

**STRUCTURE VERSUS EVOLUTION?**

by

**Angelo M. Petroni**  
Institute of Methodology and Philosophy of Science  
Turin, ITALY

**DISCUSSION PAPER**

on

Gerard Radnitzky's  
**THE EVOLUTION OF THE EXTENDED ORDER**

The Fourteenth International Conference on the Unity of the Sciences  
Houston, Texas November 28-December 1, 1985

© 1985, Paragon House Publishers

1/2

It is not easy for me to write a comment on a so scholarly and stimulating a paper as Gerard Radnitzky's "The Evolution of the Extended Order". First, the topics involved are manifold, and a careful comment should include an evaluation of some amongst the most controversial theories in cosmology, physics, chemistry, biology, ethology, economics, law, epistemology, sociology, and ethics. Therefore, it is not just for reasons of brevity that I shall have to restrict my comment to some points of the paper. Secondly, I shall have to criticize some of the fundamental ideas about spontaneous order by Friedrich von Hayek, whose work I greatly respect and admire. I wish to stress that the critical theses I shall put forward (and which are far from being original) do not concern those that have to be considered as the fundamental achievements of von Hayek's political theory and political philosophy. It would be not too difficult to demonstrate that they are completely independent of his more recent - and, in my opinion quite dubious - social evolutionism.

\*\*\*

Radnitzky's paper is not just a penetrating exposition of von Hayek's ideas on social evolution and spontaneous order. In my opinion, it contains some ideas which constitute a deep revision of some of the crucial concepts as expressed by von Hayek since the beginning of the Seventies, and which it would be easy to show that were not contained in his previous works.

In order to be more concise, I shall summarize my main critical these about von Hayek's main ideas in three points. Of course, I shall have to express them in quite a crude way, withouth the otherwise required distinctions and nuances. Therefore, my disagreement will appear greater than perhaps it really is.

a. No reasonably good concept of (social) "spontaneous order" is given by von Hayek.

This is quite a surprising but hardly deniable point. In all von Hayek's works, the concept of spontaneous order is presented as if it were an almost self-evident idea, the full treatment of which can be found in the Scottish moralists of the Eighteen century. Of course, it would be impossible to deny the importance of the works by such giants as Adam Smith or Adam Ferguson: but it is equally difficult to accept that their ideas can be considered unquestionably true, and - more to the point - that they can be integrally and directly applied to our social and economic ("spontaneous") orders.

In the "Epilogue" of the third volume of Law, Legislation and Liberty, von Hayek tried to link the concept of spontaneous (social) order to the most recent concept of self-organization in Prigogine's sense<sup>1</sup>. This is likely to be a very promising research programme. However, as far as I know, we are far from having a theory of self-organizing physical systems which could be considered as 1) a reasonably good foundation of a social and economic order<sup>2</sup>, and 2) as a reasonably good foundation of von Hayek's main (and perhaps only) example of spontaneous order, namely the market order. Of course, this second point is by far the most important, for the purpose of our discussion, and it is also the most problematic for von Hayek. It is worthwhile stressing that in both cases we cannot limit ourselves to the establishment of analogical patterns. Researches in the physical (or also biological) field may have a heuristic value for the social theory, but they can never represent per se a "true" theory (or a theory at all) of the social phenomena (included the economic phenomena). This would really be an example of scientism in the sense of von Hayek ...

b. Von Hayek does not produce good arguments in favour of the evolutionary superiority of the spontaneous order.

My thesis is that von Hayek does not give any explanation as regards why the spontaneous

order had to emerge from the evolutionary process. The fact that it emerged is merely taken as granting that it is the best kind of order. Of course, one could always answer that there is no need to give any justification of the superiority (or greater rationality, if one prefers) of the spontaneous order beyond the fact that it has emerged from the evolutionary process. However, this is a very unsatisfactory move, because it deprives de jure the concept of spontaneous order from any independent content. Everything which emerges from the evolutionary process would become, by definition, a spontaneous (and "superior" or "more rational") order<sup>3</sup>.

