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and Human Purposes:
On F.A. Hayek's Evolutionary View of the Market**

by

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Abstract: The claim that the Darwinian paradigm of blind-variation-and-selective-retention can be generalized from the biological to the socio-cultural realm has often been questioned because of the critical role played by human purposeful design in the process of cultural evolution. In light of the issue of how human purposes and evolutionary forces interact in socio-economic processes the paper examines F.A. Hayek's arguments on the "extended order of the market," in particular the tension that exists between his *rational liberal* and his *agnostic evolutionary* perspective.

1. Introduction

With his theory of cultural evolution F.A. Hayek counts – along with K.R. Popper and D.T. Campbell – among the modern advocates of an *evolutionary epistemology*,¹ a research program that is inspired by the notion that the Darwinian paradigm of variation, selection and retention can be generalized from the biological domain to man's socio-cultural achievements, including scientific knowledge.² The essential ingredient of Darwin's approach that the advocates of this research program consider applicable to the socio-cultural no less than to the biological realm is the claim that *adaptedness* – in the sense of problem-solving capacity or "knowledge" – is the outcome of a "blind" process of experimentation by trial and error rather than the product of foresight and pre-informed design.

¹ Radnitzky and Bartley, eds., 1987. – In their *Introduction* the editors (ibid.: 2) note: "Although charted in the nineteenth century, it (evolutionary epistemology, V.V.) ... has now been revived and developed by Sir Karl Popper, Konrad Lorenz, F.A. Hayek, and Donald T. Campbell." – On the relation between Hayek's theory of cultural evolution and evolutionary epistemology see Vanberg 1994b.

² For a more recent and somewhat different "defense of generalized Darwinism" see Aldrich et al. 2008. – Levit, Hossfeld and Witt (2011) reject the project of generalizing Darwinism on the grounds that the abstract principles of variation, selection and retention "have not been crucial to distinguishing Darwinian from non-Darwinian approaches" in biology and that they "do not suffice to substantiate an explanation of actual evolutionary processes," but must be supplemented by specific hypotheses. – Whether, as the authors claim, generalizing these abstract principles cannot generate a fruitful research agenda can hardly be decided on a priori grounds but must be judged in light of actual research results. The argument in this paper proceeds on the contrary assumption that generalizing the "Darwinian principles" provides useful guidance for the study of evolutionary processes in the socio-cultural realm.

It is, in particular, this claim – most explicitly stated by D.T. Campbell³ – that has been, and continues to be widely met with skepticism. As critics charge, ascribing to cultural evolution the “blindness” that the Darwinian paradigm supposes for biological evolution appears to ignore the essential role that human purposefulness and intentionality play in socio-cultural affairs. Not surprisingly, much of the discussion surrounding efforts to develop a Darwinian theory of cultural evolution has been on the issue of whether the notion of “blind” evolutionary exploration can be reconciled at all, and if so in what sense, with the obvious significance of purposeful design in human endeavors.⁴

My decision to undertake yet another attempt at clarifying the relation between human purposeful design and blind evolutionary forces is motivated by my continuing irritation with an ambiguity in F.A. Hayek’s writings, an ambiguity that has long since been troubling me as someone whose research has been very much inspired by the author’s work. What I am referring to is the tension, noticed by a number of authors,⁵ between the evolutionary arguments that became most prominent in Hayek’s later work, culminating in *The Fatal Conceit* (1988),⁶ and the classical liberal outlook at the spontaneous order of the market that prevailed in his earlier writings, - a tension I have described elsewhere⁷ as the contrast between, on the one side, a *rational liberalism* that emphasizes the value of individual liberty and the benefits to be expected from market forces and, on the other side, an *agnostic evolutionism* that portrays the extended market order (or capitalism) as the product of evolutionary forces that work their way largely in disregard of human wishes.

The paper is organized as follows. Section 1 outlines the general issue of the relation between “blind” variation and human design in cultural evolution. Section 2 takes a closer look at the tension between Hayek’s rational liberalism and his evolutionary agnosticism, the issue that motivates my inquiry. The remaining sections seek to disentangle the arguments that, as I posit, are the root-source of the noted ambiguities in Hayek’s work. Section 3 draws attention to an ambiguity in Hayek’s critique of “constructivist rationalism” that can be avoided with a more careful distinction between “two kinds of planning,” a distinction that

³ Campbell 1974; 1987.

⁴ I have addressed this issue before on several occasions (Vanberg 1994a; 1994b; 1996; 1997; 2006).

⁵ For references see Vanberg 1994a: 452.

⁶ Elsewhere (Vanberg 1994a: 461) I have noted that in reading *The Fatal Conceit* one must keep in mind that this last book of Hayek has been heavily edited by W.W. Bartley. I should add, though, that this cautionary remark is not meant to doubt the authenticity of the *principal arguments* in *The Fatal Conceit*. Bartley’s editing appears to have affected more the wording than the essential substance of the arguments. The basic thrust of the evolutionary outlook in *The Fatal Conceit* is, indeed, already foreshadowed in Hayek’s “Epilogue” to *Law, Legislation and Liberty* (1979a:153-176). On this issue see also footnotes 23 and 28 below.

⁷ Vanberg 1994a.

Hayek has in fact explicitly drawn in his earlier writings. How drawing this distinction can help to clarify the role of institutional design in cultural evolution is shown in section 4. In section 5 I argue that ambiguities in Hayek's "agnostic" comments on the role of human desires in cultural evolution can be resolved if due attention is paid to the distinction between "sub-constitutional" and "constitutional" interests, i.e. the distinction between the interests that inform persons' choices *within* a given institutional framework and the interests that inform their choices *among* such frameworks. Implications that this distinction entails for the analysis of competition among institutional regimes – and that can help to clarify Hayek's arguments on the issue of "group selection" – are discussed in section 6. Section 7 concludes the paper.

2. "Blind" Variation and Human Design in Cultural Evolution

As Hayek (1967: 32) summarizes it, the basic proposition of a Darwinian evolutionary theory is "that a mechanism of reduplication with transmittable variations and competitive selection ... will in the course of time produce a great variety of structures adapted ... to the environment and to each other." Even more concisely D.T. Campbell (1974: 421) lists as the core principles of Darwinian evolution: "(a) Mechanisms for introducing variation; (b) Consistent selection processes; and (c) Mechanisms for preserving and/or propagating the selected variations."

It is the "variation and selective retention" scheme that is at the heart of Darwin's essential achievement: to reduce seeming teleology to causation, to show how nature's adaptedness, while inviting a teleological account in terms of foresightful design, can in fact be explained in causal terms, as the outcome of a naturalistic process that is driven from behind and unfolds unguided by foreknowledge of where it leads to.⁸ And it is this scheme that, so the advocates of the research program of evolutionary epistemology claim, can be generalized to all processes involving a "growth of knowledge."⁹ As K.R. Popper (1972: 261)

⁸ As Campbell (1965: 22) puts it, with Darwin's "variation-and-selective-retention process ... concepts of planned shaping and teleological emergence became unnecessary. Instead, blind and haphazard variations, when differently propagated due to the exigencies of different environments, could account ... for the exquisitely purpose-like fit of organic form to environmental opportunity and for progressive advance in adaptedness and complexity." – Elsewhere Campbell (1974: 420) speaks of "the natural selection paradigm as the universal nonteleological explanation of teleological achievements, of ends-guided processes, of 'fit'."

