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Knowledge and Meliorism in the Evolutionary Theory of F. A. Hayek

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1. Introduction.

Unlike most economists, late F. A. Hayek ventured often into domains other than the strictly economic. As a result, his work encompasses a number of social disciplines. Such intellectual trespassing might well have led to a diffuse and disconnected body of work; but this is a danger Hayek understood and largely avoided. The unifying thread in his work is arguably his vision of society as an evolved system of rules, which he often discussed in terms of the concept of “spontaneous order.”

The negative message of this approach is quite clear: social institutions are not the product of conscious rational design, and attempts consciously to redesign evolved social orders (as envisioned, in principle at least, in most forms of socialism) are likely to yield inferior and even disastrous results. The affirmative implications of Hayek’s vision are less clear. What kinds of rules are likely to lead to “good” social orders? Can reason say anything about the choice of rules? Although Hayek explicitly denies that all (or indeed any) evolved orders are *ipso facto* desirable, he nonetheless stresses the possible beneficial effects of evolved orders — a tendency that has subjected him to charges of Panglossianism. These are, of course, issues that go beyond the doctrine historical, and are in fact critical for all evolutionary theorizing in economics and the social sciences.

This paper tries to explicate Hayek’s vision by examining the underlying theory of knowledge in his work. This theory, we argue, offers clues for resolving

the tension between skepticism and meliorism in Hayek's — or indeed any — evolutionary approach.

2. Hayek on spontaneous order.

2.1 The issues.

There are two aspects of Hayek's work that most often draw the attention of economists: (i) his definition of the economic problem as one of coordination and (ii) his effort to explain certain social phenomena as the result of a spontaneous order (Vanberg 1986; Caldwell 1988, 1994; Garrouste 1994; De Vlieghere 1994).

By calling the attention of economists to the problems of coordination that markets must solve, Hayek introduced a new perspective: a vision of the market as a mechanism for the coordination of individual plans (Hayek 1937, 1945). Though not the first to raise the coordination problem, Hayek doubtlessly contributed to enhancing the importance of this kind of vision of the market. In the same vein, his use of the concept of spontaneous orders to explain some social phenomenon constitutes an analytical tool very different from the idea of the omniscient *homo economicus* that neoclassical economics is often accused of harboring.

Underpinning these two important constituents of Hayek's work is a single intellectual problem: the problem of knowledge. Indeed, a particular vision of knowledge underlies all of Hayek's social philosophy. It can be summarized in two points: (i) knowledge is essentially imbedded in the values of the society and (ii)

social agents are not conscious of these social values. This vision allows Hayek to accord no more than a minimal role to theoretical knowledge in social evolution. Consequently, he finds it impossible to justify a central organization like that foreseen by socialism, and he argues for minimal state intervention in social evolution (Tomlinson 1990; Kukathas 1989; Butler 1983; Gray 1984).

The first issue here is Hayek's silence on what are adequate rules of conduct. It is very surprising that an author like Hayek, who spent all of his life defending the idea of beneficial spontaneous orders (the market, to mention one), has never indicated the type of rules that could lead to these orders (Vanberg 1986).

The second issue is Hayek's objection to what Popper (1966) called piecemeal social engineering — an opposition Hayek maintained despite his own advocacy of certain radical reforms and his well-known defense of and friendship with Popper (De Vlieghere 1994).

The key to unlocking both of these problems lies in Hayek's identification of tacit (implicit, practical)¹ knowledge as the primary form of knowledge. We begin by examining Hayek's theory of spontaneous order to discover the relationship between tacit knowledge and spontaneous order. We then unpack his theory of mind and knowledge to discover why Hayek (i) does not delineate the rules appropriate for a spontaneous order and (ii) why he is reluctant to embrace piecemeal social engineering.

¹ Hayek uses the terms tacit, practical and implicit interchangeably. See Gray (1984, 14).

2.2. Hayek on spontaneous order.

Hayek's point of departure is attempt to explain certain social phenomena that cannot be understood in the framework of the classical dichotomy between what is "artificial" and what is "natural." This distinction was initially suggested by the ancient Greeks (*thesei* versus *physei*) in order to distinguish what is the product of design — more exactly of the human mind — from what is not. According to this distinction, social phenomena must be either the products of the human mind (an organization) or the results of a natural evolution (independent of a human design). This distinction appears insufficient to Hayek, who believes that there are some phenomena that cannot be categorized as either artificial or natural. Hayek considers the market an example of this type of phenomena; human language and the emergence of a trodden path are other examples. Hayek suggests a tri-category approach, with the new category designated by the "concept of spontaneous order."² Hayek wants to use this concept to create an intermediate space between what is the result of a human design and what is not. This space will be "occupied" by objects that are neither organizations nor products of nature. Unlike organizations, these objects are, following Ferguson's formula, "the result of human action but not the result of human design."³

Hayek argues that the social sciences began with the discovery of these objects. Looking at the social sciences in this way, Hayek follows not only in the

² See Hayek (1973, 20-2).

