

*DISCOVERY IN THE MARKET AND RULE-MAKING.
Combining Spontaneity and Design.*

M.Sc. thesis in Economics

by

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1 INTRODUCTION

The objective of this study is to analyse an open-ended Austrian approach to economic evolution. Our approach is fundamentally different from the predictive and positivist method of mainstream economics, it is characterised by endeavour to understand the nature of evolutionary processes as they occur in the real world. Economic evolution is analysed through the market process and institutions. Neither sphere is given predominance, nor are they considered given or independent. Instead, they are continuously mutually changing by interrelated processes, i.e., the two realms coevolve. The central objective of this study is to introduce the purposefully designed elements of human action into evolutionary theory, often described only through spontaneous and unintentional processes.

The individual is the only human entity that can make decisions and take action, whether privately or collectively. This profoundly Austrian approach of methodological individualism is applied throughout the study. Individuals are not independent nor taken as given, they too are constrained and interrelated with social processes, such as the market, institutions and culture. The socioeconomic processes are thus characterised by cumulative causation¹ and overdetermination². The evolution of socioeconomic processes (the individual, the market, legal, technical, cultural, etc.) affect each other and together they construe an open-ended process of economic evolution.

The general nature of evolution, whether in biology, economics or cosmology, is irreversible. The process cannot go into reverse, and therefore it can never pass the same state twice. Whatever actions are taken, the path of history is necessarily unique. The uniqueness of evolutionary phenomena makes the subject difficult for predictive application since there are no absolute phenomena in evolutionary processes. Economic processes are complex with numerous possible options at each evolutionary step. Another difficulty arises since the elements of

¹ Cumulative causation is an evolutionary concept presented by Thorstein Veblen (1919). He recognised that both the individual and her social environment are interrelated by cumulative processes of adaptation.

² Overdetermination is an evolutionary concept presented by Resnick and Wolff (1994) indicating non-determinist and non-reductive nature of social processes (See the section 2.4: Evolution as an overdetermined process).

evolutionary processes are constantly interacting with each other and with the whole »landscape« which itself is continuously changing and affecting the elements. Every element is also a product of a long process of past interactions between other units and is therefore partly path-dependent of its historical contingencies. The fundamental indeterminacy is a characteristic of evolution. Economic agents must continuously make decisions and plans concerning the genuinely uncertain future.

Evolutionary theories vary in how they approach human rationality and how uncertain they consider the future. We seek to understand economic phenomena as intended as well as unintended outcomes of *individuals'* decisions and actions. The continual interaction and interdependency between the individual and the broad categories of economic, political, cultural and natural processes are, however, borne in mind throughout the study. The notion of economic evolution in this study has to do with the interaction of individuals in the game of the market, as well as with social institutions which exist to facilitate social order by coordinating actions and resolving conflicting interests between the members of society.

The study pursues reasonable answers to the following questions: first, while acknowledging the important realm of purposeful design of rules and institutions, can the overall evolutionary process, even in principle, be perceived to be moving in a particular *direction* or as having a particular premeditated *goal*? Furthermore, can economic evolution, as such, be understood as having a particular *purpose*? To be able to answer these questions, we must investigate the common economic notion of efficiency. How is efficiency determined? Can evolution increase or decrease in efficiency? Individuals have objectives and they act purposively, but can we attribute such notions to economic evolution? The reason for seeking answers to these questions lies in the fact that modern economic theory rather widely takes a value-laden predetermined progress of economic phenomena toward higher taxa as given. Economic evolution is thence perceived, as an analogy from biology, as improving progressively from lower or inefficient towards higher or efficient forms.

1.1 The order of treatment

The study consists of this introduction, three chapters, each investigating different elements and their nature in economic evolution, and a concluding fifth chapter. The first element in economic evolution that will be presented is the market process. The second chapter will investigate the general nature of the market process and the tangible and intangible factors on which the process lies or through which it emerges. Much interest is focused on the limits of human knowledge and action, and on other preconditions of the market process. In the third chapter, after we have discovered the spontaneous nature of the game of the market, we turn to study the framework of the game, that is, rules and institutions, through which sufficient coordination and conflict resolution among the participants and an overall order in society is attainable. We will seek to explore how rules of spontaneous origin emerge and change and why people behave rule-followingly in the first place. We will also investigate whether we are able to say something about the desirability of alternative rules or systems of rules.

Not all rules emerge as unintended outcomes of human interaction, however. In the fourth chapter we will concentrate on the intentional design of rules through the contractarian perspective of the Austrian School, grounded firmly on individualistic presuppositions about sources of value and of valuation. In this chapter we seek to study why people as a collective whole may agree on mutual rules although members of that community can perceive that in particular situations those rules may work against their own immediate interests.

The concluding fifth chapter seeks to integrate the ideas presented in the three previous chapters. The elements of economic evolution are not merely separate and subject constituents of the whole, instead they continuously affect each other as well as they affect the process as a whole which then affects the elements, and so on.

1.2 On methodology

Methodological Individualism as a chosen approach to social study

Methodological individualism will be applied throughout this study: we will maintain the methodological presumption that, whatever phenomena are considered on the social level, we ought to recognise that they result, intentionally or unintentionally, from the actions and interactions of individuals who, separately or jointly, pursue their various goals. Methodological individualism is a distinctive principle of the Austrian School. Methodological individualism is sometimes alleged to disregard the influence of social phenomena, such as culture and institutions, on the individual by taking the individual *as given* (Mayhew 1987, Hodgson 1993, 153). This interpretation gives rise to another allegation, namely the ostensibly reductionist nature of methodological individualism (Hodgson 1993, 154). If all social phenomena are to be reduced to the individual, why stop with the individual? Why not explore her psyche or even the genes?

In this study we seek to follow the Austrian approach to methodological individualism. We apply the method in an open-ended way, that is, we do not endorse the above reductionist interpretation nor do we take the individual »as given«. Ludwig von Mises gives an illustrative interpretation of our perspective:

That there are nations, states, and churches, that there is social cooperation under the division of labour, becomes discernible only in the actions of certain individuals. Nobody ever perceived a nation without its members. In this sense one may say that a social collective comes into being through the actions of individuals. That does not mean that the individual is temporally antecedent. It merely means that definite actions of individuals constitute the collective. (Mises 1949, 43)

The above description of methodological individualism recognises that social entities, such as institutions, groups, societies and culture, are real factors that for their part determine the course of human events. But it also maintains that social entities are the results of actions of individuals. Thus, we do not have to abandon methodological individualism to open up space for the social realm of the

individual. Recognition of social phenomena is thoroughly consistent with methodological individualism endorsed here.

Purposeful human action as a tenet of inquiry

Human action is purposeful behaviour. This implies that human beings have objectives, and further, that we consciously pursue goals that we consider valuable. If anyone should try to refute this, she would fall into a logical dilemma because disagreeing presupposes conscious goal-oriented action. Therefore, a counterargument would be in contradiction with itself.

The members of the Austrian School hold the methodological opinion that the only way to truly understand economic phenomena is through analysing human action as it appears in reality. What makes the inquiry difficult is the fact that reality does not appear to us uniformly. Because our experiences and goals vary, our perceptions of reality are unidentical. A theorist can, however, attempt to understand other people's actions by imagining herself in their place (Vihanto 1994, 25). We can also understand general processes that human action gives rise to (Hayek 1967, Ch 3). The relevance of the methods of *introspection* and *intelligibility* reveals that individuals have also a lot in common. Therefore, it seems possible to predict human action to some degree. Our approach to subjectivism is empirical and open-ended in the sense that the individual is considered a combination of unique and common. It remains to be presented during this study what implications our approach has on the market order.

Austrian economics assigns two tasks to economics: (1) To make the world understandable in terms of human action. (2) To explain how purposive human action can generate unintended consequences, and to trace these unintended consequences. (Kirzner 1976, 40) The Austrian approach suggests that something exists in addition to the facts of the external world and the relationships between these facts, namely the realm of human purposes. It appears reasonable to claim that without regard to human purposes we have failed to make the world intelligible to us. 'A hammer is more than a handle with a metal head; so is a price more than a number, milk consumption more than a number of gallons, and its relationship to price more than a simple functional relationship' (Ibid., 46).

The second task of the Austrian economics, that is, to explain how conscious, purposeful human action can generate unintended, but *systematic*, consequences through social interaction, appears to impinge on another Austrian insight that there is an indeterminacy and unpredictability inherent in human preferences, human expectations, and human knowledge (Kirzner 1976, 48). Theories of the social sciences do not consist of laws of objects definable in physical terms. All they may provide us with are techniques of reasoning and hence can assist us in connecting individual facts. An economic theory cannot be verified nor falsified by »historical facts» any more than mathematics or logic can, it may 'only be tested for its consistency' (Hayek 1948, 73). Historical facts are not definite objects given to observation, instead, they are always constructed through deliberate selection by the theorist.

Interpretations of uncertainty of the future differ among economists. The nature and extent of unintended consequences arising from human action are likewise under dispute (Prychitko 1995). Methodology influences theory which then organises our interpretations of the world. At the other end of the scale the world is considered quasi-predictable, whereas at the other end every situation is unique and unforeseeable. This study acknowledges that rule-bound behaviour gives rise to predictability and coordination of actions of individuals, but the future may, however, bring total surprises. The genuinely uncertain nature of the future is thence recognised. We cannot escape the condition that knowledge is dispersed in the minds of individuals, and about the nature of its changes we have no foreknowledge. Because we cannot know the nature and origin of future discoveries, the significance of liberty of the individual becomes apparent. In this study, liberty is primarily considered an instrument to achieve premeditated goals, but it can also be regarded as a value in its own right.

2 THE MARKET AS AN OPEN-ENDED PROCESS OF DISCOVERY

In this chapter we seek to introduce the market as a genuinely open-ended and evolutionary process of discoveries. The market is open-ended in the sense that innovations and discoveries shape unpredictably the course of the market process; and it is evolutionary because successful (desired) variations are continuously selected from among experiments.

In mainstream economics markets are believed, on standard assumptions, to achieve rapid market-clearing. Prices respond swiftly to changes in demand and supply conditions. The market economy is at all times close to the general equilibrium position. Mainstream theories of *systematic* changes in prices and quantities on the market perhaps underrate, not only the consequences the passage of time necessarily has on knowledge, but also the diversity of purposes and the divergence of expectations of market participants in a highly complex and open-ended world. The Robbinsian theory of economising, i.e., the allocation of known available resources in an optimal way so that any transfer of a marginal unit from one use to another cannot introduce a net benefit, is not an adequate description of the nature of the market in our open-ended perception of the world. The concept of equilibrium should perhaps only be perceived as an intermediate tool of thought in analysing some logical aspects of the market process.

A Misesian *evenly rotating economy* (Mises 1949, Ch XIV) is similarly a purely fictitious version of the market. Market prices are continuously stable because changes in data and time are precluded from the concept. The evenly rotating economy differs from general equilibrium in that the state of rest is disrupted again and again and then instantly reestablished at the initial level. The same market transactions are repeated unalteredly day after day and the system rotates evenly around a fixed centre. The fictitious idea of an evenly rotating economy can perhaps help us to acknowledge the significance that the passage of time and change of data necessarily hold in the game of the market. To claim that an equilibrium situation actually exists at a particular moment would be analogous to stating that all economic problems have been solved (Wubben 1995, 116).

Since events in the market are necessarily taking place in time, we need, in order to understand the nature of the market, a conceptual framework which does not consider the passage of time or data a triviality. For most Austrian economists markets typically generate tendencies toward equilibrium (Kirzner 1990, 25). The market economy is, however, considered not to be close to the general equilibrium situation at any time. The core of economic understanding of the market is in the explication of the market processes set in motion by the disequilibrium features. The competitive market process is considered an open-ended evolutionary process of learning through adaptation and innovation (O'Driscoll and Rizzo 1985, 126). For a radical subjectivist, even the tendency of the market process toward general equilibrium is not that self-evident, as we will learn below.

2.1 Evolution and entrepreneurial discoveries

Evolutionary processes are characterised by two interacting forces, the variation of new hitherto untested modes, and the selection from among existing variations. In this section we try to demonstrate how entrepreneurial action generates variations through innovative action as well as selective forces through competitive imitation.

The neoclassical view of the entrepreneur can be seen as responding systematically and frictionlessly to the conditions in the market. The task of an entrepreneur is to reallocate resources in a disequilibrium situation. Because the service of an entrepreneur is both valuable and scarce, a demand and a supply curve exist. Demand and supply conditions, at any given time, determine the quantity and varieties of entrepreneurial services performed. The level of pure entrepreneurial profit is adjusted through market competition to bring the supply of and the demand for entrepreneurship into coordination. The »right« quantity of entrepreneurial services is, at any given time, being appropriately deployed. (Kirzner 1985, Ch 1)

The Austrian approach, on the one hand, finds entrepreneurship incompatible with the general equilibrium notion, but, on the other hand, essential for the notion of the equilibration process (Kirzner 1992,7). Equilibrium, as such, as well as the tendency interpretation, are criticised by the radical subjectivists who

consider both notions inconsistent with reality. Interpretations of uncertainty vary between these approaches resulting in alternative views about the nature of economic processes.

Genuine uncertainty

All our actions take place under uncertainty. The degree of experienced uncertainty varies not only because situations are contextual but also because individuals experience uncertainty in diverse ways. Some consider certain types of situations similar and recurring whereas some take them as genuinely unique. Although our abilities or desires to categorise situations vary, we cannot reach a totally risk-free environment. Time works mercilessly against the fulfilment of our plans: the longer the time horizon of a plan the more probable it is that unforeseen consequences will affect the fulfilment of the plan. Ludwig von Mises linked uncertainty directly to the concept of *human action*. Action is always directed at improving the state of affairs of the individual in question.