⁹ In Campbell's (1974: 413) words, evolutionary epistemology claims "that evolution – even in its biological aspects – is a knowledge process, and that the natural-selection-paradigm for such knowledge increments can be generalized to other epistemic activities such as learning, thought, and science." – See also Campbell (1987: 92, fn.): "In this perspective, any process providing a stored program for organismic adaptation in external environments is included as a knowledge process, and any gain in the adequacy of such a program is regarded as a gain in knowledge."

has famously and provocatively summarized the core tenet of his own “Darwinian theory of the growth of knowledge”: “From the amoeba to Einstein, the growth of knowledge is always the same: we try to solve our problems, and to obtain, by a process of elimination, something approaching adequacy in our tentative solutions.”¹⁰

While Popper’s focus is on the growth of scientific knowledge, Campbell and Hayek are known for their contributions to a theory of cultural evolution that applies the Darwinian paradigm to “the various institutions and habits, tools and methods of doing things, which ... constitute our inherited civilization” (Hayek 1960: 62), to the “selective cumulation of skills, technologies, recipes, beliefs, customs, organizational structures, and the like” (Campbell 1975: 1104). From the theoretical perspective they propose, cultural evolution is viewed as a trans-generational growth-of-knowledge process, a process in which acquired (as opposed to genetically inherited) problem-solving capacity is accumulated over time, resulting in a stock of knowledge that embodies the experience gained by the trial-and-error experimentation of past generations, incorporated in tools, rules, belief-systems, and all kinds of cultural achievements.¹¹

If Darwin’s essential contribution is to be seen, as noted before, in reducing seeming teleology to causality – explaining what looks like the product of planned design as the outcome of a process not guided by foresight – one should expect a Darwinian theory of socio-cultural evolution likewise to claim that adaptedness in the human cultural realm can be explained, without invoking teleology, as the outcome of a trial-and-error process that unfolds “blindly,” unguided by foreknowledge of what it produces.¹² As mentioned above, it is in particular this very claim that is widely met with skepticism. It lets critics doubt the applicability of a Darwinian perspective to human cultural affairs, and not even all advocates of a generalized Darwinism seem to feel comfortable with it.¹³ – Since, as a closer look into the debate reveals, those who argue for and those who argue against this claim have not

¹⁰ Popper (1972: 261): “All this may be expressed by saying that the growth of our knowledge is the result of a process closely resembling what Darwin called ‘natural selection’; that is, the natural selection of hypotheses: ... a competitive struggle which eliminates those hypotheses which are unfit. This interpretation may be applied to animal knowledge, pre-scientific knowledge, and to scientific knowledge.”

¹¹ For a more detailed discussion see Vanberg 1994b: 174ff..

¹² As mentioned in the above introduction, this claim has been notably argued for by D.T. Campbell who insists that the “process of social evolution” is analogous to the “blind-variation-natural-selection version of biological evolution” (Campbell 1991: 92).

¹³ G.M. Hodgson and T. Knudsen, the principal co-authors of a paper in “defense of generalized Darwinism” (Aldrich et.al. 2008) state in their recent book *Darwin’s Conjecture* (2010: 48): “An enduring mischaracterization of the Darwinian account of evolution is that it is blind.”

necessarily the same meaning in mind,¹⁴ I should specify my understanding of what the “blindness” claim is meant to entail.

If its application to cultural evolution were meant to imply that humans act “with little conception of what they are doing or where they are going” (Hodgson and Knudsen 2010: 48), the undeniable intentionality of human action would render the “blindness” claim obviously nonsensical. This, however, is definitely not what this claim is about. As Campbell and others who insist on the “blindness” of evolutionary exploration have emphasized, it is a specifically circumscribed claim. It does not deny that whatever “knowledge” has been gained in past evolutionary exploration is used in the generation of new trials. It asserts, instead, that *variations* “show no foresight” (Campbell 1991: 103) wherever they go *beyond* what is already “known.” Evolution could not result in increasing adaptive fit, i.e. in a growth of knowledge or problem-solving capacity, if the variation that occurs at any particular stage of the process would not utilize the “knowledge” accumulated in the past. In biological evolution the variation introduced by cross-over rather than by random mutation benefits in this sense from “foreknowledge”: it recombines components of past adaptations that have already proven to be successful. And surely intentional human exploration and experimenting is not “blind” in the sense of choosing “at random” but is informed by expectations based on existing knowledge. Yet, whenever such experimental exploration ventures into territory for which prior achievements in knowledge cannot provide guidance it cannot benefit from foresight but must go blindly, bound to find out only *ex post* what works and what does not.¹⁵

When Campbell (1974: 421) argues that a “blind-variation-and-selective-retention process is fundamental to all inductive achievements, to all genuine increases in knowledge, to all increases in fit of system to environment,” the emphasis is on *genuine increase* in knowledge.¹⁶ It is meant to underscore that *gain in knowledge* “can only be explained by a continual breakout from the bounds of what was already known, a breakout for which blind variation provides the only mechanism available” (Campbell 1987: 111). Not denying that variation benefits from *existing* knowledge, Campbell insists that the “many processes which shortcut a more full blind-variation-and-selective-retention process are in themselves

¹⁴ From their diagnosis that “the term *blind* in this context has several meanings” Hodgson and Knudsen (2010: 49) conclude: “Given these ambiguities and misunderstandings, we prefer to drop the term *blind* in this context. Terms such as *undesigned* or *unforeseen* are less open to misinterpretations.” – The semantic claim that the term “blind” is more open to “misperceptions” seems to me not the same as the claim that characterizing Darwinian evolution as “blind” is an “enduring mischaracterization.”

¹⁵ For a more detailed discussion see Vanberg 2006: 201ff.

¹⁶ Campbell (1987: 92): “In the instance of such real gains ... successful explorations were in origin as blind as those which failed.”

inductive achievements, containing wisdom about the environment achieved originally by blind variation and selective retention” (Campbell 1974: 421).

3. Rational Liberalism versus Evolutionary Agnosticism

When Hayek (1948 [1937]: 33) in his pioneering essay “Economics and Knowledge”¹⁷ argued that “the tautologies of which formal equilibrium analysis in economics essentially consists can be turned into propositions ... about causation in the real world only in so far as we are able to fill those formal propositions with definite statements about how knowledge is acquired and communicated” he posed the problem, now commonly referred to as the *knowledge problem*, that was to become the focal theme of his lifelong research interests. Hayek considered the theory of cultural evolution – as developed notably in the “Epilogue” to *Law, Legislation and Liberty* (1973, 1976, 1979) and in *The Fatal Conceit* (1988) – as the culmination of his efforts in dealing with this problem. Yet, even though the evolutionary perspective surely is a consistent extension of his earlier line of argument, the agnostic overtone that comes with it, most visibly in *The Fatal Conceit*, is difficult to reconcile with the thrust of the classical liberal paradigm which Hayek’s work did so much to revive.¹⁸

Certainly, it was not merely meant as a comment on other scholars’ attitudes but as a confession of how he viewed his own role as an economist, when Hayek (1991 [1933]: 19) stated in his 1932 inaugural lecture at the London School of Economics: “It is probably true that economic analysis has never been the product of detached intellectual curiosity about the why of social phenomena, but of an intense urge to reconstruct a world which gives rise to profound dissatisfaction.” With these words Hayek describes an approach to economic science that is not content with explaining how existing socio-economic systems work but presumes, firstly, that there is a *normative criterion* against which what exists can be judged to be more or less desirable and, secondly, that scientific knowledge can and should be *applied* to assist efforts to improve man’s socio-economic condition. When I speak of Hayek’s *rational liberalism* I refer to those of his arguments that reflect this very spirit. Pointing out that the classical liberalism of David Hume and Adam Smith embodied a

¹⁷ The essay was based on his presidential address before the London Economic Club in 1936 and was first published in *Economica* in 1937.

¹⁸ In his *Hayek on Modern Liberalism*, Kukathas (1990: 13) notes that Hayek’s primary concern throughout his work has been to restate and elaborate “the normative principles which underlie the liberal ideal of a free society.”