³ Hayek states that the terms "structure" or "pattern" could have also been used.

tradition of Smith, Mandeville and Hume, but also that of the Austrians. In fact, given his Austrian training, it is not surprising that his problematic is similar to Menger's. The two authors try to explain the emergence of certain regularities that can not be attributed to an organizing mind.

2.3. Spontaneous order and organization.

Placing the dichotomy between organization and spontaneous order at the center of his approach, Hayek sets out to demonstrate the differences between the two types of institutions. In order to highlight this difference, he considers the following properties of a spontaneous order: (i) complexity, (ii) abstractness and (iii) non-intentionality (Hayek 1973, p. 38).

(i) A spontaneous order is complex in the sense that it cannot be mastered by the human brain. This complexity comes from the fact that a social order (like all social phenomena) is the result of the beliefs and judgments of agents. (Gray 1984, p. 80).

(ii) A spontaneous order is the reflection of an abstract system of relations between constitutive elements. Its existence cannot be discerned by simple inspection; our senses cannot take it in. We can only mentally reconstruct it.

(iii) A spontaneous order is not in the service of a predetermined goal because it is not the result of deliberation. A spontaneous order is (generally) useful to agents because it regularizes their interactions. Nevertheless, its utility does not

come from the fact that it is the expected result of some human actions. Hayek sees no way in which order can be attributed to intention.

All this said, we have not given a definition of social order nor indicated how it emerges. In fact, it is very difficult to find a clear definition in Hayek's work. Nevertheless, we can, for the moment, content ourselves with the following definition: a spontaneous order is defined by a set of interrelated elements that create a situation "in which individuals are able, on the basis of their respective peculiar knowledge, to form expectations concerning the conduct of others, which are proved correct by making possible a successful adjustment of the actions of these individuals" (Hayek 1978, p. 9). Hayek is conscious of the fact that the possibility of forming certain expectations cannot by itself define a spontaneous order, since this condition is satisfied even in the case of a totalitarian order. He suggests, then, that we classify orders according to their intent: if the order is deliberately created, it is an organization; if not, it is a spontaneous order.

How do spontaneous orders emerge? Hayek tells us that the answer lies in the rules of conduct that the agents follow. Let us examine this proposition in more detail.

2.4. The nature of the rules of conduct.

The regularities (or rules) governing the behavior of the agents can be of two different sorts: they can be innate (genetic) or learned (cultural). Innate regularities are formed by biological evolution, learned regularities by human civilization. It is

possible, of course, that these two sources of rules could be intertwined in a complex way refractory to analysis. Hayek eliminates these problems by concentrating his analysis on learned rules. He justifies this attitude two ways.

First, innate rules of conduct are more-or-less stable (Hayek 1979 p. 160) and inseparable from cultural rules. Given this inseparability, it is impossible to know the exact influence of innate rules on behavior. Hayek goes further by affirming that innate rules are subjugated to cultural ones. Small primitive bands, he argues, develop into sophisticated societies precisely because of rules transmitted culturally; consequently, it is this type of rule that is central for the evolution of a society. One can thus build social explanation on the basis of cultural rules alone. Second, cultural rules change much more quickly than do innate rules, and they spread primarily by imitation. For this reason, they play the larger role in social evolution.

The set of cultural rules of conduct thus contains all the values governing a society. This set is composed of two subsets. The first contains rules of conduct that are not made deliberately, like traditions, customs, norms, etc. The second (much more restricted than the first) contains deliberately produced rules, e.g., some laws and organizations. We will see further that Hayek's approach is essentially constructed on the basis of those rules of conduct that are not deliberate.

2.5. How rules of conduct change.

Change in the rules of conduct requires a long process of selection. Considering evolution and spontaneous order as twin concepts, Hayek attempts to express the

latter in the terms of the former. Thus, according to Hayek, spontaneous order is the result of an evolutionary process that selects the best rules of conduct. However, combining the concepts of evolution and spontaneous order does not imply that cultural evolution is identical to biological evolution! Hayek sees three essential differences between the two sorts of evolution. (i) Cultural evolution concerns the transmission of learned rules while biological evolution concerns the transmission of the innate rules only. The fact that the cultural features are transmitted by learning and imitation makes cultural evolution faster than biological. (ii) Cultural evolution is formed, not by the transmission of the features of some biological parents solely, but by the transmission of the features of a multiplicity of parents. (iii) Cultural evolution operates specifically by the selection of groups (1988, p. 25).