The uncertainty of the future is already implied in the very notion of action. That man acts and that the future is uncertain are by no means two independent matters. They are only two different modes of establishing one thing. (Mises 1949,105)

Purposeful human action is teleological, in the sense that individuals always seek to do something: (1) action is caused by desire to improve one's state of affairs; (2) it is directed at realising an individually imagined more satisfactory situation, and (3) individuals generally expect that purposeful behaviour can remove or alleviate the felt uneasiness. (Mises 1949, 13-4) We cannot, however, predict all the choices the other market participants are going to make. Thus our expectations about the future will remain uncertain. Only in retrospect can we learn to what extent our plans have succeeded. But what we cannot know even *ex post* is whether our action was the best possible. To be able to know that would presuppose perfect predictability of all the possible consequences of alternative choices which is clearly an unattainable state of affairs in an open-ended world.

The idea of the market, whether as a process of *discovery* (Hayek 1978; Kirzner

1973, 1979, 1985, 1989) or as a process of *creativity* (Buchanan and Vanberg 1991), presupposes a perception of a genuinely uncertain world where an unfolding future is unpredictable or non-existent before it becomes the present. The market process is generated by the initial market ignorance of the participants (Kirzner 1973, 10).

The market process is one that is generated, at each and every moment, by entrepreneurial decisions [which] embrace, most importantly, the perception and evaluation of the alternatives identified as relevant, in an environment of ineradicable uncertainty (Kirzner 1989,18).

The uncertainty of the future derives from the fact that we cannot know today what we will know tomorrow. Therefore, the general nature of knowledge in the market process becomes interesting in our study.

The nature of knowledge in the market process

Knowledge may be deliberately produced in a learning process, but it may also emerge spontaneously as an unintended consequence of actions of the market participants. Emphasis on the latter is characteristic of the process approach. Individuals learn something from the stream of events as time passes (O'Driscoll and Rizzo 1985, 38). What they learn is beyond their ability to predict because of the unexpected consequences which arise in the market process.

The Austrian middle ground theorists recognise the dispersed nature of knowledge in the market. It is, however, maintained that knowledge integrates in the course of the market process, bringing about increased coordination of plans and actions of the participants. The expectations of entrepreneurs become increasingly coherent, and the market process moves thus toward increasing efficiency. A more radical view of the knowledge problem maintains that ignorance cannot be *systematically* eliminated (Kirzner 1992, 4). *Learning is not a solution to the knowledge problem* because the 'worth of new knowledge cannot begin to be assessed until we have it. By then it is too late to decide how much to spend on breaching the walls to encourage its arrival' (Shackle 1972, 272). Ignorance of the future actions of other market participants prevents the markets from

generating consistency among individual decisions. An experience of inter-individual inconsistency of plans may prompt participants to try to revise their plans in the direction of convergence (Lachmann 1986, 56). There are, however, preventing forces operating. Revision of plans in the direction of convergence requires that participants understand their present situation (relative to an imaginary equilibrium). Secondly, coherent expectations are required to achieve the convergence of individual plans (Ibid.). Individual participants may, however, have erred in interpreting their past resulting in a misjudgment of the present situation. They may as well fail to form coherent expectations of what would be a consistent pattern of plans in the future.

A seller finds himself with unsold inventory of a product in excess of desired levels at a particular price. But what exactly is the market telling him at that price? That he needs to relocate his store? That he has failed to advertise the existence or availability of the product sufficiently? That the price is 'right' but the quality or characteristics of the product is 'wrong'? Or that the quality and characteristics are 'right' but the price is 'wrong'? What the price has conveyed is information that something is wrong, that the seller's plans and expectations are inconsistent with those of others. It has not unambiguously told him in which direction the error lies. The price's information, in other words, needs interpretation as to its meaning concerning the preferences and plans of others. (Ebeling 1995, 143)

Knowledge acquired from prices is incomplete because prices do not convey full information about what particular alterations an entrepreneur should make to the initial plan. Continuous (ex)change of imperfect knowledge prevents us from foreseeing the future: 'Though [knowledge] varies in time, it is no variable, either dependent or independent. *As soon as we permit time to elapse, we must permit knowledge to change, and knowledge cannot be regarded as a function of anything else.*' (Lachmann 1976, 127-8) The market process is perceived as a continuous stream of knowledge and its nature as fundamentally open-ended. This is to say that the pattern of knowledge is continuously changing and that the market process, in the aggregate, has no particular direction; instead, the dispersed bits of knowledge live their own unpredictable lives in the minds of individual actors.

For many Austrian economists, though knowledge is incomplete at any given time, the market process is understood to provide a means to reduce the extent of ignorance through entrepreneurial alertness. 'Knowledge is not perfect; but neither is ignorance necessarily invincible' (Kirzner 1992, 5). The rate and unpredictability of change in the economic world are not so extreme as to frustrate the emergence of economic regularities altogether (Ibid.). Social institutions create an evolving framework for the market process rendering possible the predictability of actions of the market participants (see chapters 3 and 4).

Entrepreneurship through alertness and creativity

Entrepreneurs pursue their own private goals by trying to discover new, hitherto unperceived profit opportunities. But they cannot seek to achieve discoveries in a direct manner because of the knowledge problem we discussed above. We cannot know the specific nature of a discovery before it unfolds. Discoveries can therefore only be pursued in a roundabout manner, through entrepreneurial alertness and creativity.

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 (Hayek 1948, 101).

It appears that to succeed in achieving one's private ends, an entrepreneur has to consider what at least some of the other participants might regard as precious. An entrepreneurial action manifests itself in a form of a discovery of hitherto unperceived opportunity. This comprises innovations of entirely new goods as well as improvements of already existing ones. The improvement or diversification of an existing good includes *any* change in its nature, whether qualitative, spatial, temporal or whatever alteration which opens hitherto unperceived opportunities for the discoverer or innovator. Homogeneity of goods in the market process is therefore reduced to nearly non-existence. An umbrella in Regent Street at 5 p.m. may not be a good substitute for an otherwise similar umbrella in the same street at, say, 9 a.m., or another one at the same time on King's Parade, if it starts raining in the morning and you are about to walk

somewhere from Regent Street (Loasby 1995, 19).

In the Austrian tradition the market is understood as a 'discovery procedure' (Hayek 1978, 179-90) through which individuals, guided by the information transmitted by prices, try to adjust to the flux and uncertainty of economic life. Kirzner recognises the propensity of the entrepreneur alertly to discover failures in the existing patterns of coordination among market decisions. This systematic and equilibrating tendency of the market process is considered to be compatible with the 'creative, originative, entrepreneurial alertness' (Kirzner 1992, 7).

A genuine discovery of a hitherto unperceived opportunity is something that cannot be premeditated, that is, it cannot be a successful outcome of a deliberate search for a known object. A discovery always includes a feature of *surprise* though it may, as soon as one perceives it, seem obvious. Because the nature of a discovery is surprising, one cannot pursue discoveries in a direct manner, that is, one cannot *plan* a discovery. Yet discoveries are made everywhere around us and by us. If solely good fortune caused discoveries it would be irrational to be alert to the unfolding events because alertness would not increase the probability to discover. It may, therefore, be reasonable to consider general alertness in conjunction with good fortune as a precondition for a discovery of a hitherto unnoticed opportunity. Alertness and good fortune are not, however, sufficient preconditions. One also needs some prior knowledge. First, to recognise a discovery when being confronted with one, and second, to succeed in utilising the unfolding opportunity.

The recognition that the future is undetermined and *created* through individual choices does not imply that the future is beyond any predictability, nor does it preclude the fact that individuals have expectations about the unfolding future on which they base their plans. In the *catallaxy*, i.e., in the game of the market, participants try to adapt to the prevailing circumstances as well as to changes they *expect* to occur in the future (Buchanan and Vanberg 1991, 181). An idea of the catallaxy as a '*game without goods*' (Ibid., 182) promotes the perception of a non-teleological reality. The unpredictable nature of 'objective novelties' (Witt 1995) is inconsistent with the deterministic perception of the market process toward increasing coordination.

Assume that no initial goods exist, and that individuals have certain talents

and skills that enable them to produce consumable goods from nature. Exchange will take place if individuals recognise that they can improve their well-being not only by producing for their own consumption, but also by exchanging. Assume that an idea of exchange is discovered, thus leading to specialisation and division of labour. Individuals may, instead of directly satisfying their own needs, *imagine* what might prove to be of exchange value to others. This allows the participants to *create* new goods that have potential exchangeable value. 'Individuals would use their own imagination, their own assessment of the potential evaluations of others, in producing goods wholly divorced from their own consumption, goods that are anticipated to yield values when put on the market' (Ibid., 182). If the market process is considered as a process of exchange of *preexisting*, well-defined goods, it may become tempting to think that the process tends to allocate the *known* goods in a way that further gains from trade are unfeasible. But this idea becomes ambiguous when we acknowledge that *there is no knowable set of goods to be allocated*. (Ibid.)

The market economy, as an aggregation, neither maximizes nor minimizes anything. It simply allows participants to pursue that which they value, subject to the preferences and endowments of others, and within the constraints of general 'rules of the game' that allow, and provide incentives for, individuals to try out new ways of doing things. There simply is no 'external', independently defined objective against which the results of market processes can be evaluated. (Buchanan and Vanberg 1991, 181)

Expectations in the neoclassical tradition are about a *knowable* future whose expected outcomes can be calculated as the stochastic probability distribution of future events is claimed to be distinguishable. It is held that ignorance of the future can be remedied by learning (Buchanan and Vanberg 1991, 171). For Buchanan and Vanberg, expectations are individuals' theories about the future which is essentially *non-existent* before choices, creating for their part the future, are made:

The future has not yet happened. About it, men can have only opinions, related to

past experience (learning). Since men can (must) choose how to act, their chosen acts, together with the evolution of the physical world, are continuously creating the emerging future. If this is so (as it must be), then the future cannot be known 'now' (that is, in the continuous present). (Wiseman 1989, 268)

Our theories of the future change corresponding to our unending flow of knowledge of past events. Every choice we make has its affect on the future whose particular nature we cannot foresee. Therefore, we are simultaneously creating the future and adapting to its outcomes. We are, however, not always/often able to interpret the past events to our own advantage, nor can we predict future events correctly. We base our actions in innumerable erroneous plans which for their part affect the success of other participants' plans, and so on. There are diverse views among economists about learning and error correction under the market process. We proceed now to study how errors affect the general nature of the market process.

Ignorance and error

For Kirzner the central catalyst in the market process is an entrepreneur who discovers hitherto unnoticed *errors* in the market. Since the future is unpredictable, that is, we cannot even imagine what we may discover the next moment, the only way to deal with genuine uncertainty is to be *alert* to anything that might turn out to be valuable. Discovery of error means, in Kirzner's theory, such things as the discovery of 'incorrectly low valuation' of resources (Kirzner 1985, 50), 'alertness to hitherto unperceived opportunities' (Ibid., 52), or identifying 'situations overlooked until now because of error' (Ibid.). The only type of error that is possible, Kirzner (1978) maintains, is one that results in *inefficiency*, that entrepreneurs fail to recognise available opportunities because of the costs the removal of ignorance necessarily inflicts. Kirzner suggests that an error (inefficiency) may occur in a situation where a person is confronted with a bargain and fails to grasp it because of whatever reason (laziness, tiredness, unalertness etc.).

Being confronted with an opportunity does not yet mean that one necessarily should recognise it. Let us follow Kirzner's example where a man, walking along a

street, sees a profitable offer but 'perhaps thinking of other things' (Kirzner 1978, 67) fails to seize it. What kind of an error did the man make? Did he pass the opportunity because he made an error by not grasping the profit opportunity he was conscious of, or did he fail to seize it because he was not conscious of, and therefore could not know about, the opportunity? If the man failed because of the first alternative, then we must consider ourselves erring continuously while, for instance, sleeping (being unconscious of existing opportunities). The question about when a stimulus becomes applicable knowledge is central here, and so is the question about what do we consider an error. Kirzner recognises that 'there is nothing in purposeful action which by itself guarantees that every available opportunity must be instantaneously perceived' (Ibid., 68). The notion of »discovering hitherto unperceived opportunities« in Kirzner's use (as to leading towards equilibrium) may allure us to think that opportunities somehow lurk around us waiting for alert entrepreneurs to discover them. Kirzner writes, 'opportunities costlessly available to individuals are continually overlooked by all of us' (Kirzner 1989, 31). We may, in retrospect, think that we have *failed* to take advantage of an opportunity that has been available for us but which we overlooked due to sheer ignorance. There are, however, competing approaches toward ignorance and error.

O'Driscoll and Rizzo (1985, 126) consider imperfections in the market process as errors of participants to *adjust* their actions to the market environment; their nature being the unintended and unplanned consequences of human action. Error being part of the market process itself, agents, frustrated with market outcomes, will try to revise their plans and actions to better adjust to the competitive market environment. Kirzner's concept of error has met difficulties because it can be logically claimed that one should not consider the inability to possess *future* knowledge an error at all (Buchanan and Vanberg 1991). According to this view the whole concept of error becomes unnecessary in the Kirznerian use. To illustrate this further, we can imagine that the instant one, *ex post*, acknowledges an error, one is bound to make another error when judging the initial failure since we most certainly cannot have perfect knowledge of *all* the bygone opportunities. Hence there will always exist more preferable but unperceived opportunities compared to the newly discovered one. The error correction itself is, as Kirzner

identifies, a process of discovery (Kirzner 1989, 32). The attempt to correct the erroneous plan is not, however, *guaranteed* to lead to an expected or »better« result because circumstances have already changed, thus a chance for a new frustration is already there.