“conception of a desirable order” (1967: 160)¹⁹ Hayek expressly notes that the emphasis of his own efforts to restate and to revive the principles of liberalism “is on the positive task of improving our institutions” (1960: 5).²⁰ And what he means by “improvement” he describes when he argues that policy ought to be “guided by some general conception of the social order desired, some coherent image of the kind of world in which people want to live” (ibid.: 114).²¹

The core message of Hayek’s theory of cultural evolution is that it has not been by prescient rational design but by experimental exploration that humankind discovered the institutions that have allowed it to grow and prosper, and that further improvement can also be expected only from an evolutionary trial-and-error process. It is a message that implies a warning against a pretense of knowledge in institutional reform, against rationalistic arrogance that pretends to know in advance the blueprint for a “desirable social order.” As such it is not only perfectly consistent with, but a necessary qualification of Hayek’s “emphasis is on the positive task of improving our institutions.” Yet, what I call his *evolutionary agnosticism* goes beyond such cautionary reminder of the limits of our reason. When Hayek (1988: 74) asserts that the evolutionary process to which we owe our civilization “cannot be guided by and often will not produce what men demand,”²² when he argues that “demands for justice are simply inappropriate to a naturalistic evolutionary process – inappropriate not just to what has happened in the past but to what is going on at present,” or when he notes that there “is in fact no reason to expect that the selection by evolution of habitual practices should produce happiness” (ibid.: 64), then all this sounds very much like the attitude that in his 1932 inaugural lecture Hayek described as “detached intellectual curiosity about the why of social phenomena,” but appears to be entirely void of the liberal concern for a “world in which people want to live.” The attitude of detached curiosity one finds expressed even somewhat provocatively in statements such as: “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” (1988: 27).²³

¹⁹ References to Hayek’s works are listed with publication year and page number(s) only.

²⁰ Hayek (1960: 30): “So far as possible, our aim should be to improve human institutions.”

²¹ For further references see Vanberg 1994a: 454ff., 465ff.

²² Hayek (1979: 168): “Man has been civilized very much against his wishes. It was the price he had to pay for being able to raise a larger number of children.”

²³ The “un-Hayekian” wording lets one suspect that this is an example of Bartley’s editing (see fn. 5 above).

I should note that by speaking of inconsistencies between Hayek's rational liberalism and his evolutionary agnosticism I do not mean to imply at all that the liberal concern for "a desirable social order" is, per se, incompatible with a detached "naturalistic" outlook that is interested only in explaining the factual empirical record of cultural evolution. To be sure, without the knowledge that such purely explanatory inquiry provides one could not do what a classical liberal approach to the problem of social order calls for: To assess what is observed in terms of a normative criterion, distinguishing between what is considered desirable and what undesirable, and – based on our theoretical and empirical knowledge of how the social world actually works – to identify the conditions that, in the past, favored the evolution of desirable outcomes and that, if established in the present, promise to steer evolution in a desirable direction. What causes the ambiguities in Hayek's reasoning is not that he combines both, the normative liberal interest and the purely explanatory project, but that he fails to distinguish with sufficient clarity between the two concerns. This is, in particular, visible in his comments on the role that human desires play in the evolution of the extended market order (or capitalism).

With the subtitle he chose for his treatise *Law, Legislation and Liberty* (1973; 1974 1979), namely "A new statement of the liberal principles of justice and political economy," Hayek made clear that it was not mere "detached intellectual curiosity about the why of social phenomena" that motivated this project, but his ambition to argue the case for the liberal ideal of a free society. It is in this spirit that Hayek speaks of the spontaneous order of the market – or, as he likes to refer to it, the "game of catallaxy" (exchange game)²⁴ – in terms that are clearly meant to portray it as a desirable order, one in which people may want to live. It is a "game," so he argues, that "individuals have reason to agree to play ... because it makes the pool from which the individual shares are drawn larger than it can be made by any other method" (1978:137). In similar terms he describes the virtues of the "game of the market" repeatedly as "a game that is played because it improves the chances of all" (1976: 117), as "a wealth creating game" (ibid.: 115). He speaks of the market as an order in "which the opportunities of any person are likely to be greater than they would otherwise be" (1978:

²⁴ Hayek (1976: 115): "The best way to understand how the operation of the market system leads not only to the creation of an order, but also to a great increase of the return which men receive from their efforts, is to think of it ... as a game which we may now call the game of catallaxy." – "A catallaxy is thus the special kind of spontaneous order produced by the market through people acting within the rules of the law of property, tort and contract" (ibid.: 109).

113),²⁵ and he defines the proper role of policy in a market economy as “securing an abstract overall order of such character that it will secure for the members the best chance of achieving their different and largely unknown particular ends” (ibid.: 114).

There is quite a contrast between these statements and the agnostic-evolutionary tone in which the market order is portrayed in *The Fatal Conceit*. The emphasis there is not on its superior ability to satisfy human wants but on the argument that “the market economy did indeed prevail over other types of order because it enabled those groups that adopted its basic rules the better to multiply” (1988: 132). What governs the evolutionary process by which the market order came to prevail is, so Hayek argues, not human desires and wishes but conduciveness to the survival and increase of populations.²⁶ As he puts it: “There is no reason to suppose that the selection by evolution of such habitual practices as enabled men to nourish larger numbers had much if anything to do with the production of happiness, let alone that it was guided by the striving after it” (ibid.: 69).²⁷ And he asserts: “We may not like the fact that our rules were shaped mainly by their suitability for increasing our numbers, but we have little choice in the matter now (if we ever did) So many people already exist; and only a market economy can keep the bulk of them alive. . . . In any case, our desires and wishes are largely irrelevant” (ibid.: 133).

Again, as noted before, in contrasting Hayek’s liberal and evolutionary outlooks at the market I do not mean to imply that one cannot do both, defend the market order from a normative liberal perspective and analyze the historical evolution of the market economy – as well as the consequences of its abolition – in purely naturalistic terms. Hayek is surely right when he claims that “the question of how men came to adopt certain values or norms, and what effect these had on the evolution of their civilization, is itself above all a factual one” (1988: 7). Yet, when he states that this question “lies at the heart” (ibid.) of *The Fatal Conceit*

²⁵ Hayek (1976: 107): “This order serves our ends . . . by increasing the prospects or chances of every one of a greater command over the various goods (i.e. commodities and services) than we are able to secure in any other way.”

²⁶ Hayek (1988: 133): “Yet, as with every other organism, the main ‘purpose’ to which man’s physical make-up as well as his traditions are adapted is to produce other human beings. In this he has succeeded amazingly, and his conscious striving will have its most lasting effect only so far as, with or without his knowledge, it contributes to this result. There is no real point in asking whether those of his actions which do so contribute are really ‘good’, particularly if thus it is intended to inquire whether we like the results.”

²⁷ Even though this line of argument has become most prominent in *The Fatal Conceit* it has its precursors. A lecture presented in 1979 at the Walter Eucken Institut in Freiburg Hayek (2004: 62) concluded with the statement: “Not what man understood as useful but what without his understanding was effective in increasing his numbers does in fact govern history, whether we like it or not” (my translation, V.V.). – In the “Epilogue” to his *Law, Legislation and Liberty* Hayek (1979a: 163) noted: “I have already pointed out that the pleasure which man is led to strive for is of course not the end which evolution serves The rules which contemporary man has learnt to obey have indeed made possible an immense proliferation of the human race. I am not so certain that his has also increased the pleasure of the several individuals.” – See also fn. 21 above.

one wonders what the book is supposed to say about the liberal “conception of a desirable order.” And though there are surely good reasons for him to claim that “neither socialism nor any other known substitute for the market order could sustain the current population of the world” (ibid.: 121), one wonders whether that is all that is left of the liberal vision of a “world in which people want to live” (1960: 114).

In the remainder of this paper I shall seek to disentangle what I have identified above as ambiguities in Hayek’s work, with the intention to clarify thereby the general issue of the role played by human purposes in cultural evolution. I shall focus my discussion on two themes, themes to which Hayek refers when he notes that “powerful instinctual and rationalistic impulses rebel against the morals and institutions that capitalism requires” (1988: 9). This is, firstly, his critique of what he calls “constructivist rationalism” and, secondly, his comment on the conflict between our “tribal instincts” and the demands of the extended order of the market. It is in Hayek’s arguments on these two themes that, so I submit, the main source of the noted ambiguities can be found.