Despite these differences, cultural and biological evolution share in common the phenomena of regularity and change. In order to explain those phenomena, we need to single out two processes: variation and selection (Vanberg 1986).

The process of variation is the process by which (experimental) new patterns of behavior are generated. To explain this process, Hayek points to the behavior of individuals who, facing a problem, try to solve it by trial-and-error. This process is set in motion by human will and the desire to adapt to changing conditions. Although agents who succeed in adapting themselves do not aim at any social goal, the society benefits all the same from their practices. At the end of the process,

⁴ Hayek believes that Darwin was inspired by social scientists when he formulated his theory. See Hayek (1988).

selection retains, from among a large number of solutions, those that permit the agents to succeed in their experiments. Selection's role is to eliminate inadequate solutions.

As Vanberg (1986) argues, one can find two contradictory interpretations of the process of selection in Hayek. The first, individualistic, interpretation explains the process by imitation: some new rules are generated by a few innovative individuals; other individuals imitate the innovators because they observe that those innovators have prospered. This explanation is individualistic because the unit of the selection is the individual. It is therefore compatible with the methodological individualism Hayek defends (Hayek 1979, p. 161). The second interpretation of the rule-selection process refers to the advantage that a group experiences through the adoption of certain types of rules. Hayek maintains that rules of conduct have improved in the course of history and that this improvement occurs by the selection of the group: "Such new rules would spread not because men understood that they were more effective, or could calculate that they would lead to expansion, but simply because they enabled those groups practicing them to procreate more successfully and to include outsiders" (Hayek 1988, p. 16) This explanation is not compatible with methodological individualism, at least if we take that doctrine to require that the advantage drawn by the individual agent be determining in the adoption of a rule.⁵

⁵ It is not clear, however, that even this notion of group selection could not find a more capacious notion of methodological individualism, one that, for example, simply ruled out the reification of wholes and the attempt to explain without keeping in mind the relationship

2.6. Implications.

The role that Hayek accords to rules of conduct has two implications. First, it provides an explanation for the emergence of an order. Given that the actions of agents are principally guided by rules of conduct, a spontaneous order could not emerge from the will of agents or from the conscious knowledge that informs this will. Spontaneous order emerges from the following of rules of conduct. It emerges out of our ignorance.

Second, all propositions about social change must be judged by their compatibility with these rules of conduct: “Findings derived from the articulated rules only will not be tolerated if they conflict with the findings to which yet unarticulated rules lead” (Hayek, 1978, 82). Thus central organizations that have nothing but reason to guide their actions are inferior to spontaneous orders. In Hayek's opinion, the superiority of spontaneous cooperation arises from the dispersed information it can exploit, information an organization can never wield. Information can be dispersed not only because every individual has a deep knowledge of his or her environment that another agent could not possess, but also because different agents use different rules of conduct. In order to organize

between part and whole, even if the behavior of the whole cannot be reduced to that of the part. As Hayek (1967, pp. 70-71, emphasis original) has himself written: “The overall order of a group is in two respects more than the totality of regularities observable in the actions of the individuals and cannot be wholly reduced to them. It is not so only in the trivial sense in which a whole is more than the mere sum of its parts but presupposes also that these elements are related to each other in a particular manner. It is more also because the existence of those relations which are essential for the existence of the whole cannot be accounted for wholly by the interaction of the parts but only by their interaction with an outside world both of the individual parts and the whole.” For an argument in favor of this sort of methodological individualism, see Langlois (1983).

socioeconomic activities, an organization must rely solely on its articulated knowledge. Therefore, the organization cannot benefit from the contribution of the tacit knowledge imbedded in the various rules of conduct.

2.7. Appropriate rules.

The fact that a spontaneous order is based on rules of conduct does not mean that all kind of rules of conduct lead to the formation of an order (Hayek 1978, p. 8). The obvious question then is: what are the characteristics of the rules of conduct capable of forming an order ? Hayek does not answer this question. He contents himself with noting that, if individuals avoid one another, an order cannot emerge.

Similarly, Hayek never explicitly states that a spontaneous order is, by definition, beneficial. He even affirms that the results of cultural selection are not necessarily good for the society⁶ One could infer that, for Hayek, not all orders are beneficial and, to be beneficial, an order must be formed on the basis of appropriate rules. According to Vanberg (1986), Hayek recognizes explicitly that the functioning of a market (a spontaneous order) necessitates that the agents be guided by suitable rules.⁷ On the other hand, Hayek also describes the evolution as a progressive process, which indirectly implies that orders are beneficial. It is unclear how to reconcile these two ideas.