Pure profit opportunities, recognised by Kirzner (1992, 50), may be perceived in three distinct forms. Pure profit may occur (1) as a result of *pure arbitrage* when buying and selling takes place simultaneously; (2) as a result of *intertemporal arbitrage*, buying an item now and selling it later; and (3) as a result of *innovation*, buying resources now and selling an innovation later. Kirzner concludes that '[i]n each of these cases pure profit occurs because the market had not been fully adjusted to the possibilities it itself contained (either immediately attainable opportunities or subsequently attainable possibilities)' (Ibid.). Buchanan and Vanberg consider interpretations of the entrepreneur's *intertemporal* role, i.e., advantages taken of yet unperceived divergences between today's and tomorrow's market, to be particularly problematic: 'If, as we must assume, divergences between today's and tomorrow's markets are typically associated with differences between today's and tomorrow's *knowledge*, what does it mean to say that entrepreneurial alertness corrects the "failure to realise" divergences between *present* and *future* markets? What sense does it make to describe today's failure to possess tomorrow's knowledge as *error*?' (Buchanan and Vanberg 1991, 176).

Time is not an analogous dimension to the spatial because 'different parts of a present market exist, they are present, and differences in their characteristics can be discovered. Future parts of the market simply do not exist; they are, by definition, not present.' (Ibid.) To express the indeterminate relation between entrepreneurial alertness and discoveries of profit opportunities we should, according to Loasby (1982, 116; 119 and 1989, 161), make a distinction between entrepreneurial alertness toward existing opportunities and entrepreneurial imagination with regard to future possibilities. Loasby (1982, 1989) challenges the claim that entrepreneurs *systematically* are able to make correct decisions regarding future possibilities. Their own decisions may frustrate each other's forecasts. Furthermore, it is not shown that a systematic set of forces, to guide entrepreneurs toward making coordinative decisions with regard to the unknowable future, exists. As Loasby expresses it, 'the anticipation of future coordination failures . . .

must surely open up the possibility that the entrepreneur will generate, rather than correct, error' (1989, 161). Kregel (1986), likewise, has emphasised that future objective facts are themselves partly determined by the entrepreneurial actions being taken today. Entrepreneurial activity itself thus partly creates the future which entrepreneurs wish to anticipate. The notion of remediable inefficiency, according to Buchanan and Vanberg (1991, 171), rests on the neoclassical view that knowledge of the future is imperfect not because of the fundamental unknowability of the future but because of ignorance that could, in principle, be remedied by learning. There can, however, be no »given« future, independent of the choices that will be made by individual market participants. Instead, there are innumerable potential futures of which only one will become true. For a participant to be able to learn future events by past experience would preclude every innovative action made by other participants. According to Shackle (1983, 33), 'unknowledge' of the future is not 'a deficiency, a falling-short, a failure of search and study'.

Entrepreneurs also possess, to a certain degree, mutual expectations concerning the future, because their actions are partly determined by rule-bound behaviour and they know that some of the natural processes are predictable. A certain amount of perceived predictability is inevitable in order for one to be motivated at all in planning for the future. Therefore, because some events, like the earth's rotation, are general knowledge, individual plans which are partly based on that mutual knowledge are easily coordinated together, but only to the extent that that particular bit of knowledge gives rise to. Entrepreneurs themselves also create the future through their choices, as we have above learned from Loasby, Kregel, Buchanan and Vanberg. Combining this to the extent of mutual information we can understand why entrepreneurs may succeed adequately in predicting some of the immediate future events after all. Shared information unifies, to a certain degree, the ground from which entrepreneurs leap into the unknown future. As entrepreneurs for their part create the future through decisions based partly on shared expectations, the outcomes of the market process turn out, in part, as predicted. Members of society behave and think, to a degree, uniformly because of the shared institutions, tradition and culture.

2.2 Market process, efficiency and optimisation

We have, so far, studied how ignorance of the future and imperfect knowledge of market participants give rise to genuine and invincible uncertainty. Each individual indirectly pursuing her own objectives participates in the exchange to advance her own welfare. We have discovered that the imperfectness of human knowledge and human action are uncompromising phenomena which generate the fundamental purpose for the market process as being a means for myriads of private objectives to get potentially fulfilled.

In this section we turn to study the market process as a whole. We will try to investigate whether the market process can, in principle, be perceived to be moving toward an alleged optimal, however dynamic, end. The concept of equilibrium is very central in this respect and therefore we seek to present various interpretations from the static approach pursued by the neoclassicals through the dynamic tendency interpretations of the Austrian School to the total rejection of the whole concept by the radical subjectivists.

General equilibrium

A simple example of microeconomic analysis, the perfectly competitive market for a single commodity, illustrates the nature of the neoclassical equilibrium approach. An analysis starts by assuming that the market price is also the market clearing price, i.e., at that price the quantity demanded equals the quantity supplied. At any point of time the market values of the induced variables (prices, quantities and qualities, etc.) are predetermined by the values of the underlying variables (preferences, resources, technologies). Any discrepancy between these values is explained away by postulating that some relevant underlying variable has been overlooked. This interpretation doesn't reveal anything about what is required from the part of the market participants to attain a state of general equilibrium. It is not demonstrated how such a state is achieved either. Hayek does the job lucidly by presenting what it would take, not from the market as a whole, but from the individual participants who construe the market.

[t]he concept of equilibrium merely means that the foresight of the different members of the society is in a special sense correct. It must be correct in the sense that every person's plan is based on the expectation of just those actions of other people which those other people intend to perform and that all these plans are based on the expectation of the same set of external facts, so that under certain conditions nobody will have any reason to change his plans (Hayek 1948, 42).

The equilibrium approach faces a new problem when economists begin to recognise an apparent human imperfection, ignorance. It becomes difficult to claim for the existence of perfect competition while at the same time being forced to recognise a phenomenon which makes equilibrium impossible to attain. But instead of re-examining the approach, the equilibrium economists expand the scope of equilibrium by including the cost of ignorance-removal into their models. Thus it is rational not to seek perfect knowledge because some of the relevant information is too costly to attain (acquisition costs exceed the benefits of that information). (Kirzner 1992, 40-3) We shall learn later in this section that it may turn out to be quite difficult to successfully justify the idea of rationality with regard to the ignorance-removal costs³.

Individual equilibrium

Contrary to general equilibrium, individual equilibrium is a central and actual concept in human action. One is more likely to be able to attain equilibrium 'within the universe of action controlled by one mind' (Lachmann 1969, 90) than controlled by several. 'Actions of a person can be said to be in equilibrium in so far as they can be understood as part of one plan' (Hayek 1948, 36). Hence only if all successive actions have been decided upon at one and the same moment, can we refer to an equilibrium in the actions of a person. Therefore, any change in relevant knowledge, that is, any change that leads a person to alter her plan, disrupts the equilibrium relation between her actions taken before and those taken after the change (Ibid.). Individual equilibrium will last as long as the

³ See the section below: Equilibrium, coordination and ignorance.

anticipations of relevant future events prove correct.

Equilibrium, coordination and ignorance

The status of equilibrium in Austrian and radical subjectivist approaches is currently a matter of some dispute. We will try to analyse some characteristics of different approaches and to form a picture of the notions of equilibrium and coordination with relation to genuine ignorance.

By market coordination, according to Kirzner (1992, 31), is usually understood the capacity of the market process to guide entrepreneurial action toward a pattern of resource allocation consistent with the realities of consumer preferences and resource scarcities. Subjectivists have pointed out that since entrepreneurial decisions are future oriented, the relevant consumer preferences and resource scarcities are those which are relevant in the future (Ibid.). It should, however, be emphasised that consumer preferences only partly guide entrepreneurial decisions. The reverse (among other effects) is also true; consumer preferences are continuously affected by entrepreneurial imagination. The process is highly overdetermined⁴ by numerous elements. In the long run, the scarcity of resources is alleviated by the experience that in an open-ended world alternatives have been innovated in the past. As long as imagination and innovations are not scarce resources (which they do not seem to be) there is no need to consider resources scarce in the long term.

The praxeological notion of equilibration, defended by G. A. Selgin (1988), is distinguished from the empirical approach, suggested by Hayek and Kirzner. Disequilibrating action is impossible in praxeological terms because it would be analogous to an irrational action of choosing a worse situation instead of an equally available better one (judged by the one who chooses). According to the praxeological view, 'a tendency toward equilibrium means a tendency for action to systematically eliminate perceived sources of uneasiness' (Selgin 1988, 34). This view totally disregards the existence of objective discoverable opportunities in the market. There are no other opportunities than those actually exploited. This kind of praxeological interpretation appears to be remote from reality, however. It is

⁴ See the section 2.4: Evolution as an overdetermined process.

suggested here that we should distinguish a basic difference between »objective» and »subjective» discoveries (Witt 1995). An objective discovery is an altogether new and unexperienced innovation. Before its disclosure, there was no knowledge about it as it didn't exist. After the innovation has emerged begins the dissemination process during which subjective discoveries are made by agents who become informed of the already existing innovation. It seems proper to consider the objective innovation part of the objective reality although numerous agents are not yet informed by it. It is an empirical matter to analyse the extent the innovation and its dissipation process affect market order.

What renders the market process a systematic process of coordination, according to Kirzner, is the circumstance that each inconsistency in market coordination indicates a pure profit opportunity which then attracts the attention of alert entrepreneurs (Kirzner 1992,12). A gap in coordination is itself an expression of sheer ignorance on the part of the market participants. The profit-grasping actions of entrepreneurs remove the ignorance which was responsible for the initial profit opportunities to emerge. Thus, a tendency toward coordination among market decisions is generated. (Ibid.) What is not presented, though, is the mechanism or phenomenon by which alert entrepreneurs can *systematically* realise the existence of profit opportunities. It may not be in the interest of the initial entrepreneur who created a profit opportunity to attract others because of the fear of losing her priority. Loasby (1982, 122) expresses his skepticism concerning the ability of entrepreneurs to generate market coordination: 'What assurance can we have that entrepreneurial perceptions will not be so seriously in error as to lead them in quite the wrong direction . . . ?' Subjective assessments, together with imperfect knowledge should prevent economists from ascribing coordinative tendencies in aggregate to the market process. An inherent equilibrating tendency would presuppose the velocity of an adjusting process to the changes in tastes to be so high that no new change will occur before a full adjustment to the previous change has come about (Lachmann 1969).

The radical subjectivist approach has not criticised the Austrian middle ground position for its lack of recognition of open-ended uncertainty, the creativity of individual choice, or the pervasiveness of disequilibrium market conditions. Criticism is, however, aimed at the *incompleteness* of recognition of

these phenomena (Kirzner 1992, 8). The halfway assessment manifests itself lucidly in the Austrian notion of the equilibrating tendency of the market process. The radical subjectivistic view holds that human choice, in all its manifestations, involves an 'originative and imaginative art' (Shackle 1972, 364). The terms »originative» and »imaginative» are not used in the same sense as Kirzner uses the terms »originative» and »creative» as entrepreneurial qualities. For Shackle, the equilibrating tendency of the market process is totally inconsistent with entrepreneurial action.

If the market is genuinely perceived as an open-ended, nondetermined evolutionary process in which the essential driving force is human choice, any insinuation, however subtle, of a "telos" toward which the process can be predicted to move must be inherently misleading. ... This applies to the notion of a mechanical equilibrium ... and it also applies to images of the market that are intended to capture the constant change in the equilibrium-telos ['dog chasing a cat']. (Buchanan and Vanberg 1991,180).

Especially in his earlier writings, Kirzner emphasised a deterministic tendency of the market process toward an optimal state of affairs. He maintains that the entrepreneur's role

is created by the state of disequilibrium and his activities ensure a tendency toward equilibrium ... it is important to recognise that the changes he initiates are equilibrating changes, that is, away from the maladjusted state of affairs that invites change and toward the state of affairs in which further change is unnecessary or even impossible (Kirzner 1979, 111-2).

Kirzner does not assert here that the market process should ever *achieve* the ultimate end-state, i.e., equilibrium. A proposition that a tendency toward equilibrium exists is, through the historical perspective, however, an empirical one (Hayek 1948, 45).

We may ask under which *realistic* conditions the proposed tendency exists and what ensures that the market participants ever learn to coordinate their actions

with one another to *systematically* outweigh both the open-ended creativity and the imperfection of human perception. Hence, it is not sufficient to be able to show that a process of coordination, 'in the course of which initially uncoordinated decisions come to be revised in the direction of greater mutual coordinatedness' (Kirzner 1990, 34), in a hypothetical close-ended model is conceivable. One also has to be able to demonstrate a process in the course of which the increasing coordination of individual plans systematically outweigh the continual emergence of novel ideas and innovations. Systematic learning is inconsistent with the idea of inherent indeterminacy in the way by which knowledge changes. When the participants interact in the market they no doubt learn from experience and try to revise their plans to better adapt to reality. What they learn is not known because different individuals learn different lessons. As for the learning in a 'cloudy, confused complexity of the real world' (Allen 1988, 99):

the possibility of learning does not imply that through learning the future will become knowable, but only that experience will change behaviour (Wiseman 1989, 143).