4. “Constructivist Rationalism” and the “Pretense of Knowledge”

From its sub-title, “Errors of Socialism,” one can conclude that Hayek regarded *The Fatal Conceit* as a summary and definite statement of his critique of socialism that had been a major concern of his life-work. The principal target of Hayek’s critique is the idea of central economic planning and control that, as he puts it, lies “at the heart of socialism” (1988: 54). It is this notion that in his view exemplifies in pronounced form the pretense of knowledge of which he accuses the attitude he calls *constructivist rationalism*. Of significance in the present context is that Hayek, without explicitly distinguishing between them, directs his critique at two different versions of “constructivist rationalism,” versions that are clearly concerned with different issues.

Firstly, and primarily Hayek’s critique is directed against an attitude that ignores the need for us to rely on abstract rules in coordinating our social affairs in a complex world.²⁸ It is this version of constructivist rationalism to which Hayek (1988:7) refers when he speaks of “the conflict between, on one hand, advocates of the spontaneous extended human order created by a competitive market, and on the other hand those who demand a deliberate

²⁸ Hayek (1973: 33): “It is the over-estimation of the powers of our reason which leads to the revolt against the submission to abstract rules. Constructivist rationalism rejects the demand for this discipline of reason.”

arrangement of human interaction by central authority based on collective command over available resources.” Secondly, he criticizes as constructivist rationalism a “particular conception of the formation of social institutions ... which assumes that all social institutions are, and ought to be, the product of deliberate design” (1973: 5). In both cases Hayek’s verdict is that constructivist rationalism is guilty of a pretense of knowledge, of ignoring the limits of what we can know. Both versions of his critique are, in other words, about the *knowledge problem*, yet they concern different dimensions of it.

The first critique concerns the issue of the utilization of knowledge that exists only dispersed in individual human minds.²⁹ Hayek’s charge here is that constructivist rationalism ignores the fact that only by allowing individuals to make their own choices within a framework of general rules can the particular knowledge that they separately possess, and the discovery potential of their explorative trials, be put to use for solving economic problems.³⁰ Constructivist rationalists, so he charges, ignore that in a rule-based spontaneous order far more knowledge is generated and utilized than is possible under centralized direction.³¹ As he puts it, they fail to understand “the significance of rules as an adaptation to this inescapable ignorance of most of the particular circumstances which determine the effects of our actions, and thus disregard the whole rationale of the phenomenon of rule-guided action” (1976: 20). The second critique concerns the issue of the utilization of knowledge that is generated over time in an experimental process in which different rules are tried out and experience shows what works and what does not. Hayek’s charge here is that constructivist rationalists ignore that our received institutions benefit from the wisdom that has been incorporated in them by past experience and that we need to rely for further improvement on the same forces of experimental learning that have shaped them.³²

²⁹ In reference to his early contribution on the *knowledge problem* Hayek (1988: 88) notes: “I confess that it took me a long time from my first breakthrough in my essay on “Economics and Knowledge” ... to state my theory of the dispersal of information, from which follow my conclusions about the superiority of spontaneous formations to central direction.”

³⁰ Hayek (1978: 27): “It is indeed the source of the superiority of the market order ... that in the resulting allocation of resources more of the knowledge of particular facts will be utilized which exists only dispersed among uncounted persons, than any one person can possess.”

³¹ Hayek (1988: 77): “That decentralization actually leads to more information being taken into account ... is the main reason for rejecting the requirements of constructivist rationalism.”

³² Hayek shifts tacitly from the first to the second version of constructivist rationalism when, after criticizing socialism for demanding “a deliberate arrangement of human interaction by central authority” (1988: 7), he argues: “The demands of socialism are not moral conclusions from the traditions that formed the extended order that made civilization possible. Rather, they endeavor to overthrow these traditions by a rationally designed morals system They assume that, since people had been able to *generate* some system of rules ... they must also be able to *design* an even better and more gratifying system.”

Because of Hayek's neglect to distinguish with sufficient clarity between the two versions of his critique of constructivist rationalism an asymmetry in his argument tends to be concealed which is of critical importance in the present context. When he criticizes as constructivist rationalism the demand "that the economic activities of all should be centrally directed according to a single plan laid down by a central authority" (1967: 82) there can be no doubt about what he rejects, namely central planning, and what he favors, namely a rule-based spontaneous order. Yet, when he criticizes as constructivist rationalism "the belief that it is both possible and desirable to reconstruct all grown institutions in accordance with a preconceived plan" (ibid.: 161), it is less clear what the alternatives that he means to contrast are. The qualification "*all*" could be meant to imply that Hayek has no objection to institutional planning as long as it is not all-encompassing. Yet, this can hardly be what his critique of the second version of constructivist rationalism is about. How, then, should one interpret what Hayek objects to and what he accepts in matters of institutional planning?

A theme to which Hayek has paid considerable attention in his earlier writings, but which was more and more overshadowed by the evolutionary theme in his later work, is the distinction between two kinds of "social planning." As early as in his 1935 essay on the "Socialist Calculation Debate" (1948 [1935]: 134f.), and even more explicitly so in his 1939 pamphlet "Freedom and the Economic System," as well as in *The Road to Serfdom* (1972 [1944]), Hayek took care to distinguish between "planning" in the sense of organizing society by "a system of specific orders and prohibitions" and "planning" in the sense of establishing "a rational system of law, under the rule of which people are free to follow their preferences" (1939: 9). He stressed that his disagreement with "modern planners" was not about "whether we ought to employ foresight and systematic thinking in planning our common affairs," but rather "about the best way of so doing" (1972 [1944]: 35). As he put it, the question is whether one should limit one's ambitions "to creating conditions under which the knowledge and initiative of individuals are given the best scope so that *they* can plan most successfully; or whether a rational utilization of resources requires *central* direction and organization of all our activities according to some consciously constructed 'blueprint'" (ibid.). While socialist planning demands "a central direction of all economic activity according to a single plan" (ibid.) liberal planning seeks "to design the most rational framework within which the various activities would be conducted by different persons according to their individual plans"

(ibid.).³³ The “basic principles of liberalism,” Hayek expressly emphasized, do not amount to “passively accepting institutions as they are” but call for “creating a system within which competition will work as beneficially as possible” (ibid.: 17).

To be sure, as the evolutionary perspective came to play a more prominent role in Hayek’s reasoning his emphasis shifted towards a more cautionary outlook at the prospects for deliberate institutional design, calling for a recognition of the limited “capacities of reason” (1988: 10) and due respect for the “accumulated knowledge” (ibid.: 58) embodied in institutional traditions that have stood the test of time.³⁴ Yet, though the warning against an over-eager rationalistic spirit of reform became more and more Hayek’s primary concern, the recognition that the ambition to improve our institutions has not only a legitimate place in a free society but is at the heart of the liberal agenda remained a continuing theme in Hayek’s work, up to *The Fatal Conceit*.³⁵ Even if it finds there scarce attention, Hayek nevertheless expressly notes that to the extent that we can understand the needs our grown institutions serve, “we are indeed called upon to improve and revise our moral traditions by remedying recognizable defects” (ibid.: 69). And he specifically refers to the property rights school as the “sub-discipline in economics” which provides knowledge for how “the traditional institutions of property can be improved to make the market function better” (ibid.), knowledge that has “opened up new possibilities for future improvement in the legal framework of the market order” (ibid.: 36).