The example of market order can be considered as a demonstration of my thesis. Of course, the "rationality" of market order (or, rather, its superiority over the other economic systems) can be argued in many different ways<sup>4</sup>; but there is no viable argument in von Hayek which shows why this feature of the market does represent an evolutionary superiority over, say, planned economy. In many passages of his "recent" works von Hayek affirms that it was the market order (and more generally, the spontaneous abstract social order) which made (and makes) possible the survival of the large numbers of individuals we know. The increasing in the size (or the absolute size?) of the group is exactly what von Hayek considers as evolutionary success. But it is obvious that this is far from giving a justification of the evolutionary superiority (or greater rationality) of the market, given that other economic (and social) orders (Chinese communism, for example) have been by far more successful as far as the propagation of the group is concerned.

This is hardly surprising. The market is arguably the most efficient way of producing and allocationg the goods and services people want: but this has nothing to do with the fact that the goods and services people want are good enough for the survival and the propagation of the group (or for satisfying any other criterion). If

the aggregate preferences of the individuals are such as to let them prefer, say, diamonds and books on philosophy to food and steel, the market is the best way for satisfying their preferences: but it is likely that the probability of survival and propagation of the group will be lower than that of a group under a planned economy aimed at the production of food and steel.

The same criticism applies to von Hayek's conception of the law. The system of abstract ("negative") rules of just conduct is arguably the best we can conceive in order to guarantee individual freedom and the working of the market. But there is no reason to expect that this system is also preferable from the evolutionary point of view. There is an indefinite number of situations in which it is conceivable that the group will survive (and propagate) which will obey some non-abstract rules. There is absolutely no need to think (as von Hayek does, it seems) that this will happen only under some particular conditions (wars, natural catastrophes, etc.).

An important consequence of these points is that it is not possible to find a justification of the evolutionary superiority of liberty. Liberty may represent (under some well-specified "ecological" conditions) an evolutionary superiority for the group which practicizes it<sup>5</sup>; but we have absolutely no reason to expect that this holds under any realistic conditions. The fact that liberty (as well as the rule of law) is de facto such a rare (and precious) good (whose presence is manifestly not required at all for the biological survival and propagation of a population) can illustrate the point quite well.

Another important (even if trivial) consequence is that it is not possible to argue in favour of the validity of an economic, legal or social institution in the future on the basis of any description of its origins. Even if one could demonstrate the past evolutionary superiority of an institution (according to a given criterion) this would

give no arguments in favour of its acceptance. To assume that the environment will be constant is obviously by far too unsatisfactory. Therefore, to argue in favour of the market economy one must show that, under a reasonably wide range of possible alternative environments, it will be the order which will better secure the "success". The history of the market economy will tell us nothing at all about this point. Even if one could show that market economy prevailed over another kind of economy, this would give us no logical or evolutionary reason to its favour as far as the future is concerned. Under new circumstances, the "old" economy could turn out to be more successful.

Of course, we have many good reasons for judging that a market economy is the best instrument humans have to face a wide range of possible changes in the environment (e.g., lack of commodities or of energy). But all these arguments refer to the structure of the market order, not to its origins or to its past achievements.

This point has in turn an important consequence as far as von Hayek's theses are concerned: his attempts to show that the market economy and the law are the results of a process of cultural evolution have no interest at all as far as their present and future validity is concerned. For example, in order to establish the superiority of the law as a whole of rules spontaneously evolved over the law as an act of will of the legislator, all von Hayek's attempts to show, e.g., that "what we know about pre-human and primitive human societies suggests a different origin and determination of law from that assumed by theories which trace it to the will of a legislator"<sup>6</sup>, as well as to show that even amongst some animals (as robins) some rules of conduct hold which share many features with the rules of law, are irrelevant. The great historical interest of such theses cannot be considered as a theoretical value.