⁶ Thus: "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, p. 27).

⁷ To support his thesis, Vanberg cites Hayek (1978, pp. 124 and 135), who appeals to the approaches of Smith and Hume.

It is also unclear whether Hayek really poses two different questions, one concerning the existence of an order and the other concerning the beneficial aspect of that order. The situation is far from clear because the two questions seem so closely related that one could argue that they form just one question, that of existence. The reduction to one question can be defended in the following way. Hayek's order is characterized by the existence of correct expectations or, at least, by the existence of some expectations that have a good chance of being correct. Now, if the existence of such expectations is necessary for the existence of an order, one could argue that the order, by definition, is beneficial. The expectations being right, the agents could proceed to exchanges. Vanberg (1986) reminds us precisely that, for liberals, an order is beneficial if it serves the interests of individuals. Now, an exchange based on correct expectations serves individual interests. But, on the other hand, Hayek claims that some orders are better than others: "certain combinations of such rules of individual conduct may produce a superior kind of order, which will enable some groups to expand at the expense of others" (Hayek 1978, p. 9). If some differences exist between orders, then the question of what are the suitable rules of conduct for a superior order comes up again. What is important here is that the possibility of comparing different orders implies that the question of a beneficent order is independent of the question of the existence of an order.

In large measure, the ambiguity in Hayek arises because he is not interested in any of these questions. He is not interested in understanding the nature of the rules that create an order, nor in knowing which are sufficient to generate a

beneficial order. If Hayek poses any question, it is which rules *do not* lead to an order, not which do. In fact, if Hayek were to try to indicate which rules are appropriate, he would fall into a contradiction — for two reasons.

First, it is necessary to remember that the rules of conduct have, for Hayek, a role that is essentially negative. It is clear that the rules of conduct guide the actions of individuals, but they do not guide them by transmitting positive knowledge. They transmit only negative knowledge by indicating what is permissible or, more precisely, what agents should *not* do. Obedience to these rules is beneficial because they represent accumulated experience and, therefore, help the agents to avoid making the same errors as past generations.

Second, prescribing the appropriate rules of conduct would fall under the category of constructivist rationalism. Constructivist rationalism, which Hayek attributes to such figures as Descartes, Comte, and Rousseau, is the doctrine that human reason is capable of constructing a set of ideal institutions. According to Hayek, constructivist rationalism attempts to arrive at a government based on reason. Hayek considers this undertaking impossible for epistemological reasons that are laid out in his theory of mind and of action.

2.8. Knowledge and the mind.

Hayek distinguishes physical order from phenomenological order. The latter is not constructed of properties of physical objects but of our mind's experiences with the physical world; these experiences are assembled into a subjective map of the

external world. The existence of such a map means that each sensation has a significance only inside a system of preexistent sensorial connections. The consequence is that the perception of a new experience cannot occur outside this system. Thus, the categories of the human mind are formed in the adaptation to changes in the world surrounding us. This means that the human mind is not formed out of immutable or universal categories. Moreover, these categories cannot be completely known: they are formed by the guided activity of our mind. This impossibility derives, according to Hayek, from the fact that each classification apparatus must have a higher degree of complexity than the objects that it classifies. Because the mind is a classification apparatus, we cannot ask to it to comprehend its own operations, but only those of lower degree. The conclusion that Hayek draws from this vision of the mind is essentially negative: the principles that govern the mind cannot be discovered completely, which means that our environment will never be completely understood.

This impossibility of understanding our environment has its counterpart in Hayek's vision of action. According to Hayek, every action is determined by a particular goal. The will to undertake a certain action disappears if the goal that motivated the action is achieved. Nevertheless, the way the agent acts depends on the agent's opinions. These opinions represent some permanent dispositions of this agent⁸. As the will is directed toward a goal, these dispositions are directed toward some values (Hayek 1978, pp. 86-7). However, contrary to the will, they do not

⁸ Hodgson (1993, p. 165) points out the imprecision of Hayek's terms.

disappear after the accomplishment of a certain act; they continue to influence later acts.

To act according to some permanent dispositions is to act according to rules of conduct transmitted by traditions and customs. This means that individual actions are not determined uniquely by reason and that rules of conduct present an opaque order that cannot be controlled by agents. To control the set of these rules, we would have rationally to reconstruct them.

