that this Lange-Dickinson-Lerner deviation in the debate on the socialist calculation should be seen as a confirmation of the soundness of Mises’ critique.

²² This idea, we know, is at the core of Hayek’s transformation and it was identified or used by Hayek in several of his works (for instance Hayek, 1937, 1940, 1945). For the interpretation of this transformation and its relationship with the socialist calculation debate, see Caldwell (1988, 1997) as well as the work Caldwell has just published at the end of 2003. Keizer, for his part, has been rather of the mind that it was only in 1978 that Hayek really developed the idea of making “competition a process of discovery”. This is why he believes that the partisans of the “Hayekian version” of the socialist calculation debate (as opposed to the “Misesian version” partisans) are the victims of an optical illusion in their “rational reconstruction of the debate”, to the extent that they “tend to read more into these statements than he [Hayek] actually wrote (see Vaughn 1980: 549-50; Lavoie 1985: 101, 164)” (Keizer 1994: 230, n.8).

clearly thought of his intervention in the debate as a continuity of the critique that had been launched by Mises²³.

Despite all that has just been said, I would like to contend that Hayek's argumentation against socialism cannot be interpreted as his desire to distance himself from the positions adopted by Mises. In particular, I want to make it clear, in contrast to what Willem Keizer contends, that the idea that Hayek "deviates from the Misesian arguments, especially as far as the question of 'impossible in *principle* or in *practice*' is concerned" (Keizer, 1994: 209) is not warranted. Admittedly, it seems clear that the terms of the debate had changed from Mises to Hayek and that now it was no longer a question for Hayek of the "possibility" of socialism but rather of what Jack Birner has called its "feasibility" (Birner, 1994: 5), or of what Bardhan and Roemer (1994) characterised as the "*workability of market socialism*". It would seem then, following this reading, that Mises and Hayek would have raised questions of different methodological kinds: Mises' question would be about the very "logical possibility" of socialism, Hayek's would be about the mere "realisticness" of socialism. The first question would be fundamental for theoretical economics to consider and resolve, while the second, being somewhat more pragmatic, would only raise a problem of factuality. Hayek's line of reasoning would put the emphasis on a common sense kind of problem, one concerning practicality and consequently it would only constitute a challenge at the practical level to socialists, economists and political leaders of how it could be implemented *in the real world* in a centrally planned economy.

In my opinion, this interpretation of Hayek's critique of socialism is unjustifiable. It seems on the whole preferable to read both Mises' and Hayek's critical arguments as forming impossibility theorems. In my opinion, far from breaking with the fundamental plan Mises had set up, Hayek, on the contrary, upheld the thesis that socialism was impossible, but did this by reformulating Mises' argument and by saying that Mises should have said that it was because socialism is, in principle, impracticable, that he was caught off guard. Hayek rightly says that, in using the phrase "logically impossible", that Mises had meant in fact that socialism was "impossible in principle", that it was "impracticable"²⁴. For this reason, there is no way one could

²³ I consider as proof of this that Hayek, in "Economic and Knowledge", takes umbrage equally with the static version of the General Theory of Equilibrium and Mises' *apriorism*. Hayek had already read Karl Popper's *Logik der Forschung* by 1935.

²⁴ Referring to the phrase "the impossibility of socialism", Hayek clearly rejects this wording of the problem: "... Mises had occasionally used the somewhat loose statement that socialism was impossible,

oppose, in the context of this discussion, “impossible in principle” to “impossible in practice”. The concept of “impracticability”, as used by Hayek, cannot therefore be taken to mean that Hayek is admitting that socialism is theoretically possible but empirically unimplementable: this concept is entirely *theoretical*, in and by itself. Hayek’s theoretical argument concerns the practical problems a CPB would be facing and would be in the impossibility to solve.

To say that Hayek was opposing socialism only because it is “impossible in practice”, then, is missing the point, particularly in view of the fact that Hayek, as a methodologist of economics, claimed that the explanations provided by economic theory are “explanations by the principle” as opposed to explanations in full-blown detail (Hayek, 1955). For Hayek, socialism is not “logically impossible”, in the sense that it would constitute a self-contradictory term (a contradiction of the “square circle” kind) and that, as such, socialism would be inconceivable or unthinkable. Socialism is impossible because it assumes the attainment of certain conditions necessary for the functioning of such a regime completely controlled by a central government and that these conditions, which theoretical analysis has the task of identifying, will never be achieved, which is what Hayek demonstrated with an “explanation in principle”.