According to Kirzner, markets fail to correspond to equilibrium situations because, and to the extent that, the participants have erred in taking advantage of exchange opportunities. These errors work as an incentive for entrepreneurs to seek for pure entrepreneurial profit. As such opportunities are successfully discovered and exploited, the market moves in the direction of equilibrium. (Kirzner 1990, 25) Kirzner recognises, however, that the equilibrating tendency is not a guaranteed one 'since entrepreneurial endeavor may itself introduce new, additional, errors into the system' (Ibid.). There is no guarantee that existing opportunities for exchange will ever be discovered. These two phenomena, i.e., (1) ignorance of the present opportunities and (2) unpredictability of future possibilities, ought to prevent us from taking the equilibrating tendency for granted.

The mainstream notion of market equilibrium presupposes, as we have learned, »full-awareness« or perfect knowledge of all relevant information. Exchange often requires the expenditure of resources which introduces the

concept of transaction costs to the realm of market equilibrium. An important part of the transaction costs may consist of acquiring relevant information. According to Kirzner, 'the "full-awareness" interpretation of equilibrium need not mean full knowledge of all relevant information; it may mean merely full knowledge of how to acquire (costly) relevant information. Ignorance may thus be consistent with market equilibrium to the extent that it is known that removal of this ignorance is not worth the cost of such removal.' (1990, 26) If it is, however, already known in advance that the cost of removing ignorance (acquiring more relevant information) exceeds the benefits of that removal, the nature of that further information is necessarily also foreknown which would require perfect knowledge of the relevant information at the initial moment. How else could we know beforehand whether or not it is advantageous to remove this ignorance? Ignorance, it is argued here, is not consistent with the market equilibrium *in any situation*. Search of valuable information cannot be totally without risk. A newly discovered opportunity to trade may or may not lead to a net return on search costs. This result cannot, however, influence the decision to engage in information efforts *ex ante* since one cannot yet know the outcome of the trade. And *ex post* it is impossible to change the information costs incurred. The information will thus be used irrespective of how costly it was to acquire. (Streit and Wegner 1992, 137)

For Kirzner, utter ignorance differs from the ignorance described above in that its removal *is* advantageous. The utter ignorance of an opportunity is hence inconsistent with market equilibrium because the removal of that would result in a mutually gainful exchange through exploiting that opportunity if it was discovered. (Kirzner 1990, 26) It is suggested here, however, that there is no real difference between the concepts of ignorance and utter ignorance. We either know the relevant information or we do not. The above categorising of ignorance does not provide us any further information. The crucial nature of ignorance is that we cannot know in advance what we would know if we acquired more information because every bit of new information changes our knowledge in an *unforeseeable* way. Furthermore, if optimisation itself is a costly process, then the optimal degree of optimising behaviour cannot be discovered by solving the initial optimality problem (Argyrous and Sethi 1996, 481). Instead, the emerging circularity problem shows that optimising cost cannot be completely handled in

an optimising model (Conlisk 1988, 214-5).

Economic action is *teleological*, in the sense *only* that individuals possess goals and seek to attain them. What, in specific detail, they seek at a particular moment is not knowable to most other people. As Veblen (1919, 76) recognised, '[t]he question of a tendency in events can evidently not come up except on the ground of some preconception or prepossession on the part of the person looking for the tendency'. One has to have some premeditated definitive end or some legitimate trend of events in mind. The evolutionary point of view leaves no room for a question of normality as to '[w]hat should be the end of the developmental process under discussion?' (Ibid.)

Alternatives for coordination explanation

Teleologically oriented market process theorists may justify their conviction of the coordinating tendency of the market process also as follows: 'If we maintain, nonetheless, that the market process can fairly be described, in general terms, as equilibrating, this is because of a conviction that in the face of initial ignorance there is a systematic tendency for genuine discoveries, rather than spurious ones, to be made' (Kirzner 1992, 45). Kirzner understands that the tendency interpretation is based on a *conviction* of its existence. This study has not yet found another worthy of support.

The coordinative tendency of the market process is one alternative to the explanation of the existing overall market order. We may, however, find other phenomena which can cause predictable behaviour, other than that of the deterministic coordination process. Institutions, tradition and culture give rise to path dependency which can give an alternative answer to the emergence of spontaneous order. The notion of path dependency in economics implies that future developments of firms, institutions, economic systems, etc., are not entirely independent from the past but are instead affected, to a certain degree, by the paths they have traced out (Hodgson 1993, 203). Stephen Jay Gould, a paleontologist, has promoted the idea that evolution also depends to a great extent on *accidents* (Gould 1990).

Path dependency in the economic context suggests that evolution is not directed by the selection of the most efficient organisational or institutional

configurations. What becomes selected is affected by deliberate choices made by individuals as well as by the chance of particular opportunities being discovered and created. For example, technological change is interacting with or overdetermined by, among other elements, institutions of particular property rights. Certain types of technological innovations may be unachievable without appropriate patent rights, and at the same time patent protection may obstruct competition among technological possibilities. To state that 'marginal adjustments towards perhaps more optimal outcomes are often ruled out' (Hodgson 1993, 205) would require, however, prior knowledge of the optimality. It is suggested here that path dependency is not an obstacle on a route toward optimality, but instead a phenomenon that prevents the emergence of some alternative opportunities. More importantly, though, it prevents a total collapse of the existing order by limiting the extent of sudden change.

Determinism and purposeful behaviour

Ervin Laszlo has named the third chapter of his book *Evolution the Grand Synthesis* (1987): 'The Mastery of Evolution'. The very name indicates Laszlo's approach to evolution, that is, evolution can and indeed should be controlled by man: 'If an activist acts with a sound knowledge of the dynamics of social evolution and intervenes at the right place, at the right time and in the right way, he or she can create that tiny but crucial internal fluctuation that the nondeterministic and nonlinear dynamics of an otherwise random process of bifurcation could amplify into society's dominant operating mode' (1987, 129). Thus, it is suggested that goals of an activist could become the dominant 'attractors of society's next systemic state, pulling it out of chaos and onto the next plateau of order' (Ibid.). What is left unexplained is first, how can the »right« place, time and way to intervene in the evolutionary process, even in principle, be defined, and second, what ensures that a particular action of a participant leads, through the suggested process of »monotonous amplification«, to a desirable socioeconomic outcome.

When we say that economic evolution comprises not only the spontaneous or unintended consequences of human action but also the purposefully designed institutions, it does not imply that evolution itself is in any way under the control of, or mastered by, man. The fact that a government, for instance, imposes a public

policy in order to achieve some premeditated goal in society does not indicate that the members of the government control social evolution. This is simply because in order to do that one should be able to show that the nature of economic evolution, as a whole, is knowable. That a particular public policy has its effect on the course of evolution, is by no means the same as saying that we can control the entire process. It would be equally futile to suggest that one market participant controls the market process as a whole just because any action taken by her affects the overall pattern of the market process (which it, of course, does). Veblen (1919, 74-5) recognised that both the individual and her environment are affected by the developments of economic evolution: 'The economic life history of the individual is a cumulative process of adaptation of means to ends that cumulatively change as the process goes on, both the agent and his environment being at any point the outcome of the last process.'

Efficiency and progress

Modern Western cultures regard increasing efficiency as a synonym for progress or change. The word progress itself is often taken to indicate, not only a change in time, but specifically a change for the better. Increasing efficiency can be interpreted to mean that an increasing number of people can pursue their private goals better than before, that there are, for instance, less prohibiting rules preventing them to increase their welfare by voluntary choices. Increasing efficiency is also often understood to result in a move toward an optimal state of equilibrium. The first interpretation stands on subjectivist ground because the individual is taken as the sole interpreter of her values, whereas the second derivative interpretation deals with a change on the system level. The first notion does not, however, imply that time somehow automatically increases the number or quality of choice situations. Therefore, we cannot postulate that the welfare of our ancestors was necessarily worse than ours. Our welfare is affected also by the nature of choice situations (e.g., a war time compared to a peace time) which are under continuous change.

There have been attempts to justify the hypothesis of maximising behaviour by the notion of natural selection (Friedman 1953, 22), as well as attempts to justify the spontaneity of economic evolution by the efficiency-directed teleological

approach:

Competition is a procedure of discovery, a procedure involved in all evolution, that led man unwittingly to respond to novel situations; and through further competition, not through agreement, we gradually increase our efficiency (Hayek 1988, 19).

Hayek suggests two different things here. First, the evolutionary process is moving toward further efficiency. Second, increasing efficiency is attained through competition, not through mutual agreement or social contract. It will be shown, however, that evolution can be approached from a more open-ended standpoint.

A deterministic evolutionary model of stratified stability holds that the structural configurations are built from the simple to the more complex, with each rung in the »ladder« being functionally stable in its own environment (Chase 1985, 805-6). The model explains why evolution has a consistent direction through time, namely that of from the less developed (the earlier) to the more complex (the later). Time and history are seen to generate evolution proceeding in an orderly fashion that is both indeterminate as to what particular path becomes selected, and non-random as to the direction in which evolution is moving. Moreover, the path selection is not considered an accidental statistical process because it is characterised by volition and choice. The range of possible choice-paths is determined by technical abilities and institutional factors, while the directional trajectory for any chosen path tends from a less complex stratum of organisation to a more complex one. (Ibid., 807) A more complex form evolves because an earlier, simpler form becomes unstable within the changed circumstances. It is a matter of 'unidirectional imperative' (Ibid., 814).

An idea of intentional command of evolution has charmed many social scientists. The changes in society's value system are suggested to be self-correcting by nature (Liebhafsky 1968, 523) and existing values are warranted only as long as they provide efficiency in maintaining the causal continuity of the problem-solving process of society. The self-correcting nature of changes in societal values are by virtue of the fact that the problem-solving process of society involves conscious awareness and that it is, in principle, open to the surveillance of the

community. Society has the capacity to deliberately change those patterns of behaviour that are no longer appropriate to the problem-solving process. (Bush 1987, 1080) It is further suggested that society progresses, that is, improves its efficiency, through the intentional choice among particular technological innovations. Socioeconomic evolution is thus considered a 'subject to the discretionary control of mankind' (Ibid., 1108).

Societies are not only observed to progress through time, regression is, according to Bush, also an available option. Outcomes due to the central planning in the former Soviet Union and the Holocaust engineered by the Nazi regime, are calculated as »social inefficiencies» leading to the regression of those societies. The net loss in efficiency results from the intrusion of 'spurious science'. (Ibid., 1100-1) But if this was the case, how can socioeconomic evolution be in the control of mankind in the sense described above? The intentional choice to prefer inefficiency and regression does not seem to be consistent with the postulated efficiency-driven tendency of socioeconomic evolution. Bush concludes that 'one can be sanguine that "regressive" institutional changes are ultimately reversible, since the demonstrable adverse consequences of spurious "knowledge" cannot be long endured in the life processes of the community without a sensed awareness that something is amiss . . .' (Ibid.). But aren't the »progressive» institutional changes also reversible, how else could the »regressive» changes ever occur?

Giovanni Dosi and Richard Nelson (1994, 154) define the term »evolutionary» to include the following characteristics: (1) movement of something over time, (2) random elements which generate variation, and (3) mechanisms that systematically select from existing variations. If the selecting forces are seen to *systematically* winnow the most successful from among variants, it may easily lead to the Panglossian⁵ modes of assumptions that evolution always means increasing progress and efficiency, a progressive journey from the simple and lower to the complex and higher form of organisation. For instance, North (1981, 7) writes: 'competition in the face of ubiquitous scarcity dictates that the more efficient institutions . . . will survive and the inefficient ones perish.' In so far as we reject

⁵ Panglossian thinking is associated with the presumption that natural and competitive social processes lead to optimal results, that nature is an optimiser (Hodgson 1993, 197).

the notion of perfectly optimising agents and costless information and replace it with an open-ended evolutionary process which experimentally selects behaviour and institutions, can we still assume that the process is efficiency-oriented?

For Marina Bianchi (1994), the process of evolution is one of trial and error represented by individual plans and actions. The process consists of successful as well as unsuccessful plans which, when perceived as failures, people attempt to correct by the method of trial and error. Evolution is thus a process of continuous learning. According to Allen (1988, 107), evolution cannot lead to optimal performance because the ability to survive includes also the ability to create more or less random variations which are experimented in the »shifting landscape«. Thus variability is part of the evolutionary strategy of survivors. Evolution is a continuing process of selection which favours those individuals and social structures that maintain the ability to experiment and learn new things. Selection and efficiency are thus seen as separate matters. Marina Bianchi (1994, 18) suggests that the meaning of efficiency should be modified in the direction of flexibility, adaptability, and the ability to experiment. Efficiency is perceived more as an ability to produce new variants and self-correcting forces through learning than as the selection of optimal outcomes.

The Austrian tradition highlights the significance of rules and institutions in the discovery process and therefore comprehends the above notion of efficiency. We can increase our opportunities to gain by adopting general rules which encourage individuals to experiment new variants. The selection of variants is left to individuals who through trial and error try to improve their welfare. However, because of the uncertain nature of the process, it is not at all certain that improvement is brought about. If evolution is not considered a causal sequence with a deterministic teleology, but instead as a process of selection from a set of existing alternatives which mutate in an unpredictable way, we can abandon the notions of progress and increasing efficiency. Stephen Jay Gould rejects any assumptions of a deterministic nature of evolution. 'Life is a copiously branching bush, continually pruned by the grim reaper of extinction, not a ladder of predictable progress' (Gould 1990, 35). Within the constraints of variation and selection the geometric possibilities for evolutionary trees are nearly endless. A bush may quickly expand and then reduce continuously, or it may diversify

rapidly and maintain the width by a persistent balance of innovation and destruction, or it may evolve in whatever other way. For Gould, the notion of increasing progress is 'a desperate finger in the dike of cosmically justified hope and arrogance' (Ibid., 45).