The problem of property rights - whose importance for the extended order is

very well stressed by Radnitzky - shows very well the difference between an evolutionary and a theoretical approach. The contemporary most prestigious school of property rights<sup>7</sup> does not represent at all an attempt to find some evolutionary features of the property rights. The theory is clearly not historical. It is grounded on a theory of rational behaviour - exactly as Gary Becker's theory of human behaviour is. History is of interest as long as it gives examples of relevant situations: but the historical/evolutionary (social or economic) process as a whole has no importance in order to produce the theory of property rights.

\*\*\*

Radnitzky's analyses are undoubtedly fully informed of all these difficulties of von Hayek's positions. However, I am afraid that his attempts to eliminate them are not in agreement with von Hayek's evolutionary principles.

One of the main departures of Radnitzky is his strong acceptance of the dichotomy between facts and values. "No amount of empirical knowledge can decide a moral issue" (p. 18), and traditions and institutions, no matter of their origins, can be evaluated on the basis of particular value systems. Once a value is given, we can formulate "hypothetical imperatives" on the basis of our empirical knowledge<sup>8</sup>.

According to Radnitzky, "Hayek's social and political philosophy has posited the priority of liberty, of the autonomy of the individual. Once the priority of liberty has been posited, the rest of the system can be derived with the help of empirical theories". (p. 7). I am very doubtful on whether this really happens. For the author of Law, Legislation and Liberty (but not for the author of The Constitution of Liberty) freedom is not a value which emerged from a deliberate attempt to implement it through institutional, legal or economic arrangements, but is an unintended result of those rules of conduct which made prevail the group which had adopted them. Once von

Hayek's theses about the rules of conduct and their evolutionary function have been posited, this becomes an unescapable conclusion. Independent of any question about theoretical validity, to assume that some rules of conduct have been deliberately adopted because the group knew that they would have produced a free order would be fully contrary to the position often expressed by von Hayek on this matter. We never "posit" any value, and we never choose the institutions that have to realize it. It is not a fortuitous case that von Hayek seems not to accept, at the social level, the relevance of the "big divide" facts/values.

\*\*\*

To sum up, I think that Radnitzky's paper is more a restatement than an analysis of the hayekian ideas about spontaneous order. His refusal of the size of the group as a criterion for evaluating the success of a system of rules; his acceptance of the fundamental importance of external criticism, related to genuine value standpoints, as well as his refusal to attribute optimality to the norms and institutions spontaneously evolved, deprives von Hayek's social evolutionism of its main (and in my opinion, wrong) content. The consequences on the crucial problem of the improvement of a (social or economic) spontaneous order, and of the role for institutional reform, are not too far from those which follow from James Buchanan's criticism of von Hayek's evolutionism. In another paper, I tried to defend von Hayek's positions against Buchanan's criticism, but I am afraid that the reinterpretation I have given of the concept of spontaneous order is far from being acceptable by the author of L.L.L.<sup>9</sup>.

If I am right, it is therefore very important to draw a sharp distinction between von Hayek's ideas about the evolution and the evolutionary value of spontaneous order from one side, and the content of his ideas about the structure of spontaneous order on the other. As I tried to point out, there is no necessary link between them. In



particular, if we take the market order as a sort of "implicit definition" of what has to be meant for "spontaneous order", then none of the arguments in favour of the superiority of spontaneous order over other orders has to be linked to any evolutionary thesis - included the very dubious, semi-historical theses on the rising of the market order, contained in L.L.L., which can perhaps be useful for producing a nice als ob story, but which are by far too general and aprioristic for having any significant historical/descriptive relevance.