The distinction between the two kinds of planning alerts one to the fact that two levels must be distinguished at which evolutionary processes are at work, the *sub-constitutional* and *constitutional* level,³⁶ and that human purposes can be infused at both levels. Evolutionary exploration at the sub-constitutional level, i.e. *within* a given – but changeable – framework of rules, is about discovering problem-solutions *within* the constraints defined by these rules. By contrast, evolutionary exploration at the constitutional level, i.e. at the level at which the *rules themselves* are being tested, is about discovering which rules “work better” in the sense of providing a more conducive framework for human interaction and cooperation.

³³ Hayek (1939: 8f.): “We can ‘plan’ a system of general rules, equally applicable to all people and intended to be permanent (even if subject to revision with the growth of knowledge), which provides an institutional framework within which the decisions as to what to do and how to earn a living are left to the individuals.”

³⁴ Hayek (1988: 75): “The process of selection that shaped customs and morality could take account of more factual circumstances than individuals could perceive, and in consequence tradition is in some respect superior to, or ‘wiser’ than, human reason.”

³⁵ Hayek (1988: 8): “Although I attack the *presumption* of reason on the part of socialists, my argument is in no way against reason properly used . . . , reason that recognizes its own limitations. . . . Thus I wish neither to deny reason the power to improve norms and institutions.”

³⁶ I am using here the terminology of constitutional economics. See e.g. Vanberg 1994c: 178pp. and passim.

Aimed at the sub-constitutional level, “socialist planning” – as “central direction of all economic activity according to a single plan” – is hostile to evolutionary exploration. It pretends to be able to know in advance what can only be discovered by experimental trial-and-error.³⁷ This is, however, clearly not the case with the second of the two versions of planning distinguished above. It does not prevent evolutionary exploration but aims at shaping the framework of rules within which it is to occur. It is about defining general constraints that “channel” the experimental discovery process. The difference between the two versions of purpose-guided “social planning” is glossed over when Hayek (1988: 51) derides “the delusion of ‘social engineering’ ... that man can consciously choose where he wants to go.” This charge is surely justified with regard to the rationalistic pretense that we can pre-plan the specific end-state at which all our efforts should aim. The futility of such ambition does not mean, however, that we cannot, or should not, seek to constrain evolutionary processes in ways that we expect to result in more desirable *patterns* of outcomes – the particulars of which remain unknown *ex ante* and are to be found out by experimental exploration – than what unguided evolution were to produce.

Without explicitly distinguishing between the two ways in which we can seek to “control” evolution it is misleading for Hayek (*ibid.*: 74) to argue: “Understandable aversion to such morally blind results, results inseparable from any process of trial-and-error, leads men to want to achieve a contradiction in terms: namely, to wrest control of evolution – i.e., of the procedure of trial-and-error – and to shape it to their present wishes.” To be sure, the warning that “to confine evolution to what we can foresee would be to stop progress” (1979: 169) is no less justified than the argument that, “if we are to advance, we must leave room for a continuous revision of our present conceptions and ideals which will be necessitated by further experience” (1960: 23). Yet, as Hayek explicitly acknowledges, this does not mean that we cannot, or should not, seek to “create the conditions in which society can gradually evolve improved formations” (1979: 14).³⁸ Defining rules that set limits for evolutionary exploration is not “to stop progress” but to “channel” evolution in order to make it more

³⁷ It is in contrast to such pretense of knowledge that Hayek (1948 [1946]: 101) argues: “The solution of the economic problem of society is ... always a voyage of exploration into the unknown, an attempt to discover new ways of doing things better than they have been done before. This must always remain so as long as there are any economic problems to be solved at all, because all economic problems are created by unforeseen changes which require adaptation.”

³⁸ Hayek (1952: 160f.) alludes to the distinction that needs to be drawn here when he contrasts “two fundamentally different and irreconcilable attitudes ... : on the hand the essential humility of individualism, which ... hopes to ... create conditions favorable to further growth; and on the other hand, the hubris of collectivism, which aims at conscious direction of all forces of society.”

serviceable to human needs. It is this strategy of infusing human purpose into evolution that the next section will take a closer look at.

5. Evolution Within Constraints: Institutional Design as “Purposeful Selection”

The formula of “the survival of the successful” is often said to be an empty statement because in evolution the only measure of success is survival. And, in fact, as long as the relevant characteristics of the selection environment remain unspecified, to be told that the “successful” will survive is not of more help than if one were told that the survivors will survive. Yet, if, and to the extent that, relevant characteristics of the selection environment are known informed conjectures can be formed about the kinds of properties “successful” variants are likely to possess. It is by inviting the search for such *conditional* evolutionary conjectures, i.e. conjectures about what is likely to “survive” under specified conditions, that the formula of “the survival of the successful” serves a useful heuristic function.

The information that conditional evolutionary conjectures provide can be translated into advice for how evolutionary processes should be “conditioned,” i.e. what kinds of selection constraints they should be subjected to, if they are to favor variants with “desirable” properties. Analogous to the contrast between conditional and unconditional evolutionary conjectures one can distinguish *conditioned* evolutionary processes from their *unconditioned* counterparts, i.e. from processes of trial-and-error exploration that are “left alone,” not affected by human efforts to impose limiting constraints. The market is a paradigmatic example of conditioned as opposed to unconditioned evolution. It depends, as Hayek has stressed again and again, for its “beneficial working” on a “suitable framework” (1972 [1944]: 39), a framework that is to “secure for the members the best chance of achieving their different and largely unknown particular ends” (1978: 114).

Even if this theme, just as the argument on “liberal planning,” is given more attention in his earlier writings, Hayek has never left any doubt that how the market game operates critically depends on the “rules of the game,” and that providing for a framework that ensures its beneficial working is the principal task of liberal policy. In *The Road to Serfdom* and in his essay on “‘Free’ Enterprise and Competitive Order” (1948 [1947])³⁹ Hayek took particular care to point out that, rather than defending “a dogmatic laissez faire attitude” (1972 [1944]: 36), the “liberal argument ... does not deny, but even emphasizes, that in order that

³⁹ The essay was based on a paper Hayek presented at the 1947 founding meeting of the *Mont Pèlerin Society*.

competition should work beneficially, a careful thought out legal framework is required” (ibid.). It insists, so he argued, that the “functioning of competition ... depends, above all, on the existence of an appropriate legal system, a legal system designed both to preserve competition and to make it operate as beneficial as possible” (ibid.: 38).⁴⁰ And he declares that the “fundamental principle of liberalism,” does not call for the “absence of state activity” but for a policy which “uses the legal framework enforced by the state in order to make competition as effective and beneficial as possible” (1948 [1947]: 110).⁴¹

The market process exemplifies evolution at the *sub-constitutional* level, a process of experimental exploration that takes place within given – but changeable – rules. What is true at this level, namely that in order to secure its “beneficial” working the evolutionary process must be constrained by “appropriate” rules, applies, however, no less to the constitutional level, i.e. to the process of variation-and-selective-retention in which the rules themselves evolve. By while Hayek takes care in describing the market as a case of *conditioned* evolution, he does not apply the same care when – with his theory of cultural evolution – he shifted the focus to the constitutional level. The problem with his evolutionary agnosticism is that it ignores the critical difference between conditional and unconditional evolutionary conjectures. With its focus on “a naturalistic evolutionary process” it ignores that *unconditioned* cultural evolution – by contrast to a market process within “appropriate rules” – can no more be expected to satisfy liberal principles than it can be expected to “produce what men demand” (1988: 74). And it ignores the fundamental difference between demanding “that evolution come to a halt” and seeking “to wrest control of evolution” (ibid.) by setting limits within which experimental exploration is to proceed.

If the tension between Hayek’s evolutionary agnosticism and his classical liberalism is to be resolved, his naturalistic perspective on evolution must be supplemented by *conditional conjectures* that specify how cultural evolution needs to be constrained so as to render its

⁴⁰ Hayek (1972 [1944]: 39): “In no system that could be rationally defended would the state just do nothing. An effective competitive system needs an intelligently designed and continuously adjusted legal framework.” – Hayek (1948 [1947]: 113, 115): “As far as the great field of the law of property and contract are concerned, we must ... above all beware of the error that the formulas “private property” and “freedom of contract” solve our problems. ... Here (in regard to the formula “freedom of contract,” V.V.), as much as in the realm of property, the precise content of the permanent legal framework, the rules of civil law, are of the greatest importance for the way in which a competitive market will operate.”