According to Hayek, the knowledge that our minds would have to use for this reconstruction is explicit knowledge that presupposes considerable tacit (implicit, practical) knowledge. The explicit, verbal knowledge represents just a small part of all of our knowledge. What is more, learning is not necessarily achieved verbally. In order to learn to use some things (“knowing how”), it is not necessary to speak. For example, the learning of a language by a child cannot presuppose the same language. The capacity to learn a language is already there. So, the capacity to behave according to rules is older than our capacity of articulating the same rules (“knowing that”), i.e., older than our articulated knowledge. Our practical knowledge is not only more extensive than explicit knowledge, but it has priority over that explicit knowledge as well. A significant part of tacit knowledge is not transferable. Given that the rules of conduct we follow contain so much tacit knowledge, we can never reconstruct them. All that we can do is to observe the results of certain regularities: “The fact that we recognize patterns which we cannot specify does not, of course, mean that such perceptions can legitimately serve as

elements of scientific explanation (though they may provide the intuitions which usually precede the conceptual formulation)” (Hayek, 1967, 53). The great fault of constructivist rationalism lies in believing that reason could replace the knowledge reflected in these regularities.

This theory of the mind has two implications. First of all, Hayek strays very far from the vision a *homo economicus* whose acts are perfectly calculated. The role he accords to reason in the determination of actions is even smaller than the one conceded by even so well-known a critic of *homo economicus* as Herbert Simon. The latter maintains that the behavior of individuals cannot be rational in the neoclassical sense of the term. According to Simon, neoclassical rationality requires perfect information. Having a limited knowledge and calculation capacity, the human brain can never deal with the complexity of the surrounding world; human actions can therefore rarely be rational in the neoclassical sense of the term. Hayek also believes that human actions are not rational but he goes farther than Simon in the explication of the non rational aspect of the human actions. For Hayek, the absence of rationality emanates from the logical impossibility of controlling and of reconstructing the rules of conduct that determine the actions of the agents⁹.

Secondly, we now know why Hayek does not specify the rules leading to a beneficial order: if Hayek were precise about which rules of conduct can bring about a spontaneous order, it would mean that reason could reconstruct such rules and

⁹ Simon has recently discussed his ideas in relation to those of Hayek. See Simon, et al. (1992).

that we could teach them to future generations. Yet, this is impossible because the values forming these rules precede reason — logically, psychologically, temporally (Hayek 1988, p. 23). These values are located between instinct and reason. They are often opposed to instinct and escape to reason. The latter could not have created the traditions of the society, for it is itself the product of those traditions (Hayek 1988, p. 21). As reason is not the parent but the child of traditions, one could not allow it to determine the future of society.¹⁰

3. Piecemeal social engineering

Hayek's position concerning social reforms is, at the very least, fuzzy. On the one hand, he is not very pleased with the idea of piecemeal social engineering, as dear as it is to his friend Popper. On the other hand, Hayek offers some radical propositions for reform of the constitution or the currency. He even accepts that all traditions are in principle open to discussion (Hayek, 1978, 19). In order to be coherent, Hayek must reject the idea that institutional experimentation can be rationally justified (De Vlieghe, 1994).

Several writers have pointed to what they see as contradictions in Hayek!¹¹ We will concentrate on the version of De Vlieghe (1994). According to De Vlieghe, the traditionalism of Hayek is based on three ideas.

1. Rules of conduct must not be put aside for a rationalistic opportunism

¹⁰ See also Barry (1979, p. 82), who maintains that an evolutionary approach is necessarily retrospective. It can only say that such and such a rule has survived; it can never predict the rules necessary for survival.

¹¹ See, for example, Tomlinson (1990) or Kukathas (1989).

2. The biggest part of our knowledge is implicit, tacit; this knowledge is therefore inaccessible theoretically; it is accessible by traditions
3. Evolutionary forces are better than intentional reforms.

De Vlieghe believes that it is this third idea that causes Hayek to take a self-contradictory position and, in particular, to pay only lip-service to piecemeal social engineering. De Vlieghe's argument is the following. There exists a two-pronged analogy between technological evolution and institutional evolution.

1. In both cases the agents use knowledge that they do not possess. For example, an engineer or a workman need not build a machine in order to use it. Similarly, we use many institutions without understanding them.
2. In both cases, it is impossible to reconstruct the background of a novelty, of an invention. It is, for example, impossible to reconstruct all existing productive apparatuses. The historic accumulation is so overwhelming that it is impossible to reconstruct it. Similarly, it is impossible to reconstruct the ensemble of our institutions.