5.- “The” question: has Hayek refuted market socialism?

It is now time to conclude. Did Hayek refute socialism? We can certainly claim he did. But it is harder to claim that his defence and depiction of capitalism are equally convincing. Certainly it is easier to accept that Hayek made a unique contribution by using robust, sometimes even biting, arguments, even if he wasn’t the first to open the door to critiquing socialism – since Mises had passed through the same door earlier. I completely agree with Michael Wohlgemuth (1997) that Hayek’s arguments are still today completely to the point as far as market socialism is still eulogized by political economists.

As we have seen, Hayek’s argumentation is literally *stuffed* with content relevant to the most disparate discipline. He draws equally on economic theory, in its true sense as on sociology, history, anthropology, biology, political science, legal theory, demography and while what he meant was that socialism made rational calculation impossible” (Hayek 1935a: 76). Hayek’s wording is “the impracticability” of socialism (*ibid.*: 69 and *passim*).

neurophysiological psychology. But in his heart, Hayek's multidimensional argumentation is above all and between all its component parts *philosophical* (ie. epistemological, methodological and ethico-political) despite the fact that Hayek's self-avowed goal was in the end to show that the question of socialism is a *scientific* question – of the social sciences in general, of the science of economics in particular. But I agree with Hayek that it is certainly also a scientific problem that economics as a theoretical science has to cope with. In other words, as such, socialism should be seen as a scientific theorisation, as Hayek has precisely presented it, and, following falsificationism, which Hayek takes on explicitly, as such it has to be seen as subjected to possible refutation.

And this is exactly what Hayek himself attempted to do. To follow him on his own terrain, we have to modify the question in such a way that it is no longer a matter of asking whether and how a well-conceived socialism –not a utopian socialism–can be applied scientifically, as Marx and Engels would have wished, but rather of asking more directly if the socialism conceived as economic theory is *true* – true, since the socialist theory at least claims to be scientific, in the sense that it aspires to be an economic theory of social organisation. It is appropriate therefore to see if it holds its own as such, and so to see if it is well-founded. Hayek's answer to this question, which he formulated in the context of analyses that were often technical but always framed perspicaciously and with the aim of clarity, is categorical: socialism, for Hayek, could not be put into practice simply because it is based on an inadequate and false economic analysis. But if socialism is despite everything *put into practice*–and history is there to prove it has been–we would then have to admit that its application necessarily brings with it a social and economic costs which may be exorbitant, and which may engender economic consequences that are detrimental in the absolute sense. Like Sartre's God, socialism for Hayek is a “futile passion”. Worse in a sense, it is an incalculable risk.

It is true that the risks that socio-economic statism poses for us are incalculable in their details. We should therefore be satisfied with a demonstration that incorporates what Hayek called an “explanation by the principle” and “pattern prediction”. The methodological limitations of the science of economics are such that one must not expect of this discipline that it provides us with experimental proofs, equivalent to those provided in the physical sciences. It remains striking that Hayek was never knocked over by the collapse of the USSR, as if this episode in

human history finally showed he was right. For Hayek, the question was never to be asked in these terms: the question is and has to remain through and through *theoretical*.

This said, when analysed in the framework of political economy envisaged as a social science, there can be no doubt for Hayek that socialism had been well and truly refuted. For, compared to the competitive economy model, socialism represents a socio-economic regime that simply doesn't work, is inefficient and hopeless. At the heart of Hayek's approach to the question of socialism is the contention that his analysis leads to a concrete political conclusion, based on a logically valid inference and an overall scientific reasoning. Of course, a methodological investigation on what a theoretical science of society and economy can be is unavoidable here. What, according to Hayek, is to be expected of the science of economics is that it substantiates the proof that socialism is not only impossible to put into practice but that it is also detrimental.

There are good reasons to believe that Hayek has refuted market socialism as an unachievable model of the economy. It may be that his evolutionary argument, because it is intertwined with a lot of philosophical commitments which cannot be disputed on scientific grounds even if it is also largely based on findings coming from different social sciences, is not as compelling as the first one. Be that as it may, the impracticability argument seems to me to have been established beyond reasonable doubt.

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