⁴¹ As noted above, this theme plays a lesser role but is still present in Hayek’s later work, such as in his 1978 article on “Liberalism” where, under the heading “Positive tasks of liberal legislation,” he notes: “Traditional liberal doctrine ... never developed a sufficiently clear program for the development of a legal framework designed to preserve an effective market order. If the free enterprise system is to work beneficially, it is ... necessary that their (the laws’, V.V.) positive content be such as to make the market mechanism operate satisfactorily” (1978: 145f.). – See also e.g. Hayek (1960: 230; 1967 [1963]: 263; 1973: 74).

working properties “beneficial” in terms of liberal values. When Hayek speaks of government’s “coercive interference in the process of cultural evolution” (ibid.: 20), and when he deplores the fact that the “evolution of rules was far from unhindered” (ibid.), he must implicitly invoke some notion of a *properly conditioned* evolutionary process by contrast to a purely “naturalistic” process. After all, there is no reason why “coercive” actions of government should not be considered part of an unconditioned evolutionary process, just like anything else that may come into play. Hayek does not specify, however, the conditions that in his view must be secured so that evolution can be considered “unhindered” and what ought to be regarded as “interference.”⁴² In other words, in case of his theory of cultural evolution Hayek fails to do what he took care to do for his theory of the market: to point out that “suitable” framing conditions are required for its “beneficial” operation.

Had Hayek paid explicit attention to the distinction between *unconditioned* and *conditioned* evolution he might well have arrived at an understanding of the interplay between human purposeful design and “blind” evolution not all too different from the one that was proposed by the American institutionalist John R. Commons.⁴³ While Commons regarded the Darwinian evolutionary perspective as an adequate analytical tool for studying the process of institutional change, he insisted that economics as a science that deals with purposeful human action should take its lead from Darwin’s arguments on “artificial selection”⁴⁴ rather than his theory of “natural selection.”⁴⁵ Because the role played by human purposes in socio-cultural evolution makes the critical difference, Commons suggests that, rather than speaking of *natural* and *artificial* selection, one should distinguish between *purposeless* and *purposeful* selection. While with regard to purposeless or natural selection that governs “the unguided processes of nature” (Commons 1924: 377) the question of whether what survives is “good” cannot be meaningfully asked, this is, so Commons argues, not true for artificial or purposeful selection that brings into play human values as normative criteria. As he puts it: “Natural selection is just as purposeless when it lets wolves and liars survive as when it lets gazelles

⁴² Implicitly Hayek (1988: 32) distinguishes between government’s positive role in providing the framing conditions for a “desirable” process of cultural evolution and its “negative interference” when he argues: “Governments strong enough to protect individuals against the violence of their fellows make possible the evolution of an increasingly complex order of spontaneous and voluntary cooperation. Sooner or later, however, they tend to abuse that power.”

⁴³ For a more detailed discussion see Vanberg 1996; 1997.

⁴⁴ Darwin (1972 [1875]: 3f.): “Although man does not cause variability and cannot even prevent it, he can select, preserve, and accumulate the variation given to him by the hand of nature almost in any way in which he chooses. . . . Man may select and preserve each successive variation, with the distinct intention of improving and altering a breed, in accordance with a preconceived idea. . . . As the will of man thus comes into play, we can understand how it is that domesticated breeds show adaptation to his wants and pleasures.”

⁴⁵ Commons (1950: 91): “Political economy belongs to the field of artificial selection, because it deals with human purposes.”

and George Washington survive. Success is the only measure of fitness. But artificial, or rather purposeful, selection introduces ethical ideas of fitness – the ethical ideas of right and duty, goodness and badness, justice and injustice” (Commons 1950: 91). According to Commons, economists must keep in mind that the injection of human purpose is omnipresent in the phenomena they study, and that what they call “free competition” is not “Nature’s struggle for existence ... but is an ideal of public purpose ... to be attained by restraints upon the natural struggle for existence” (Commons 1934: 713).

To be sure, Commons’ overall outlook at economics, institutions and, in particular, capitalism is in many regards quite different from Hayek’s. Yet, as a corrective to Hayek’s evolutionary agnosticism his concept of purposeful selection can help to redraw attention to the insight that Hayek had stressed in his earlier work but lost sight of in his later writings, namely, that we are not confined to choosing between letting unconditioned, naturalistic evolution run its course or bringing evolution to a halt, but that we can utilize the discovery potential of evolutionary exploration and yet seek to “control” evolution in the sense of adopting “rules of the game” that we expect to make its working properties more serviceable to human needs. In other words, Commons’ concept of purposeful selection shows how human purpose-seeking and open-ended evolution can be reconciled by means of institutional constraints that put evolutionary exploration in the service of human purposes, i.e. by using the very strategy that Hayek had once endorsed as “liberal planning.”

6. “Tribal Instincts” and Constitutional Interests

As Hayek asserts, it is not only constructivist “rationalistic impulses” that revolt against the evolved order of the market but also powerful “instinctual impulses,” “tribal instincts” that we inherited from the times when our primeval ancestors lived as hunters and gatherers in small bands. Having “evolved during the few million years while the biological constitution of *homo sapiens* was being formed” (1988: 11), these instincts are, so Hayek argues, adapted to facilitating cooperation within groups that included a small number of members known to each other, but they were in conflict with the rules that made the growth of the order of the market possible and that are an indispensable prerequisite for its continued functioning.⁴⁶

⁴⁶ Hayek (1988: 31, 43): “The prior development of several property is indispensable for the development of trading and thereby for the formation of larger coherent and cooperative structures. ... Trade could not be based on collective knowledge, only on distinctive individual knowledge. Only the growing recognition of several property could have made such use of individual initiative possible.”

They favored *within*-group cooperation but were an obstacle to the rules and practices that needed to be adopted if mutually beneficial cooperation and trade were to be extended beyond tribal limits. It is this fact that Hayek refers to when he speaks of the “conflict between our instincts ... and the moral traditions that ... serve to restrain these instincts” (ibid.: 85), when he notes that “the extended order of human cooperation has evolved despite opposition from our instincts” (ibid.: 120), when he asserts that man “achieved civilization by developing and learning to follow rules ... that often forbade him to do what his instincts demanded” (ibid.: 12), or when he speaks of the “innate feelings of the micro-order, the small group ... (that) are often threatened not only by several property but sometimes even more so by competition” (ibid.: 35f.).

Hayek’s claim that we carry with us genetically inherited dispositions that may be in conflict with the culturally evolved rules of the market is surely a plausible conjecture.⁴⁷ He adds, however, a misleading connotation with phrases such as “man has been civilized very much against his wishes” (1979: 168), or “civilization has resulted from unwanted gradual changes in morality” (1988: 20). Phrases like these seem to suggest that it was not because of its superior capacity to satisfy human wants that the market order came to prevail but because of reasons unrelated to men’s wishes. Such reading would, however, be incompatible with the message that Hayek’s general theory of the market as a “wealth-creating game” conveys.⁴⁸ Obviously his comments on the conflict between “tribal instincts” and the rules of the market must be given a different interpretation, one that Hayek suggests when he argues that these rules “do not directly serve the satisfaction of individual desires” (1978: 17) but “(if they are *generally* observed) make all the members of the group more effective” (ibid.: 7), enabling them to more successfully pursue their individual aims.