According to De Vlieghe, these analogies must also follow the same logic of modification: the impossibility of reconstructing the productive apparatus does not preclude the agents from using it, nor from introducing novelties or suggesting inventions. Ignorance about the background of technology does not eliminate the possibility of deliberate invention. According to De Vlieghe, one can apply the same reasoning to institutions: it is impossible to reconstruct the institutional background, but this should not prevent us from suggesting innovations and partial reforms. This constitutes for De Vlieghe a defense of piecemeal social engineering and a criticism of Hayek.

Yet, it remains important to know why Hayek objects to piecemeal social engineering. De Vlieghe argues that Hayek's objection comes from his belief that the reformer as well as the engineer needs complete knowledge in order to achieve even these partial projects. By contrast, De Vlieghe argues that in fact neither needs to have complete knowledge.

Although Hayek's view is certainly not impervious to criticism, De Vlieghe's argument misses the important aspect of Hayek's approach, for two reasons. First, it is not clear what De Vlieghe means by invention or novelty. If one means a new product, it is true that the "knowledge how" could be sufficient for the introduction of such a novelty. The very first computers and cars were produced using a production apparatus that was not foreseen previously for those kinds of products. That this productive apparatus has since undergone modifications that led to a greater functionality does not speak to its hesitant beginnings.

The situation is different if one means by the term novelty a process of production never seen before. For this kind of novelty, it is doubtful that "knowledge how" could be sufficient, since the innovation requires the complete replacement of one productive device by another. De Vlieghe's allusion to human reproduction implies that it is the invention of a product that interests him as a novelty¹². This is not really the kind of novelty that preoccupies Hayek, who is

¹² Thus, "A lot of people can 'make' children, but nobody has even a fraction of understanding of the (re)production-apparatus the human body" (De Vlieghe 1994, p. 290).

mostly concerned with the replacement of spontaneous institutions by new, rationally designed institutions.

The second reason speaks to the impossibility of reconstructing tacit knowledge completely. De Vlieghe (1994, 290) believes that this impossibility comes from the fact that “reason can not compete with the cumulative force of the long term institutional fixation of knowledge.” This assertion means that he not only identifies implicit knowledge with the knowledge imbedded in the productive apparatus but — more importantly — with a knowledge that one cannot reconstruct because its background lies in a faraway past.

It is no doubt true that historic accumulation renders the reconstruction of some kinds of knowledge difficult; but this is not the essential reason why Hayek objects to the possibility of a such a reconstruction. Hayek thinks that it is impossible to reconstruct the ensemble of our institutions because practical knowledge precedes theoretical knowledge. In terms of partial institutional reform, this means that we cannot reconstruct our institutions because their evolutionary traces have disappeared; rather, we cannot reconstruct institutions because it is impossible to access their traces even in principal. We cannot articulate and transmit the required knowledge verbally. For us to articulate it, our reason would have to go beyond or outside of these traces. This is impossible because our mind is the product of the evolutionary process and not the reverse. It is therefore the priority of implicit knowledge that leads Hayek to object to social engineering and consequently to disagree with his friend Popper.

4. Hayek's evolutionary agnosticism versus his liberal rationalism.

In the two preceding sections, we have argued that Hayek's approach can be characterized by an incompatibility between two types of propositions: those concerning certain kinds of radical change and those harboring a warning against intervention in social evolution. By taking into account Hayek's theory of knowledge, we have been able to resolve the tension in favor of evolutionism. Put otherwise, our conclusion is that the evolutionary aspect of Hayek's ideas takes precedence of the rationalist aspect.

By contrast, Vanberg (1994) maintains that a systematic insistence on the evolutionary aspect of Hayek's approach denatures his overall message. Laying great stress on the importance that the literature places on Hayek's last work¹³, Vanberg argues in favor of an interpretation that takes into consideration the rational(ist) aspect of his approach. Vanberg does not propose to deny the existence of a grand tension in Hayek's program for liberalism. He formulates that tension in terms of simultaneous presence in Hayek's thought of rationalist liberalism and evolutionary agnosticism. For Vanberg, Hayek's rationalist liberalism lies within his collection of arguments in favor of the establishment and maintenance of a liberal order. By contrast, evolutionary agnosticism corresponds to the fatalist aspect of Hayek's work, that is, to his acceptance of an evolutionary process that human reason cannot resist, even if the results of that process are not always wanted.

¹³ *The Fatal Conceit* (Hayek 1988). According to Vanberg, this work, unlike Hayek's earlier writings, focuses too heavily on evolutionary propositions.