Efficiency and welfare

The central approach to welfare economics has been that which considers the notion of Pareto optimality as its core criterion when measuring the welfare of society. 'A change is seen as enhancing the economic well-being of society if it renders some of its members better off (in their estimation) without rendering any others worse off' (Kirzner 1992, 182). This interpretation of Pareto optimality is consistent both with methodological individualism and with subjectivism since the valuation of increase (or decrease) in welfare is left to the choosing individuals and interpersonal comparisons of utility are not pursued.

Problems emerge, however, when the Pareto criterion is integrated with the idea that the economic problem facing society is that of allocating its resources among its competing goals in the most efficient way. The inefficiency of resource allocation is identified then with suboptimality, according to the Pareto criterion (Ibid., 183). The emerging problems relate to methodological individualism and to subjectivism. Society, in the aggregate, cannot possess goals nor deliberately allocate resources. Only the *members* of society are able to possess goals and choose among alternative possibilities.

An attempt to search for criteria by which it would be possible to evaluate economic merits of specific institutions comprises, in the Austrian tradition, according to Kirzner (1992, 181), the recognition of the following principles:

- (1) Methodological individualism: meanings of statements concerning the welfare of society that cannot be unambiguously translated into statements concerning the individuals in society are not recognised.
- (2) Subjectivism: statements that perceive the economic welfare of society as expressed in terms that are unrelated to the valuations and choices made by individuals are not recognised.

(3) An emphasis on process: interest in the economic welfare of society is not merely in terms of its level of economic welfare but also in regard to the ability of its institutions to stimulate and support those economic processes upon which the attainment of economic welfare depends.

Hayek has focused on the circumstances of dispersed knowledge in society (Hayek 1948, Ch 4). The relevant information that the members of society would have to possess to be able, even in principle, to solve their economic problems, is widely dispersed. The dispersed nature of knowledge thus makes the notion of social efficiency in the Paretian context unattainable.

Austrian economists (especially Kirzner) suggest an alternative basis for evaluating social welfare, one thoroughly consistent with the principles of methodological individualism. Fragmented knowledge is responsible for the actions of market participants not being mutually coordinated. The economic problem of society is seen to be that of alleviating (if not altogether overcoming) the discoordination among market participants. Much interest is thus focused on institutions which increase the coordination of actions in the market by making it easier for the participants to predict decisions of others. For the radical subjectivists, since market outcomes are thoroughly indeterminate, nothing systematic can be claimed with regard to the welfare properties of the market process. The rejection of the coordinating tendency of the market process challenges claims for market efficiency. The notion of social efficiency is thus pronounced altogether meaningless.

In this study, subjectivism is examined on the level of the individual as well as on the level of the market order. Our open-ended and empirical approach to subjectivism lies in between Misesian *apriorism* and Hayekian *empirism*. It is recognised that individuals are partly dissimilar, as far as their objectives and values are concerned. On the other hand, we are often able to predict other people's decisions by imagining ourselves in their place. We are also able to understand various phenomena that human action gives rise to. Therefore, the subjectivism endorsed by the author comprises at the level of the individual both the uncertainty of individual choices and the potential for empirical predictive

theory. On the level of the market process our subjective perspective deviates from the »equilibrating tendency» approach. There is no logical connection between discoveries at the level of the individual and the claim that an equilibrating force is at work at the level of the market process. The tendency ought to be empirically testable to earn scientific relevance. In so far as this is not the case the concept is merely speculative.

2.3 Economic planning and the knowledge problem

In this section, we attempt to present the nature of society as genuinely open-ended. The open-endedness can be seen as the underlying source for the general attraction of the market order in comparison to central planning. The justification derives from a logical argument and is compatible with the genuine open-endedness of the evolutionary process of societies. The argument relies on the principles of methodological individualism and of subjectivism: (1) Only individuals can make decisions, either individually or collectively. (2) Only the individual in question can know her contingent preferences which are revealed to others through her actions.

The market process approach shows that the absence of central planning not only makes the market process possible but also that decentralised decision-making is the crucial prerequisite for markets to function. For Austrians, the absence of centralised direction is necessary for the coordination of the market process to be attained at all (Kirzner 1992, 51). In the radical subjectivist approach the open-ended evolutionary market consequences are unattainable through any central planner, however benevolent and omniscient she may be (Buchanan and Vanberg 1991). There is a fundamental logical difference between the Austrian and the radical views although their conclusions are matching. The Austrian critique of central planning identifies the unfeasibility of an omniscient and benevolent monolithic planner because of the dispersed nature of knowledge and the indeterminacy of individual preferences. *If* such a planner did exist it would make no difference whether or not she was the decision-maker instead of the market participants, because the outcomes of the alternatives would be equally Pareto efficient. Radical subjectivist critique of central planning not only recognises the

unfeasibility of an omniscient and benevolent central planner but also holds that the Austrian view fails to identify the core fallacy in the idea of central planning. According to Buchanan and Vanberg (1991, 184) 'even the planner so idealized cannot create that which is not there and will not be there save through the exercise of the creative choices of individuals, who themselves have no idea in advance concerning the ideas that their own imaginations will yield'. Thus a central planner cannot, even in principle, foresee the market outcomes not yet created by the *participants* and is therefore bound to fail.

In so far as we are ready to accept the above idea, we can conclude that only a decentralised market economy can provide individuals the ends-means framework through which they may accomplish whatever they see appropriate. It is not claimed here that a market economy would necessarily be more efficient than a centralised economy in coordinating individuals' actions. It may indeed turn out that a centralised economy can offer such a stationary environment that the coordination process can really exist. It is suggested here that the coordination of actions alone does not lead to welfare of the members of society. Without freedom to seek new methods to improve one's well-being we cannot say much about the welfare contribution of coordination. It is therefore not the system-level coordination that counts when we compare the goodness of the market order to the coercive order of a central planning system. It is the degree of liberty of individuals to seek whatever they want, within the constraints of general rules of conduct, that matters since future preferences are unknowable. A central planner cannot know what individuals in locational and temporal contingencies want or would want if they had the liberty to discover for themselves. The market order does not ensure that a particular individual's action is or will become consistent with others, or that she necessarily will discover something that others appreciate. What the market does is that it gives each participant freedom to pursue her own goals regardless of what they are. The market process is thence not a secure one but it renders possible discoveries of the yet unknown.

2.4 Evolution as an overdetermined process

Before we turn to study the realm of institutions in chapter 3, it may be fruitful to

try to connect the evolutionary nature of the two worlds, the catallaxy and the framing institutions, together in a way that does not underrate the significance of the game of the market any more than the importance of institutions, and most importantly in a way that does not try to reduce complex processes to simple mechanics.

Resnick's and Wolff's notion »overdetermination« means that every human entity (individual, group, institution, society, culture, etc.) is affected in endlessly diverse ways and from endlessly diverse directions, and is hence continuously changing. Thus every object is perceived as a *process*. (Resnick and Wolff 1994, 40) Individuals are affected by interacting influences, for instance, by other individuals, institutions and traditions which are similarly affected by other processes. Because people (as individuals or groups) and institutions exist in a constitutive relationship to that which is outside of themselves, there can be no independence of entities from one another. Rejection of independence among social processes may also imply that it is difficult or even impossible to rank determinations with regard to their importance (Ibid., 41). Since each entity changes, its influence on all other entities must also change; this changes them and their influences back upon the initial entity and so on. Evolution becomes thence a product of continuous changes in its constitution. 'This implies that no telos guides or governs such evolution, for that would entail a determinism: some ultimate pull (essence) which alone dominated the evolutionary movement' (Ibid., 44f).

Overdetermination also has an important methodological dimension. Theorising in one particular way needs no more justification than one way of dancing or speaking. 'It accepts that each theory is one glimpse, unavoidably partial and open-ended, into the ceaselessly changing complexities that are its objects' (Resnick and Wolff, 46-7).

In economics, the dominant way of coping with the complexities of human economic life has long been deterministic reasoning. The maximum simplicity and explanatory power of the demonstrations are presumed to be the goals in studying complexity. The greater the simplicity and predictive power, the closer economics is assumed to become to the actual economic evolution. (Resnick and Wolff, 49) It is, however, important to note that when playing by the rules of the

game, both the players and the game influence and change each other. Game theory does not give answers to this because in a genuinely open-ended evolutionary game, the rules must be left to change in an *unpredictable* way. The game is bound to be close-ended and mechanical when we arbitrarily try to determine or confine the nature of changes in the rules. Then again, if we let the changes be genuinely uncertain, then the game does not tell us anything.

An overdeterminist notion of complexity and evolution refuses the coherency of reducing deterministically the complex to the simple. Instead, evolution is seen as a genuinely open-ended, continuous flow of changes among social processes generating and generated by individuals, groups, structures, and institutions. (Resnick and Wolff, 55) Evolutionary processes of complex organisms do not, it is argued, support a deterministic view according to which evolution should be purposeful, that life »progresses» from »lower» to »higher» forms (Radzicki and Sterman, 1994, 63; Gould 1990, Ch. 1).

3 THE REASON OF RULES

The evolutionary approach starts from the observation that the future is genuinely uncertain. In so far as we are ignorant of what tomorrow may bring, the only way to cope is to rely on our experience of earlier satisfying results. Our imperfect knowledge and limited reason prevent us from being able to calculate at every situation the best possible alternative. Therefore, in dissimilar situations we tend to behave the way we have done in adequately resembling past events. We behave rule-followingly.

Rule-obedience renders possible predicting some of the actions other individuals are going to take. As we follow general rules, we expect other people to reciprocate which they most often do. And as general rules of conduct are applicable in a number of dissimilar situations, we are able to expect a certain mode of behaviour by placing ourselves in the position of others. Social rules also facilitate the peaceful settlement of conflicts that necessarily arise between the members of community as the ends of individuals are disparate and the means of achieving them are scarce. Rules are not only useful to resolve disputes after a conflict has emerged, but what appears more important, they prevent innumerable potential conflicts from arising as the members of community share the rules of conduct.

We have learned in the previous chapter that the market can be perceived as a genuinely open-ended evolutionary process. The market process cannot, however, proceed without general rules which guide the actions of the market participants. In this chapter our attention centres specifically on the *unintentional* processes of rule emergence and change. We will investigate law-making processes that facilitate general agreement within a community although the source of change is the dispute resolution of few. Even though general rules are not goods that can be privately traded, we try to investigate whether a market-like voluntary exchange of rights is possible under some type of law-making.

In section 3.1 we will present the general characteristics of social rules and examine motivations for rule-obedience. In section 3.2 we study moral rules which bring forward the significance of reciprocity in society and explain our motivations for rule-obedience, particularly when no formal agency to enforce

rule-following behaviour exists. We will in section 3.3 examine processes through which rules emerge without deliberate design, and how they create spontaneous order in society. In section 3.4 evolutionary processes of selection among rules are presented. The theme concentrates largely upon group selection explanations and their interpretations. In section 3.5 we will examine common law as an evolutionary process of discoveries. The last section, 3.6, in this chapter presents a customary law process as a significant bridge between spontaneous evolution and contractarian agreement.

3.1 Rationality of rule-following

Individuals exhibit certain patterns or regularities in their conduct that can be described in terms of rules. This does not necessarily mean that individuals are aware of these regularities or that they are explicitly stated as rules. 'A social institution is a regularity in social behavior that . . . specifies behavior in specific recurrent situations, and is either self-policed or policed by some external authority' (Schotter 1981, 11). Rules are thus behavioural regularities in the interaction between individuals. They arise because of the uncertainty in deciphering the complexities created by the very interactions, and because they facilitate the peaceful settlement of conflicts.

Every situation that we encounter is unique in the sense that the situation in which we find ourselves can never recur in an exactly similar way because of the unescapable passage of time between any two situations, hence the world is no longer the same at the latter situation compared to the preceding one. We are, however, able to find certain similarities between different situations, past and future. We do not seem to respond to particular situations as unique events but, instead, tend to form categories of situations which we in some sense perceive as similar (Vanberg 1993, 176). We can therefore identify certain types of situations belonging to the same *class*. We ignore some of the unique aspects of particular situations and concentrate on the aspects that help us to put the situation into a class of adequately similar situations. Without the categorising ability we could not discover any similarities between past and future situations and therefore could not behave rule-followingly.