Such remarks point to the need to distinguish between the question of whether we like to *follow certain rules* and the question of whether we like to *live in an order governed by these rules*. In light of this distinction Hayek’s claim that having been “civilized very much against his wishes was the price man had to pay to be able to raise a larger number of children” should be more appropriately restated as the claim that submitting, against his

⁴⁷ Cf. in this context the research program of evolutionary psychology that focuses on the question of what kinds of behavioral dispositions can plausibly be assumed to have evolved in the problem environment that our ancestors were exposed to for thousands of generations, living as hunters and gatherers in small bands (Cosmides and Tooby 1992.: 219). – For a more detailed discussion see Vanberg 2004.

⁴⁸ It is in the spirit of this theory when Hayek (1976: 109) notes that the extended order of the market “arose through the discovery that men can live together in peace and mutually benefiting each other without agreeing on the particular aims which they severally pursue. ... All that was required to bring this about was that rules be recognized which determined what belonged to each, and how such property could be transferred by consent.”

“tribal instincts” (and other impulses), to the discipline of the rules of the extended order was the price man had to pay to be able to enjoy the benefits to be reaped from living in a market environment. In other words, what is at stake here is not a conflict between “man’s wishes” per se and the order of the market, but a conflict between different kinds of human desires, between desires that are served by the cooperation in small groups and desires that can be better satisfied in the extended order of the market. Even if the market frustrated certain kinds of human wishes, it was able to prevail because it offered a more attractive environment for people to live in than the alternatives.

The ambiguity in Hayek’s comments on the emergence of the extended order of the market may be due in part to an insufficient separation of two issues, namely the question of whether the market came about *without human design* and the question of whether it arose *against human wishes*. Certainly, the rules of the market did not come into being because they were deliberately designed by men who foresaw their beneficial effects, but are, instead, the unintended outcome of experimental exploration.⁴⁹ Yet, even though it is not the *result of human design* the extended order of the market can still be seen as the *result of human wishes* in the sense that individuals preferred the living conditions it offered over what alternative orders were able to provide.

Hayek’s argument on the conflict between “tribal instincts” and the rules of the market concerns in fact but one particular aspect of a more general conflict, namely – in terms of the language of constitutional economics – the conflict between *sub-constitutional* and *constitutional* interests (Vanberg 1994c: 169ff.). People can seek to improve their condition by choosing preferred options among the alternatives open to them at the sub-constitutional as well as at the constitutional level. They can, in terms of the game metaphor, seek to play a *given game* more successfully – choosing their preferred strategies within *given rules* – and they can seek to play a *better game* – opting for a more attractive framework of rules. And the interests that affect their individual choices within a given framework need not be aligned with their constitutional interests, i.e. with their preferences regarding the kind of rule-environment in which they would wish to live. The rules we must adopt if we want to “play a better game” may require us not only to curb our “tribal instincts” but other desires for more immediate benefits as well. This is true already at the level of *personal constitutional choice*,

⁴⁹ Hayek (1988: 23): “Learnt moral rules, customs, progressively displaced innate responses, not because men recognized by reason that they were better but because they made possible the growth of an extended order exceeding anyone’s vision, in which more effective collaboration enabled its members, however blindly, to maintain more people and to displace other groups.”

for what Thomas Schelling (1978) has called *self-management*, i.e. cases in which we restrain our desire for immediate satisfaction by imposing rules on our behavior that enable us to realize benefits that we consider more important than what we sacrifice. And it is a fortiori true for *social constitutional choice*, i.e. cases where we agree to submit, jointly with others, to rules that impose constraints on our sub-constitutional choices, constraints which are “per se” undesired but which we are willing to accept because the benefits we expect to enjoy in the altered institutional framework outweigh the costs of the constraints.

The difference between individual choice among rules and among “constitutional environments” on the one side and collective constitutional choice on the other side, as well as the interplay between them, is of critical importance for the dynamics of cultural evolution (Vanberg 1991). It is a difference that one has to keep in mind when Hayek (1976: 21) speaks of rules as “general purpose tools,” arguing that they, just like ordinary tools, “have become adapted to the solution of recurring problem situations and thereby help to make the members of the society in which they prevail more effective in the pursuit of their aims.”⁵⁰ In the evolution of rules problems may play a significant role that are typically absent in the evolution of “tools” in the standard sense of the word, problems that concern the above mentioned conflict between *sub-constitutional* and *constitutional* interests.

There are, to be sure, rules that individuals can separately experiment with, just as with ordinary tools, and for which the payoffs from compliance or non-compliance are not inherently contingent on what other group-members do, such as, for instance, rules of personal life style, work ethic, rules of nutrition, etc.. Yet, there are other kinds of rules that only groups can experiment with, be it because by their very nature they are inapplicable at the level of individual behavior – such as, e.g., rules for organizing collective action – or because individuals cannot directly benefit from unilaterally adopting them but only from being part of a group within which they are generally practiced.⁵¹ It is in particular with the latter kind of rules that the conflict between sub-constitutional and constitutional interests may arise.

⁵⁰ Hayek (1976: 21): “Like a knife or a hammer they have been shaped not with a particular purpose in view but because in this form rather than in some other form they have proved serviceable in a great variety of situations. They have not been constructed to meet foreseen particular needs but have been selected in a process of evolution.”

⁵¹ Campbell (1991) refers to the issue that is at stake here when he distinguishes “two forms of possible cultural adaptation,” namely one that “is exemplified by the cultural evolutions of tools,” a form that “is characterized by the fact that individuals can generate variations on the culturally received form, and to some extent can confirm the efficacy” (ibid.: 102f.), and what he calls “type 2 cultural evolution”, which is characterized by “group-level advantage” and involves the evolution of “group attributes, ideologies, organizational traditions, etc.” (ibid.: 108).

If, as Hayek (1988: 70) argues, the “extended order ... came into being through the fact that those groups following its underlying rules increased in numbers and in wealth relative to other groups,” and if “the acquisition of distinct advantages by those groups ... (enabled) them to expand more rapidly than others and ultimately supersede (or absorb) those not possessing similar customs” (ibid.: 43),⁵² it must surely have been the attractive living conditions that such groups exhibited that provided sufficient incentives for individuals to be willing to submit to the rules of the market. That is to say that in order for the extended order to be able to prevail in the process of cultural evolution it did not need to be imposed on men “against their wishes,” all that was needed was to prevent free-riders to benefit from the rule-compliance of others. In other words, and as noted before, to be able to attract people by its beneficial working properties the wealth-creating “game of catallaxy” needed mechanisms that allowed individuals’ constitutional interests to prevail over their “tribal instincts” and other conflicting impulses.

7. Institutional Design and the Unavoidability of Competition

By jointly submitting to rules in their dealings with each other individuals create, in effect, a *constitutional* or *social niche* for themselves within which evolution is conditioned such that selection forces are made to work that differ from those that would otherwise prevail. In creating such social niches by institutional framing men respond to a problem that A. Alchian and W.R. Allen (1977: 17) have described in these terms: “With scarcity and unlimited wants, competition among people ... is inescapable. A world of scarcity is a world of competition, and conflict among competing people must be resolved. ... Whether violent or nonviolent modes prevail, the question remains: What mode of competition ... is best? ... The question is not how to eliminate competition. ... The scientific questions are, ‘What are the different kinds of competition, how do they operate, and what are their effects?’”

Rather than acquiescing to whatever competitive conditions they were to face in a “naturalistic evolutionary process” men can adopt rules of competition that allow them to play a “better game” than what “natural selection” would impose on them. Yet, as Alchian and Allen point out, even though they can seek to create more hospitable niches, in a world of scarcity men cannot escape competition. Whatever rules they adopt, within-group competition

⁵² Hayek (1988: 16): “Such new rules would spread ... simply because they enabled them to procreate more successfully and to include outsiders.”

for scarce benefits will continue to feed a process of evolutionary exploration that is bound to produce unforeseen results. There is, however, yet another sense in which men cannot escape competition. The social niches that groups may create remain always embedded in a – natural and social – environment in which they are exposed to whatever forces of competition and selection are at work there. It is in reference to this “secondary” level of competition that Hayek invokes the group-selection argument, noting that “whether group selection also operates in biological evolution remains an open question” (1988: 25), but insisting that “cultural evolution operates largely through group selection” (ibid.).