Clearly, not all aspects of evolution are incompatible with rationalism. One need only recall, with Vanberg, that an explanation of rules of conduct as results of an evolutionary process does not at all deny a role to reasoned intervention. Nonetheless, when we put forward these two themes simultaneously, the relationship between them quickly becomes problematical, and an incompatibility emerges just as quickly when we make one of the themes primary to the other. If Vanberg's argument were simply that we ought to take into account the rationalist aspect of Hayek's work, then his argument would pose no problem. Unfortunately, his argument doesn't stop there. In effect, his proposal to reconcile the two aspects amounts to subjugating Hayek's evolutionism to his rational liberalism. And, in that sense, Vanberg's reconciliation falls foul of our interpretation of Hayek's theory and, for reasons that we will suggest, leads to a dead end.

Vanberg's reconciliation strategy depends essentially on a distinction between two types of evolutionary proposition: conditional evolutionary propositions and unconditional ones. According to this distinction, a proposition is unconditional if it speaks to evolution *per se* and leaves unspecified the constraints under which an evolutionary process functions. By contrast, a conditional evolutionary proposition would specify the constraints. Proposing a reinterpretation of Hayek in light of this distinction, Vanberg concludes that Hayek's evolutionism consists only in conditional evolutionary propositions.

To buttress his rereading, Vanberg takes up Hayek's defense of the market. We need not consider the details of this defense here. Recall, however, that in some

passages Hayek defends the market as a desirable social institution that, to yield beneficial results, must be constrained by a framework of appropriate rules. Thus, the proper — efficient and beneficial — functioning of the market is contingent on the nature of the rules that make up the general framework in which the market operates. Vanberg apparently bases his choice of this example of the market on the belief that it advances his quest to reconcile evolutionism and rationalism in Hayek. Insofar as the framework surrounding the market is a legislative one put deliberately in place — for example, as the end result of a rational debate — then the concept of a spontaneous evolutionary process (like that of the market) is compatible with deliberate institutional design. From this specific example of the market, Vanberg draws his general conclusion: Hayek’s evolutionary agnosticism makes sense only to the extent that it doesn’t contradict his rationalist liberalism!¹⁴

We see three problems with Vanberg’s interpretation.

First of all, it is far from clear that the evolutionist argument is dominant only in Hayek’s later works. Hayek’s evolutionism has its roots in his theory of

¹⁴ It is interesting to note that Vanberg’s interpretation is entirely within the liberal tradition of *Ordnungspolitik* as well as being consistent with the ideas of the late Ludwig Lachmann (1963; 1971). As Vanberg says, the German Ordo-liberals are distinguished by their desire to specify the legislative and institutional reforms necessary for a viable liberal order. For his part, Lachmann proposed a distinction between *external* and *internal* institutions. The entire legal system constitutes the external institutions, whereas competitive markets are examples of the internal institutions that develop spontaneously within the legal framework. The analogy between this distinction and Vanberg’s distinction between unconditional and conditional propositions is striking. In both cases, spontaneous orders are confined within a larger framework; and, in both cases, the appropriate rules of conduct that undergird a well-functioning market cannot appear spontaneously. Vanberg affirms this latter point explicitly: “If and to the extent that, an appropriate framework of rules cannot be expected to spring up “naturally”, and to be maintained as well as continuously adjusted by spontaneous forces alone, deliberate efforts in institutional design and legislative reform are essential ingredients to a viable liberal order” (Vanberg, 1994, 470).

knowledge, which long antedate *The Fatal Conceit*. We have already cited several passages from Hayek's earliest works (notable *The Sensory Order*) that illustrate unambiguously the presence of this theme in his very earliest intellectual periods.

Second, Vanberg's general conclusion is not entirely solid. The distinction between propositions that are conditional and propositions that are unconditional is far from clear. In an early passage, Vanberg (1994, p. 460) seems to want to say that, in order to be conditional, an evolutionary proposition must articulate conditions independent of the evolutionary process. In another passage (*ibid*), he defines a conditional proposition as a proposition that must indicate the constraints under which the evolutionary process manifests itself. But these two definitions are not identical. Take the case of the market. One can defend the market as an evolutionary process and argue that the success of the process is measured by population growth.¹⁵ This says nothing about the constraints under which the process functions, but it is a conditional evolutionary proposition in Vanberg's first sense, since the criterion of measurement is independent of the process. On the other side, we can say that a well-functioning market process depends on the framework in which the process operates. In that case, there is no need to specify an independent measure of success.