[Rules] serve to abbreviate the list of circumstances which we need to take into account in the particular instances, singling out certain classes of facts as alone determining the general kind of action which we should take. At the same time, this means that we systematically disregard certain facts which ... it is rational to neglect because they are accidental partial information which does not alter the probability that, if we could know and digest all the facts, the balance of advantage would be in favour of following the rule. (Hayek 1967, 11)

Hayek illuminates the role of rules as behavioural dispositions here, delimiting the range of alternatives that are taken into consideration. Elimination of certain kinds of action restricts the alternatives on which conscious choice is required; thus decisions are in part determined by rules which an individual may not even be aware of. The limiting and elimination of alternative kinds of action also works as a restraint on creative action in specific circumstances. As creative action is of vital importance for the innovations of new rules, the hindrance of creativeness works against the emergence of new rules. While doing so rules, as constraints on individual actions, simultaneously prevent society from falling into a state of chaos. Thus, the economic lives of the members of society proceed somewhere in between the perfect rigidity of rules unresponsive to environmental variation, and the state of chaos perfectly responsive to environmental variation, the latter extreme being as a matter of fact incompatible with the very notion of rules. Greater uncertainty will cause rules to be more restrictive in eliminating particular actions. Interestingly enough, uncertainty itself becomes thence the basic source of predictable behaviour when greater uncertainty causes increasingly predictable regularities. (Heiner 1983, 570)

Rule-following behaviour implies that the actor, instead of choosing on a case-by-case basis, is predisposed to act in a certain way in certain types of situations. This rule-following behaviour is relatively unresponsive to variations in particular situations because the actor does not calculate at each and every circumstance individually what kind of action is to be pursued. The judgement occurs at the rule-level instead (Vanberg 1994a, 17). The choice whether or not to adopt a rule is thus based on comparison among the potential alternative general outcomes of

behaviour: rule-following behaviour brings about adequate and constant results whereas case-by-case judgment gives rise to more volatile outcomes some of which are not at all desirable. Vanberg suggests that 'practices are adopted because they are advantageous to the actor, whether such adoption occurs explicitly and consciously or implicitly and habitually' (Vanberg 1994a, 17). He maintains further that the potential opportunities brought about by case-by-case-based behaviour are outweighed by rule-following behaviour if rule-following is in advance considered more advantageous (Ibid.). This type of argument for rule-following behaviour indicates that existing rules generate efficiency (compared to a situation without particular rules), otherwise they would not have been adopted. Our interpretation does not go that far as we hold that rule-bound behaviour is generated by the sheer ignorance of the future events instead of the calculated advantage. Our imperfect knowledge prevents us from being able to calculate potential future gains, especially those arising through case-by-case behaviour. Therefore, it seems unnecessary to hold that because rules exist, they must be beneficial. Deviating from a particular rule may be more advantageous in certain situations, but these situations are often ignored because of the uncertainty about when to deviate (Heiner 1983, 585). Ignorance about the outcomes of deviation in a particular situation prevents us from trying. We are not completely independent in particular choice situations because of our path-dependency of tradition and culture.

Rule-following has a two-fold effect on the market process. It facilitates predictive actions of the market participants and therefore increases the possibility of anyone to predict plans of others'. Following a rule limits, however, the range of alternatives that are taken into consideration and works therefore as a hindrance to discoveries.

Institutional interest and compliance interest

When considering rule-following behaviour we should perhaps make a distinction, presented by Vanberg (1994a, 21-2), between a choice among institutional environments and a choice of whether or not to comply in particular situations to the prevailing rules. It is a matter of institutional interest when considering the former type of choices and a matter of compliance interest in the

latter type of choices. Institutional and compliance interests of a person do not have to be in congruence, i.e., one can prefer to live in a society where a certain social rule is commonly followed, but one may still prefer not to comply with that rule herself. For instance, a tax-evader may prefer to live in a community where all members pay taxes.

A person benefits from living in a community where everyone obeys moral rules. She may also choose to generally act morally but disregard the moral code in situations where there is no danger of punishment. An interesting question is whether it can be considered rational for an individual to choose *always* to obey moral rules even if she expects that it will be more advantageous in some particular circumstances to disregard them. (Vanberg 1994a, 52) We will try to investigate this in the next section.

3.2 Rationality of moral behaviour

Moral rules are often in an unwritten form and they emerge, change and are enforced spontaneously without a formal agency. Individuals often have personal incentives for moral behaviour and for monitoring other members' behaviour. Moral rules demand a kind of behaviour that is considered socially desirable. Other members of a social group benefit from an individual's rule-obedience which may, however, be in conflict with the immediate narrowly-defined interest of the member herself. A »keep promises« rule evidently benefits anyone to whom a promise is given, but may result in discontent for the promiser if the disclosing events prove it to be disadvantageous to keep the promise in a particular situation.

Moral behaviour does not emerge without some form of endorsement which may range from the *formal* mode imposed by some enforcing agency, over the *informal* sanctions individuals spontaneously impose on each other, to the intangible *internal* sanctions an individual's conscience imposes on her, including the imagination of sanctions expected from some transcendental entity (Vanberg 1994a, 42).

The individual is throughout this study understood as a *self-interested* person. Self-interest may (as it often does) comprise also an interest in moral action. An

individual's morality reflects some generalised theory about the consequences which may result from rule-obedience or rule-violation. The testing of a theory may, however, turn out to be rather difficult. Theories about short-term consequences of moral behaviour are more easily testable than those about the long-term. Likewise, theories about what produces more material wealth are more easily testable than those about what brings about greater happiness. 'Theories about whether "morality pays" may even be inherently immune to falsification — for instance, if the relevant remuneration for moral conduct is expected from some transcendental entity' (Ibid. 51).

The social nature of moral rules makes it particularly tempting for anyone to deviate because the rules are based on confidence. If promises are generally trusted in a community, the deviator can easily earn by breaking his promises. Therefore, rule-violating behaviour is retaliated with power and effort. Next, we will study the reciprocal nature of rule-following using a simple example of the game theory.

Moral behaviour as a rational choice

Moral rules are social in the sense that an individual does not benefit *directly* from rule-following behaviour, instead, her own rule-obedience benefits everyone else in the group. Consider a »do not cheat« rule for instance. Here the immediate narrowly-defined interest of an individual might be to disobey moral rules while other people behave rule-followingly. This is a typical case of the Prisoners' Dilemma (figure 1). Mutual cooperation of A and B would yield the largest total returns ($4+4=8$), but either one would gain personally if defected while the other cooperated ($7+0=7$). The players know this and are not willing to risk being left empty handed, so they both defect ($2+2=4$) and are in a worse personal situation compared to the cooperative mode. If the players are not able to trust each other or enforce a remedying rule, they are stuck with the situation.

		A	
		cooperate	defect
B	cooperate	4 / 4	0 / 7
	defect	7 / 0	2 / 2

Figure 1
Prisoners' Dilemma

PD-rules do not have the same self-enforcing character as coordination rules do. A typical coordination rule is the »drive on the right» rule (figure 2).

		A	
		right	left
B	right	4 / 4	0 / 0
	left	0 / 0	2 / 2

Figure 2
Coordination problem

Rule-following behaviour is directly advantageous to the individual adopting the coordination rule, hence rules of this type are in general self-enforcing, i.e., they can emerge spontaneously without purposeful design (although a spontaneous *alteration* of this type of rules may be difficult). General standards, for instance, are outcomes of coordinative processes as it is beneficial for the users to conform. On the other hand, when a standard has been established, it is rather difficult for variations to emerge without deliberate design.

PD-rules, on the other hand, although they can emerge spontaneously, do not tend to be retained without sanctions attached to them. They either require enforcement by some formal agency, or spontaneous incentives for individuals to follow PD-rules must emerge. Let us consider the latter alternative for a while.

Spontaneous incentives for rule-bound behaviour

Individuals may be motivated to act morally not only because of the immediate disadvantages brought about by formal or informal sanctions but also because of the more remote advantages of *good reputation* which can be perceived as 'human capital' (Vanberg 1994a, 53). It may be advantageous to invest in a good reputation (act morally) because one cannot predict the particular future situations where it can turn out to be beneficial to own assets in such capital. Thus it can be rational to adopt a moral routine, i.e., to »blindly» obey moral rules independent of the expected advantages or disadvantages in particular situations. This is due to the fact that a person may perceive the *uncertainty* of a situational calculation, in other words, the uncertainty of the expected advantages from choosing whether to obey a rule in a particular situation or not. Further, regular situational calculation brings about bad reputation in a social group and hence increases the costs of unpredictable behaviour (e.g., recurrent devaluation of currency tends to result in higher rates of interest in the opportunist country compared to otherwise (adequately) similar but rule-obedient members of the international community). It should be noted though that an individual's commitment to moral rules is never unconditional, that is, the commitment is a disposition which individuals will not acquire if their experience does not convince them that moral behaviour in general pays, and which they will not maintain if their experience systematically changes. Hence 'moral commitment requires sanctions for its maintenance as well as for its origins'. (Vanberg 1994a, 57) The perceived advantage of moral behaviour thus depends on the characteristics of a particular environment.

Another spontaneous remedy for the suggested deficiency exists in the individual's incentives to enforce moral rules which obviously do not advance the immediate interest of a rule-obeying individual. In a social group where individuals repeatedly interact they may mutually reinforce each other's behaviour to reward desirable and to punish undesirable behaviour. This

principle of *reciprocity* spontaneously enforces moral rules and encourages toward cooperative behaviour. The notion of *moralistic aggression* appears to be feasible not only in the environment where the probability of future interaction between individuals is substantial. There seem to be instances of moralistically aggressive action where 'the aggressor cannot reasonably expect that the effects on the addressee's future behaviour will generate benefits to him that will outweigh the costs of his punishing act' (Vanberg 1994a, 67). Individuals thus appear to retaliate against defectors even in situations where the expected future benefits do not cover the incurred costs of the retaliation. Individuals who punish defectors even in cases where situational calculation would suggest not doing so, may follow a hitherto successful rule which may provide adequate protection from the exploitative tendency of the other actors. 'To be perceived as somebody who is willing to hurt himself only to get the satisfaction from taking revenge may be a most effective deterrent' (Ibid., 67-8). Further, by signalling the defector's unreliability, the retaliator increases the severity of the punishment and hence the cost of immoral behaviour as other members will become reluctant to interact with the defector. People incur material losses in order to reinforce norms of fairness, revenge, courage, cooperation and honesty (Argyrous and Sethi 1996, 480). The narrowly-defined self-seeking behaviour is thus tempered by the existence of moral sentiments.

3.3 Evolution of rules

Rules emerge and change both unintendedly, without the deliberation of anyone, and through the contemplated efforts of people. In this section we will study the nature of spontaneous orders brought about by evolution of universal rules. A deterministic efficiency-guided interpretation of economic evolution is challenged by a non-teleological perspective.

Civilisation is not only a product of evolution — it is a process; by establishing a framework of general rules and individual freedom it allows itself to continue to evolve. This evolution cannot be guided by and often will not produce what men demand. (Hayek 1988, 74)

The deliberate design of rules and institutions is an important element in economic evolution. Intentional planning is consistent with the idea that the overall evolutionary process *as such* is undesignable and that it cannot be guided by our conscious action. This does not exclude the impact that purposeful design evidently has on the evolutionary process. Rather, it pursues a general attitude toward the nature of the socioeconomic evolution; that we are not able to foresee the consequences rules and institutions will have on the overall order because future circumstances that, in part, affect the resulting order are not known to us. Therefore, we cannot directly design the evolutionary process itself.

The *general* properties of a prevailing spontaneous order are predictable in the short term. General predictability is a decisive property of a spontaneous order because without it expectations of future events would be frustrated. We have to know something about the general characteristics of the outcomes the rules give rise to in order to be able to plan and make decisions. The predictability decreases, however, as the span of time expands as ever growing number of unfolding events affect the order. The *specific* features of spontaneous orders are unpredictable because we lack the knowledge of specific contextual circumstances where general rules are applied. 'The peculiar feature that all spontaneous orders have in common is that they emerge out of the interaction of a multiplicity of *elements* which, in their responses to their particular environment, are governed by certain general rules' (Vanberg 1994a, 78). The character of these rules is crucial for the nature of the resulting overall order while the particular manifestations of the resulting order will depend on the specific circumstances to which the elements respond (Hayek 1973, 40).

Hayek recognises that there is no spontaneous market order as such that can be assumed generally to be *efficient* or *beneficial*, independent of the rules and institutions governing the action of market participants. The special capacity of the market to utilise dispersed knowledge cannot guarantee that a spontaneous market order will be beneficial in *all* instances, that is, independently of the particular rules upon which the market is based. Therefore, the beneficial working of the market requires *appropriate* rules (Hayek 1978, 124-35). Hayek has described the essence of appropriate rules followingly:

Since rules of just conduct can affect only the chances of success of the efforts of men, the aim in altering and developing them should be to improve as much as possible the chances of anyone selected at random. Since in the long run it cannot be predicted when and where the particular conjunction of circumstances will occur to which any rule refers, it must also be unknown who will benefit by such an abstract rule and how much different persons will benefit. Such universal rules intended to apply for an indefinite period can thus aim solely at increasing the chances of unknown persons. (Hayek 1976, 129-30)

General rules cannot be used to advance interests of anyone particular. Therefore, rules work as an indirect method to increase the potential for improvement. The method does not ensure that the outcomes are optimal, or that everyone can equally benefit from spontaneous order. Who is going to benefit depends on the personal qualities and specific circumstances the rules give rise to. Mutual agreement on general rules is attainable because they are impartial in the sense that anyone selected at random has the freedom to discover whatever she considers valuable. The principle embraces the perception that individuals' preferences are dissimilar and that they pursue separate goals.

Order-creating rules in a free society are often supported by the beliefs that the existing rules ought to be kept. However, there is no *independent* principle of justice that can provide a basis for these beliefs. The belief that we ought to retain the prevailing rules is a product of the same evolutionary process as the rules themselves. (Sugden 1989, 87)

Different-rule model breaks the causal continuity of success

There is extensive support for the »Darwinian« natural selection in socioeconomic evolution: more efficient rules displace the inefficient as evolution proceeds its determinate course. The fact that rules change is taken as evidence that the tendency is at work. It is held that since a new rule is desired by the community it must be more efficient than its antecedent. The new rule is no doubt more efficient *in the new environment* than the antecedent would be. What we don't know is whether the new rule is more efficient in the new environment than the antecedent

was in the old one when it was applied. Imagine that a unanimously chosen rule R_0 is replaced by another rule R_1 , equally unanimously agreed upon. R_0 gave rise to outcomes O_0 at the time T_0 , whereas R_1 gives rise to outcomes O_1 at the present time T_1 . Although R_1 works better than R_0 at the time T_1 , we cannot say that R_1 works better at T_1 than R_0 did at T_0 , or that the outcomes O_1 are more desirable (efficient) than the outcomes O_0 were. This is because we can only make inter-temporal comparisons of the efficiency of rules by referring to the *degree of unanimity* (degree of unforced volition) in the rule-making. Only individuals in their temporal and local contexts can judge what is desired. Therefore, in so far as both of these rules are unanimously agreed upon, we cannot claim that the present rule is more efficient than its antecedent. We can only say that due to a change in the environment the antecedent had to be revised to maintain appropriate adaptation.