## NOTES

<sup>1</sup> F.A. von Hayek, *Law, Legislation and Liberty*, 3 vols.. (London and Henley: Routledge and Kegan Paul, 1973, 1976, 1979), vol. III, pp. 158-159, and p. 200, note 33. An attempt to develop the analogy between von Hayek's spontaneous order and the theories of self-organizing physical and biological systems has been provided by W. Weimer, in his 1983-ICUS paper "Spontaneously Ordered Complex Phenomena and the Unity of the Moral Sciences". Weimer's paper contains also a development of von Hayek's main epistemological theses about the nature (and the limits) of social sciences. I gave a criticism of these theses in my discussion paper "On 'Alleged Limitations and Constraints in the Unity of the Science'. Complex Phenomena and Simple Explanations". I think that Weimer's paper shows very well the deep difference between von Hayek's conception of science and reason, and Popper's critical rationalism. To put it in a paradoxical way: if Popper tried to produce a rational theory of the tradition, von Hayek tries to produce a traditional theory of reason.

<sup>2</sup> Even in a purely prescriptive sense.

<sup>3</sup> I discuss this point in my "Introduzione" to the Italian edition of Law, Legislation and Liberty (Milano: Il Saggiatore, 1985).

<sup>4</sup> The two main contemporary defences of the superiority of the market probably come from the neo-Austrian Economics, and from the neo-Walrasian Arrow-Debreu general equilibrium theory. As it is well-known, von Hayek put forward a deep criticism of the whole general equilibrium theory approach. (On this topic see the beautiful article by S.C. Littlechild, "Equilibrium and the Market Process", in I.M. Kirzner (ed.), Method, Process, and Austrian Economics (Lexington, Mass., and Toronto: Lexington Books, 1982, 75-102)). One of the main basis for his criticism was his view of the function

of the market as a process of discovery. This function is also stressed by Radnitzky (p. 35). However, it is important to note that we are faced here with a concept of discovery which is completely different from scientific discovery. Scientific discovery is the discovery of laws; the discovery in the market process is the discovery of particular facts. This difference has many important consequences. For example, even if one accepts the "Popperian" thesis of the impossibility of an algorithm for scientific discovery, this does not imply at all that an algorithm-like procedure is de jure impossible for discovering new particular facts in the market process. On this topic see A.M. Petroni and G. Scarampi, "On Herbert Simon's Logic of Discovery", forthcoming. For a criticism of Simon's theory of scientific discovery as far as the physical laws are concerned see the first chapter of my Dinamiche ed ellissi. Aspetti metodologici dell'"Astronomia Nova" di Giovanni Keplero (Università di Pisa, tesi di laurea: 1982).

<sup>5</sup> For example, because the individuals will follow a greater number of new patterns of behaviour, and one of them could reveal itself to be extremely useful for the survival of the whole group.

<sup>6</sup> L.L.L., I, p. 73.

<sup>7</sup> The names of Coase, Demsetz, Alchian, Pejovich, are among the best known.

<sup>8</sup> I disagree with the justification Radnitzky gives of the dichotomy facts/values. According to Radnitzky, "Deducing a genuine (i.e. non-instrumental) value judgement from premisses that have purely descriptive function in the argument at hand is logically impossible, since ampliative inferences are not valid" (p. 18). I fail to see why there would be an "ampliative" inference. If it is true that "no amount of empirical knowledge can decide a moral issue", it is by far more true that no amount of moral knowledge can decide an empirical issue! Why it would not be equally "ampliative" an inference

from an "ought" statement to an "is" statement? On the problem of "ought" statements and ampliative inferences see W. W. Bartley, III, "Logical Strength and Demarcation", in G. Andersson (ed.), Rationality in Science and Politics (Dordrecht: Reidel, 1984), 63-93, and my review-article of this volume in "Methodology and Science", 18:62-71 (1985).

<sup>9</sup> See J.M. Buchanan's "Cultural Evolution and Institutional Reform", unpublished, and The Limits of Liberty (Chicago and London: The University of Chicago Press, 1975), chapter 10 (in particular p. 167); see also my "Introduzione", cit..