As is not uncommon in the discussion on the group-selection issue, Hayek’s arguments on this subject are somewhat ambiguous because they fail to separate claims that are uncontroversial from those that are under dispute. Entirely uncontroversial is the claim that groups within which group-beneficial behavior is exhibited will do better in competition compared to groups whose members are less willing to engage in group-beneficial practices. The group-selection dispute is not about this fact. What is controversial is the claim that group advantage per se can explain the evolution of behavioral practices that are group-beneficial but self-sacrificial. The well-known principal objection against this claim is that individuals engaging in such practices provide a collective good for the group and will, in the absence of compensating benefits, be at a disadvantage compared to fellow group members who free-ride on their sacrifices, who enjoy the group-benefit without sharing in the costs of producing it. Contrary to what Hayek insinuates, this objection does apply with no lesser force in the social than in the biological realm (Vanberg 1994c: 82ff.).⁵³ The fact that groups in which group-beneficial rules are followed provide a more attractive environment for their members cannot explain per se why individuals are willing to comply if it is costly for them. In order for such compliance to be individually advantageous there must be some mechanism at work that sufficiently compensates for the individual sacrifice and the explanatory task is to specify the mechanism by which this is achieved. In other words, how group advantage translates into incentives for individuals to exhibit group-beneficial but individually sacrificial behavior is the *explanatory* question that an empirical theory of cultural evolution needs to answer. How the competition between and the evolutionary selection among groups ought to be conditioned in order favor the emergence of institutions under which individuals want to live is, in turn, the *normative* question that a classical liberal outlook at cultural evolution needs claim that

⁵³ As Campbell (1991: 104f.) puts it: “For those beliefs and organizational forms that are beneficial for the group as a whole but costly for individual inclusive fitness ..., there is individual-level selection pressure operating against the adaptive group selection.”

groups operating under different rules are in competition with each other and that the efficacy of their respective rule systems is an essential driving force in cultural evolution.⁵⁴ to answer.

Hayek (1988: 121) addresses the *explanatory* issue when, in the spirit of detached intellectual curiosity about the why of naturalistic evolution, he argues that, “although the displacement of one group by another, and of one set of set of practices by another, has often been bloody, it does not need always to be so.”⁵⁵ But, as noted earlier, he is silent about the *normative* issue of what the liberal concern for “a world in which people want to live” (1960: 114) implies for the “positive task of improving our institutions” (1960: 5). Yet, the liberal “conception of a desirable order” (1967: 5) can surely be assumed to rule out competition by “bloody” means. What Hayek has described as “liberal planning” is not a recommendation for letting “a naturalistic evolutionary process” take its unguided course, but for providing institutional safeguards for a functioning market as an arena for voluntary exchange and cooperation.

If cultural evolution can, as Hayek suggests, be viewed as a process of civilization, this is because – and to the extent that – men succeeded in domesticating unconditional “naturalistic evolution” by subjecting it increasingly, and in ever extending circles, to rules that worked against mutually destructive and in favor of mutually beneficial modes of competition. The institutional-constitutional edifice of modern civilization can, in this sense, be viewed as a multilayered system of social-constitutional niches in which the rules at any particular level define competitive constraints for the respective niche’s internal operation, but are themselves subject to competitive constraints defined by the rules that govern the more inclusive niche. With all their efforts at “wresting control” of evolution by creating social-constitutional niches, men cannot escape the competition that continues to operate within their respective niches as well as the competition to which the niches themselves are exposed in their own environment. And this means that human purposeful design remains at all levels embedded in the process of evolutionary exploration that such competition is bound to propel, a process in which what men consider desirable may turn out not to be sustainable.⁵⁶ This may be seen as the justifiable kernel of Hayek’s (1988: 134) claim that in view of the ultimate verdict of evolutionary selection “our desires and wishes are largely irrelevant.” It would

⁵⁴ Campbell (1991: 91): “Intragroup homogeneity and intergroup heterogeneity makes possible a cultural selection of adaptive group ideologies.”

⁵⁵ Hayek (1988: 121): “Many of these processes may then have happened entirely peacefully, although the greater military strength of commercially organized people will often have accelerated the process.”

⁵⁶ As Hodgson and Knudsen (2010: 50) put it: “Sometimes, despite human intentions, some institutions will survive, while others do not. ... Any outcome of artificial selection must be tested in the environment.”

obviously be naïve for us to try to establish what we consider a desirable social order even though it can be predicted to be unsustainable in view of the forces of evolutionary selection to which it is exposed. Yet, the fact that we cannot predict evolution's ultimate verdict should surely not keep us from striving to improve our institutions, "guided by some general conception of the social order desired, some coherent image of the kind of world in which people want to live" (1960: 114).

8. Conclusion

I have noted above that with his argument on the conflict between our "tribal instincts" and the rules of the market Hayek addresses a particular aspect of the more general problem that – in the language of constitutional economics – people's *sub-constitutional interests*, i.e. what in particular situations is in their immediate interest, and their *constitutional interest*, i.e. their preferences regarding the kind of social order in which they want to live. Contra Hayek's claim that the rules of the market evolved "very much against man's wishes" I argued that it was because of people's constitutional interests in enjoying the benefits that the wealth-creating "game of catallaxy" had to offer that the extended order of the market was able to prevail in the process of cultural evolution, notwithstanding "tribal instincts" and other impulses that may have revolted against the discipline that the rules of the market required. I did not, however, state an important qualification that this argument is in need of. My concluding remarks are to make up for this omission.

When I noted above that individuals' constitutional interest inform their choices among alternative rule-regimes I passed over the fact that individuals can exercise their constitutional choices in two critically different ways, and that the difference between the two has important implications for the results that their choices are likely to produce. On the one hand, individuals can choose individually and separately among alternative constitutional regimes, by moving from less preferred to more attractive jurisdictions. And they can, on the other hand, participate in the political-collective choice of constitutional regimes, such as by exercising their voting rights as citizens. In both cases human purposes impact on the process of cultural evolution, but the two modes of "purposeful selection" differ critically with regard to how the conflict between, in Hayek's terms, "tribal instincts" and the rules of the market works out.

When they choose individually and separately under what kind of constitutional regime they prefer to live individuals are forced to decide whether the benefits they expect from living in a particular jurisdiction outweigh the frustration of their “tribal instincts” or other impulses that this may entail. In other words, they face a trade-off between satisfying their constitutional interests at the expense of conflicting impulses and, alternatively, giving in to the latter at the expense of frustrating their constitutional preferences. Furthermore, in their individual and separate choice among existing regimes individuals can compare the actual living conditions that result from the respective rule systems, without any need for them to know or understand how it is that different systems of rules produce different outcome patterns.

By contrast, when people participate in collective-political choice among constitutional regimes, they are not forced, as in the previous case, to choose between giving in to immediate impulses and the kinds of order they wish to live in but can without noticeable costs indulge their “tribal instincts.” Furthermore they face a knowledge problem that does not exist in the previous case. Rather than choosing between alternative constitutional regimes in light of how they actually work out, in collective-political choice they are asked to choose among alternative institutional blueprints the factual outcomes of which, if they were implemented, are difficult for them to reliably predict (Buchanan and Vanberg 1989; 1996).

It is because of the differences in the incentive-problems and the knowledge-problems that the two forms of constitutional choice involve that they tend to favor the emergence of different kinds of regimes. And it is these differences that can help to explain why it is that the extended market order is, on the one, extremely robust where its fate depends on its ability to attract people who can decide separately and individually for themselves in which kind of social order they want to live, and, on the other side, rather vulnerable where its fate depends on the constitutional preferences that people voice as participants in collective-political choice (Vanberg 2010).

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