In the great majority of cases, in biological evolution, the traits that enhance the chances of survival of an organism during a mass extinction period do so because of incidental reasons that are unrelated to the causes of their evolution in the first place (Gould 1990, 307). Organisms evolve under natural selection in »normal« times for specific reasons (usually involving adaptive advantage), but a mass extinction brings along *different rules* for survival. 'A trait with no previous significance, one that had just hitchhiked along for the developmental ride as a side consequence of another adaptation, may now hold the key to your survival' (Ibid.). There can be no causal correlation between the reasons for evolving a feature and its role in survival under the new rules. A species cannot predict what kind of structures are potentially useful in future circumstances. For instance, small animals seem to have been successful in most mass extinctions, particularly in the Cretaceous event that wiped out all remaining dinosaurs some 65 million years ago. Mammals may have survived primarily because they were small, not because they embodied any better intrinsic anatomical virtues relative to dinosaurs. And mammals were certainly not small because they had sensed some future advantage in it. The different-rule model fractures the causal continuity between reasons for success among local populations and the causes of survival of any population in the long run. (Ibid., 307-8)

The different-rule notion can be applied in socioeconomic evolution, though

somewhat tempered. Replace the populations with rules, for instance. A rule or a set of rules is then selected by imitation or by some agency. The selection process favours those rules that are preferred by the community. The chosen rules may or may not survive in future circumstances, but since the future is genuinely uncertain, we are not able to foresee which rules will survive in the long run. A dramatic change in the social environment may abolish hitherto successful rules. We may also refer to societies or industries as populations which are then selected by the adaptive advantage to local circumstances as well as by the nature of change in the environment. An entire industry may cease to be successful after a particular regulative rule is abolished, bringing about dramatic changes in the economic lives of the firms affected. A whole society may run into difficulties although it applies previously successful rules. A total extinction of a society is perhaps not probable but a drastic decline in the welfare of its members may be brought along.

There is, however, a prominent difference between biological and economic evolution. As far as most non-human organisms cannot consciously design and communicate rules to adapt to their changing environment, human beings can. Human processes of innovation and imitation generate and select alternatives much more rapidly than the processes of natural selection in biology which has to rely on the relatively slow proliferation and selection of the more adaptive. What the fields have in common though, is the amoral or purposeless nature of evolution.

3.4 Group selection

Economic evolution works through diverse processes of variation and selection. So far the presented selective forces have mainly been on the individual level and have concerned intra-group relations. In this section we turn to study inter-group relations as a selective power of rules and institutions.

Group selection is a heterogeneity-inspiring notion in economics. In this section, we will investigate whether a selective process on a group level can be justified. As our methodological position is founded on methodological individualism and subjectivism, the selective process ought to be defended by the

principles of individuals as the only source of value and valuation. We will consider some suggested problems of group selection and try to find a reasonable way to examine them.

A profound understanding of the nature of interaction between a group and its constituents, both interacting with the environment, is presented by Hayek: 'the existence of the whole cannot be accounted for wholly by the interaction of the parts but only in their interaction with an outside world both of the individual parts and the whole' (Hayek 1967, 71). Thus, a whole is not a sum of its constituents and, further, there is interdependence between a whole and its constituents as well as among the constituents. And both the whole and its constituents are interdependent with the environment. This notion can be interpreted, contrary to the views of some writers (Mayhew 1987, Hodgson 1991), as to comprise the context-dependence as well as the interdependence of an individual, a group and a culture.

Hayek's ideas of group selection are often argued to be inconsistent with his emphasis on methodological individualism⁶. It appears, however, that the principles of methodological individualism are applied in a limited manner by the critics. The fact that there are entities of different levels, like groups, societies, institutions and culture, should not mislead us to dismiss methodological individualism as inconsistent with group selection. It is altogether consistent with methodological individualism and indeed essential to recognise the influences of entities other than the individual. It is maintained only that social phenomena are necessarily brought about by individuals and that individuals alone are the basis for change through deliberate decisions as well as the unintentional consequences of their actions.

Some writers implicate that Hayek's conception of evolution is unclear because 'an adequate application of the evolutionary analogy must not only explain the associated mechanisms of selection, but also the degree of both durability and variation of each unit, the evolution of the context, and the interaction of the environment with the group and the individual' (Hodgson 1991, 78). It may turn out that to pursue Hodgson's goal one has to abandon the real

⁶ Hodgson (1993), Birner and Zijp (1994, 16)

world as it is — genuinely open-ended.

Hayek acknowledges that in order for the market process to bring about an order, it must be guided by appropriate rules. Hayek proposes an explanation here for the selection on the group level:

[R]ules of conduct have thus not developed as the recognized conditions for the achievement of a known purpose, but have evolved because the groups who practised them were more successful and displaced others. They were rules which, given the kind of environment in which man lived, secured that a greater number of the groups or individuals practising them would survive. (Hayek 1973, 18)

The selection of rules and institutions seems to work through the greater capacity to sustain large populations and furthermore, through the extermination of the unfit:

most groups had to acquire certain traits to form into larger societies; or, more probably, those who did not were exterminated by those who did. ... Most of the steps in the evolution of culture were made possible by some individuals breaking some traditional rules and practising new forms of conduct—not because they understood them to be better, but because the groups which acted on them prospered more than others and grew (Hayek 1979, 160-1).

The expansion of a population may result from migration as well because, accordingly, the rules

enhanced the prosperity of certain groups and led to their expansion, perhaps less by more rapid procreation than by the attraction of outsiders (Hayek 1979, 159).

The less successful groups imitate the more successful ones; or, the more successful groups expand through more rapid procreation or immigration; or, the more successful groups exterminate less successful ones. (Sugden 1993, 399) The apparent ambiguity of the nature of the group selection may indicate that the

processes of group selection work in multiple ways (hierarchies) and that their nature may change over time.

The concept of group selection may be interpreted as follows: Groups evolve through the innovation of rules and institutions by their members and through the imitation of rules and institutions of other groups. This implies that there is, instead of competition among social groups, competition among rules and institutions. '[P]rosperity is a result of the imitation of the more successful ones' (Barry 1994, 148), or, according to Hayek, cultural evolution should be perceived to concentrate on the selection of 'institutions and practices' (Hayek 1973, 23). We can take the evolutionary nature of language as an example; it would be awkward to assert that the decline in the use of the Welsh language is *caused by* a fall in the Welsh population. Hence it would be more proper to consider competition among languages and not competition among social groups. (Sugden 1993, 401)

Without a proposition of *particular* consequences of the group selection process, Hayek notes:

That rules become increasingly better adjusted to generate order happened not because men better understood their function, but because those groups prospered who happened to change them in a way that rendered them increasingly adaptive. This evolution was not linear, but resulted from continued trial and error, constant 'experimentation' in arenas wherein different orders contended. (Hayek 1988, 20)

To state that a group becomes increasingly *adaptive* to the prevalent and future circumstances does not imply that the scopes of future adaptations are predictable. Vanberg proposes that it is the *desirability* for individual constituents that makes rules and institutions beneficial in Hayek's account (Vanberg 1994b, 187). A unanimous agreement to implement a new rule is analogous to market exchange, both processes benefit all the participants. There is, however, no implication yet that an implemented rule will enhance the future adaptations of a group and hence is beneficial. A desired rule may as well result in *disorder* when applied (Hodgson 1993, 178-9). Thus, Vanberg's suggestion for a criterion of selection, that is, desirability, is perhaps only half the answer. Members of a group, of course, have to desire change for an alteration of a rule to take place.

However, the change of a rule is only a *trial* of a hitherto unexperimented rule. The success of that rule is measured *after* the implementation. Furthermore, we can consider the evolutionary process to comprise a mixture of selective processes which succeed in varying degrees, the world includes both appropriate and inappropriate rules and institutions (Heiner 1983, 569). A weak selection process of rules may render possible even self-destructive performance of a group — arising, in particular, from a goal-oriented design of rules and institutions.

Ulrich Witt brings forward an essential point to consider in economic evolution. According to him, it is unclear to what extent 'the spontaneous development of rules can avoid the emergence of social dilemmas' (Witt 1994, 187). There is no escape, it appears, from the existence of social dilemmas because of our imperfect knowledge and limited reason. The members of a group may, of course, have 'some general conception of the social order desired, some coherent image of the kind of world in which the people want to live' (Hayek 1960, 114), although they lack the ability to predict the specific features of that social order. Furthermore, we are not able to foresee the consequences a new rule or modification of an existing one will have on the overall social order. This implies that as much as we might desire a particular social order, it would still be impossible to attain it through direct intervention. Moreover, the more clearly people are able to predict the particular consequences that a new rule would bring about in their future, the less chances there are to attain unanimity among a group. Unanimity can be attained only on general rules the particular consequences of which cannot be predicted by individual members of a group.

An example of group selection as competition among rules and institutions is the spreading principles of the market based on individual liberty and private property. These rules have hitherto been successful in coping with scarcity and the infinite and diverse nature of human wants. Hayek's criterion of the success of a group, i.e., the capacity for a social system to sustain large populations, is subject to some difficulties here. It may be impossible, in empirical terms, to assert that a society based on market principles has an unquestionably greater capacity to sustain large populations than societies based on non-market principles. One can, however, assert that a market economy renders possible the use of localised knowledge, available only to participants in particular circumstances, better than a

non-market economy.

The functioning of the market process requires a number of individuals with different capabilities. The more participants there are in the game of the market, the more creative the nature of the market process may become. The process creates unrealised possibilities which may or may not be discovered. It all depends on the extent to which individuals are able to learn to take advantage of new opportunities. The justification of an emerging spontaneous order, according to Hayek, lies in the idea that it can improve the chances of anyone selected at random. This does not, however, necessarily imply that liberal societies are desirable *because* they develop a capacity for supporting large populations (Barry 1994, 149).

An explanation of social rules in terms of group advantage is challenged by Vanberg: to provide an explanation at all, one would have to specify a process by which the fact that social rules and institutions are advantageous to a group can be reasonably assumed to contribute to the existence of the rules and institutions in question (Vanberg 1994a, 84). There are, according to Vanberg, two processes in which the beneficial effects of a rule for a group can be assumed to account for the existence of that rule. First, one can assume a feedback process based on the fact that individuals recognise a rule's beneficial consequences and take action to implement the rule. Second, one may assume a feedback mechanism at the group level that operates independently from the individuals' purposes. (Ibid.) Both these feedback mechanisms seem at first sight incompatible with the invisible-hand explanation of spontaneous social order. The first one emphasises the role of *deliberate design* rather than unintended consequences of human action, though in a fundamentally individualistic way. The second one explicitly rejects the individualistic premises of human action although it stresses the role of *unintended outcomes* of social processes.

The first feedback mechanism that Vanberg suggests, according to which individuals recognise beneficial consequences of a rule *before* its implementation, should perhaps be modified to give justice to reasonable principles of group selection: individuals may recognise a rule's beneficial consequences only *after* the establishment of a rule and therefore prefer to *retain* it. A rule is retained if it brings about an increase in adaptation to present and future circumstances.

In so far as we conceive group selection (and cultural evolution) to comprise not only the unintended outcomes of human action but also the purposefully designed elements, the above presented processes of the selection of rules are consistent with the intra-group premises for group selection. Accordingly, group selection cannot require any feedback mechanism that presupposes that the individuals recognise a rule's beneficial consequences *before* it is implemented. Just as a spontaneous social order which is not directly reducible to the actions of individuals (and hence is, according to some writers [e.g. Nozick 1974, 21-2], inconsistent with methodological individualism), group selection is consistent with methodological individualism in the sense that the competence of a social group, i.e., the degree of adaptation, and the selection of competing rules and institutions are evidently brought about by innovation and imitation by individual members of a group. Furthermore, as far as we consider group selection as a selection process among rules and institutions instead of social groups (Sugden 1993), the group selection explanation appears justifiable. The members of group A may imitate a rule followed by the members of group B not because they foresee the particular consequences the rule will bring about if implemented in group A, but because the members of group A can recognise some general patterns in group B's success. The members of group A prefer to imitate a rule adopted by group B because of B's success *as a group*.

Group selection and the free rider problem

Vanberg acknowledges that group selection in economics is parallel to that in biology, and distinguishes between two kinds of rule-following. First, those cases in which a socially beneficial rule also directly benefits the individual. These cases do not cause any essential problem for an individualistic approach. The problem lies within the second type of case in which a likewise socially beneficial rule is *disadvantageous* to the rule-following individual⁷. (Vanberg 1994a, 86) Vanberg asserts that the problem concerns spontaneously established rules particularly because constraints can be attached to purposefully designed rules, thus eliminating the problem (Ibid., 87).

⁷ See also the section 3.2 Rationality of moral behaviour.