It's important to note that Vanberg's reconciliation strategy rests on the second definition. In effect, the logic of that strategy is the following: since the

¹⁵ This is not an argument to which we subscribe, of course. It is, however, an argument suggested in certain passages of Hayek, notably Hayek (1988).

framework in which the spontaneous market order operates represents the constraints to that process, and since the framework is deliberately chosen, then intellectual coherence demands that Hayek's evolutionism be constrained by his rationalism. The reconciliation between rationalism and evolutionism in Hayek cannot succeed unless this strategy, which appears to succeed in the case of the market, can generalize to the case of cultural evolution. In other words, in order for his attempt to succeed, Vanberg has to demonstrate that his interpretation of Hayek's evolutionism as a conditional proposition applies also to the rules that form the very framework in which the market operates. It is here that Vanberg's strategy begins to take on water. The reason for this lies — once again — in Hayek's theory of knowledge.

It is important to remember that Hayek refers to cultural evolution in an “inclusive” sense that comprehends legislation as well. He makes frequent reference to an “extended” spontaneous order, by which he means a society based on competition and the following of general rules of conduct. In order for Vanberg's strategy to succeed, one has to hold not only that the evolution of institutions proceeds by a (rational) comparison among institutions but also that the rules of conduct are subject to deliberate choice. But we know that Hayek explains the rise and diffusion of such rules by an evolutionary process that is not guided by reason. Recall once again that Hayek considers reason itself to be the product of the rules, which thus make it impossible that reason could choose among the general rules of conduct. To put it another way, applying Vanberg's strategy to cultural evolution in

general requires finding some general meta-framework made up of deliberately chosen rules. If we take Hayek's theory of knowledge seriously — and Hayek certainly took it seriously, as he referred back to it all his life — we could never admit a deliberately chosen meta-framework of this sort.

Third, Vanberg's interpretation sidesteps the problems posed by Hayek's well-known distrust of reason, a distrust that manifests itself without exception in all his works.¹⁶ If we follow this interpretation, we have to treat as unimportant all the passages in which Hayek argues for the primacy of tacit against explicit knowledge. But the primacy of tacit knowledge is crucial to Hayek's theory in general and to his defense of the market in particular. For Hayek, the impossibility of transferring tacit knowledge easily to a central planner is the principal reason for the superiority of the market over a centralized economy. Thus, in marginalizing the role of this type of knowledge, Vanberg's reconciliation project threatens to undermine the those features that are special to the Hayekian defense of the market.

Conclusion: Hayek as research agenda.

As almost all interpreters point out, the essential problem in Hayek is to find an acceptable criterion for the use of reason. Considered without the background of a theory of knowledge, Hayek's own proposals for institutional reform seem to reflect an ordinary kind of liberalism. Unfortunately, Hayek's theoretical edifice — his

¹⁶ It obscures also Hayek's ambiguous stance toward methodological individualism, a topic to which Vanberg has devoted an excellent article (Vanberg 1986).

theory of cultural evolution, his defense of the market, etc. — loses much of its interest if we subtract his theory of knowledge.

If, as we have argued, Vanberg fails to reconcile the tension in Hayek between rational liberalism and evolutionary agnosticism, then where do we stand? From the perspective of doctrinal history, the tension simply remains unresolved: the tension itself is a key feature of Hayek's work, one not unlike the unresolved tensions in many other writers.¹⁷ From the point of view of the theory of social institutions or of the evolutionary approach to economics, however, it remains important to resolve — or at least to investigate — this tension. In this regard we need to see the work of Hayek not as a text that will provide us with all the answers but rather as the starting point for a research program.

Such a research program will have to proceed cautiously. It is not at all clear, for example, that a reconciliation between liberal rationalism and evolutionary agnosticism will be possible. We may have to choose — or to choose not to choose. In the meantime, Hayek's negative message — that we need to view skeptically proposals for the radical reconstruction of institutions — remains a valuable one in its own right.

The Hayekian research agenda we propose is likely to bear the most fruit if it pays attention to those aspects of Hayek's theory that are the least developed. For one thing, it is striking that, despite his early interest in cognition, Hayek never

¹⁷ Schumpeter, for example. See Langlois (1987).

developed a theory of learning. In part, of course, this reflects the fact that the theory of evolution itself is a kind of theory of learning. But, as *The Sensory Order* reminds us, organisms can also learn in ways not best characterized by variation and selection.¹⁸ And Hayek makes clear that imitation is an important component of cultural evolution, a component requiring a different model of learning.

The development of a theory of learning would be the first step toward a better theory of how rules emerge, are transmitted, and are selected — a research program that has been underway for some time (Langlois 1992). And such a theory may eventually lead to an understanding of the role that reason can play in cultural and institutional evolution.

¹⁸ See Butos and Koppl (1993) and Langlois (1996) for efforts to develop and apply the model of learning in *The Sensory Order*.

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