The above presentation may seem confusing. How can a rule of spontaneous origin be disadvantageous to an individual who is herself responsible for establishing it? The argument for the existence of a conflict of interests between an individual and a group lies with the idea that *free riders* benefit at the expense of *altruists* in a group which includes both types. 'Any socially useful self-sacrificial behaviour benefits both the "altruists" and the nonaltruists in the group, the *net* benefit being greater to the nonaltruists because the gains to the altruists are reduced by the self-sacrificial risk costs they bear' (Campbell 1980, 73). If this were the case, why would the altruists continue to behave in a self-sacrificial way? If the altruists, acknowledging the presence of the free riders, still behave in a self-sacrificial way, they must prefer their chosen behaviour or otherwise they would change their pattern of behaviour. Furthermore, how can a spontaneous rule emerge if it is against the interests of individuals to adopt it? To get selected, a spontaneous rule requires the *imitation by individual members* of a group. There appears to be something essential lacking from Vanberg's and Campbell's presentations concerning human preferences. Individuals do not only consider short-term outcomes when deciding whether or not to follow a particular rule, but also longer-term consequences, for instance, good reputation brought about by self-sacrificial behaviour. A rule may be disadvantageous to an individual in the *limited* sense. However, one may just as well attempt to establish a rule which at first sight seems disadvantageous to her, if she values the good reputation rule-following behaviour will yield and expects reciprocal behaviour from the part of others in her group. It appears that people generally seek to *conform* to a group whether to gain access to its »tacit knowledge« (Hodgson 1993, 175) or to satisfy some basic needs such as security brought by an order or because of other reasons. A general rule of conduct to conform to a group has perhaps resulted in successful consequences in the past and is hence retained.

We can consider group selection as an imperfect process of selection in economic evolution. The selective processes are realistic insofar as they are not expected to produce optimality-oriented outcomes. Group selection is only one approach to selective processes and therefore it is not considered a consummate explanation.

3.5 Common law as an evolutionary process

In this section, we will explore the efficiency criteria of common law based strictly on the principles of methodological individualism and subjectivism. In so far as inter-personal comparisons of value are not pursued and separate goals of individuals are recognised, the system meets the criteria of goodness. The determination of the particular characteristics of rules is left solely to the members of a community.

The common law tradition originated in England in the 11th century and is the prevailing system in Great Britain, Ireland, the United States, Canada, Australia, New Zealand, and those parts of Africa and Asia that have been part of the British Empire. The distinctive source of law in the common law systems is the judiciary, the law-making by ruling of judges. This is in contrast with the legislature as a fundamental source of law-making in the civil law system countries where the judiciary is precluded from making law. (Cooter and Ulen 1988, 72)

The law-making process of common law is especially interesting from an evolutionary perspective because the creation and selection of rules works spontaneously without goal-oriented legislature. Instead, new rules emerge through individual disputes and are therefore both spatially and temporally close to the decision makers' (the disputants') values. The common law process has a close relation with the principles of the market process because it enables the observation of disparate objectives together with voluntary agreement.

In addition, a system of law has some prerequisites which must exist in order to be considered generally appropriate. Rules have to be relatively *stable* so that the members of society can make rational plans for the future without having to incur constant costs the unpredictability of sharp changes in rules would create. Rules are also expected to be *uniform*, i.e., the law should be the same for everybody. The uniformity of application of rules, independent of particular persons involved, leads to the principle of »the veil of uncertainty«. If the members who should among themselves decide upon general rules of conduct perceive that the rules are invariably applied in adequately similar situations, incentives for pursuing private interests in law-making are alleviated. The agreement upon a particular rule is thence made as if under the veil of

uncertainty, not knowing the particular members who are to be influenced by the rule but knowing some general characteristics of the outcomes that the rule will bring about. The third requirement for an appropriate system of law is, interestingly enough, contrary to the first two. The application of rules should be *flexible* both spatially and temporally. In order to promote the recognition of subjective values, the legal system ought to adapt not only to distinctive characteristics of local jurisdictions but also to individual preferences of the members of community.

Changes in the environment provide new opportunities for gain and encourage the adoption of new institutional arrangements. Common law evolves spontaneously adjusting to the preferences of the local members of society.

Common law as a discovery process

As common law rules are changed, does this give rise to an increase in efficiency? Do »efficient« rules eventually replace »inefficient« ones? In neoclassical terms, a new rule is considered more efficient than the one it replaces if it allows an allocation of resources closer to an ideal Paretian allocation, i.e., 'to the allocation that would have been observed in a world of fully defined, allocated and enforced private property rights exchanged at zero transaction (including litigation) costs' (De Alessi 1991, 110). As it has been indicated earlier in this study, we are, however, not able to attain an ideal world of zero transaction costs. Therefore, recognising the existence of transaction costs we seek to study the open-ended nature of the common law process.

Common law does not evolve by goal-oriented and potentially arbitrary choices of judges, but because rules that are no longer preferred by the members of community are more likely to be litigated and overturned. Rules are changed through a bidding process based on the ability and willingness of members to litigate the existing rules. As an alternative rule becomes more desired relative to the existing one, more litigations are raised to overturn the existing rule, eventually giving rise to a change of the rule.

The common law process deviates from the market process in that the right to use a new rule is common to all, whereas in the market process the winning bidder owns the right exclusively. Under common law, however, the right to

contract around the rules brings the market back to the realm of the law. Parties who do not find an acceptable solution from existing rules of common law have the freedom to adopt any other solution that is mutually agreed upon. The case-by-case adaptation corresponds to a voluntary exchange in the market.

A federal system, in which each member state has its own common law, is also a partial substitute for contracting around the existing rules, thus permitting greater diversity of local characteristics (De Alessi 1991, 112f).

Order through precedents

Precedents can provide overall order in common law without any collective process. Established precedents are more difficult to overturn because they are interwoven with other precedents, i.e., they are logical extensions of other precedents. In addition, judges may have no incentives to overrule a precedent because of higher costs in preparing an opinion. (De Alessi 1991, 120-1)

Since the common law process allows individuals to adjust their preferences around the precedents, the problem of aggregating the preferences of different individuals can be avoided. And when the precedents are not at auction, they remain unaltered while their individual applications can respond to a variety of preferences. The precedents provide order while the ability to contract around the common law provides flexibility. (De Alessi 1991, 123)

Special interest groups may have some incentive to attempt to change common law to their own advantage. Rent seeking under common law does not, however, yield as much advantage as under statutory law because individuals can always contract around the common law rules eliminating the arbitrary efforts of a special interest group. Contracting around a common law rule is, however, limited by statutory and constitutional law (e.g., prohibiting from selling oneself into slavery). Statutes supplant any common law rule with which they are in conflict, and hence they can destroy the logical consistency of common law by altering the rules. Legislators may have an incentive to reduce the scope of common law because the process lies outside their direct control. They may seek to replace it with statutes which they are better able to manipulate to benefit special interest groups who reciprocally support their legislators. (De Alessi 1991, 122) The political process does not, however, generally allow diversity of interests to the

extent that common law does.

The principles of common law, as presented here, realise the prerequisites of an appropriate system of law. The stability and uniformity of rules are brought about by the tradition of precedents whereas their flexibility results from the ability of the disputants to contract around the existing rules. Common law is a process for resolving individual, not collective, disputes. In any particular trial, the relative values of the existing and the alternative rules depend upon the particular plaintiff and defendant paired in the dispute. The right to contract around a common law rule solves Arrow's transitivity problem by allowing individual contracting, and it solves Buchanan's tyranny of the majority problem by allowing diversity of interests (De Alessi 1991, 117). Exchanges being voluntary and hence mutually beneficial, the preferences of both parties to the contract are taken into account. The nature of the common law process relates to the principles of methodological individualism and subjectivism rather well, although conflict resolution may bring about undesired results for the losing parties. Value comparisons between individuals are not pursued and separate objectives of the members of community are observed. The system thus corresponds in many ways with the principles of the spontaneous market process.

3.6 Customary law as an evolutionary social contract

During the tenth and eleventh centuries, European merchants established a customary law system, »the Law Merchant«, to encourage international trade. This international legal system broke the constraints of localised, intra-national, rules, although being governed without a centralised coercive authority. Institutions were established for dispute resolution and incentives were implemented to induce rule-obedience. The rules emerged as a spontaneous social contract among the medieval business community. In short, the legal system is 'voluntarily produced, voluntarily adjudicated and voluntarily enforced' (Benson 1992, 15), and it is still in force to day.

Our purpose here is to present another legal system that is compatible with our methodological perspective. We will demonstrate that a community can rely on a spontaneous law-making process even though the members may be

geographically dispersed and culturally unrelated. General rules of conduct are observed despite the apparent heterogeneity of the members. The process becomes an evolutionary social contract as the rules emerge from the customs of community and their change is observed throughout. Evolving (sometimes unwritten) social contracts produce legal systems based on customary rules of conduct emphasising individual rights and private property. Adjudication procedures exist to solve disputes without violence, yet no centralised authority is needed to apply sanctions. When sanctions are applied, they are primarily in the form of economic restitutions. Sanctions are enforceable because of reciprocal agreement between the members of society for recognition of rules, support of judgements, and social ostracism. (Benson 1991, 41)

Institutions for adjudication and enforcement of customary rules

Customary law is recognised because individuals identify the advantage of behaving in accordance with others' expectations when reciprocated. Reciprocity together with an expected advantage of good reputation and moral behaviour construe the foundations of rule-obedience and the enforcement of the law in the customary law system. Individual rights and private property are both social rules in the sense that they are advantageous for any individual only indirectly, through reciprocal behaviour of others. These rules benefit a person only when other members of society reciprocate rule-following behaviour. Rules of this type may expand rapidly into society through imitation because a contract between any two or more members is advantageous for each of them. For instance, two neighbours may contract to respect each other's property while other members of the society live in anarchy. It is beneficial for both of them to have one enemy less than before the contract, especially when that person is the nearest of all.

These rules are also Prisoners' Dilemma rules, i.e., an individual would gain a short-run advantage (especially in a one-shot game) by violating a rule when other members in society behave rule-followingly. We have, however, learned earlier in this study that individuals generally do follow also PD-rules, if only because of the genuinely uncertain future which may bring about unexpected situations in which a good reputation of moral and reciprocal behaviour may turn out to be a valuable asset.

In a small and frequently interacting group of people reputations are sufficiently well-known and trust relationships are strong. There is thus little need for formal institutional arrangements beyond perhaps that of the immediate family (Benson 1993, 51). Incentives for new institutional formations may arise when the expected advantages of interaction expand to a larger and/or less stable group. Interaction in a larger group, where one does not know the reputations of others, increases the potential for opportunistic behaviour to arise. Therefore, rule-obeying individuals try to make *credible commitments* to signal their credibility in the group as well as to prevent themselves from becoming victims of injustice. For instance, by accumulating human or physical assets to increase the ability to inflict violence and by signalling the willingness to retaliate one can reduce the probability of offence against oneself. This can, however, be a costly alternative to protect oneself against illegal action. Therefore, individuals with mutual interests may have strong incentives to form contractual groups as a solution to both the assurance problem and for the enforcement of legal matters (Benson 1992, 8).

Individuals can, by participating in a group, signal their credible commitments to behave trustworthily in the future. And as an individual does not know whether the other party is, in a case of dispute, strong enough to resist the individual's effort to prosecute or to refuse a fair judgement, she can insure herself against the possibility by joining a contractual group. Thus, individuals not only have incentives to contract for the exchange of recognition of rules (even though each probably recognises that these rules may occasionally work to her disadvantage), but also for the exchange of obligations to support one another in dispute resolutions. 'The assurance association's (implicit or explicit) social contract can make group members obligated to aid any other member in a valid dispute, given that member has fulfilled his obligations to the group in the past' (Benson 1992, 8). Thus, the ability to obtain support in a dispute depends upon the exchange of reciprocal loyalty.

Dispute resolution through mutual agreement

In order to avoid open conflict in a case of dispute resolution it becomes necessary to appeal to a mediator or arbitrator. There is, however, no coercive authority in a customary system to force the conflicting parties into a court. A rule of voluntary

and peaceful dispute resolution may yet emerge if the members of society discover its advantages compared to a settlement through violence. A rule of this kind is highly contagious since everyone can predict the consequences when being confronted by a stronger party. A chosen arbitrator or mediator must be mutually acceptable for both parties, thus fairness becomes embodied in the adjudication process:

Players would not consciously accept the appointment of a referee who was known to be unfair in his enforcement of the rules of the game or at least they would not agree to the same referee in such cases. "Fairness" or "justice" may emerge, therefore, in a limited sense from the self-interest of persons who enter into an enforcement contract. (Buchanan 1975, 68)

A chosen mediator need have no vested authority to impose a solution which is not agreed to by the conflicting parties. The ruling must therefore be accepted by both parties as the power of the arbitrator is limited to persuasion. When the arbitrator has convinced the members of the affected group that a judgement should be accepted, her ruling can be backed by a threat of ostracism by the members of the entire community. Similarly, individuals will lose support of the group if they do not agree to arbitration that is acceptable to the other members of the group. Since the judgements under customary law are always agreed upon by the parties and since the members of the parties are obligated to comply to the party decisions, the judgements spread throughout the parties as rules of conduct.

An adjudicated decision becomes part of customary law only if it is considered a beneficial rule by the affected parties. Thus, rules that are desired by the local members of community are attained. New rules are generally built upon the existing body of rules and are hence extensions of the previous rules. The fundamental principles of customary law (e.g., private property and individual rights) are not (at least up till now) changed, they are extended by new rules to cover changing situations.

Customary law and natural law

Collective arrangements for establishing constitutional rules can be achieved, as

we have now learned, through the process of individual agreements. The rules spread throughout community if they are considered useful by the members, that is, if the rules are consistent with existing values. Property rights will be defined when the benefits of doing so cover the costs of defining and enforcing such rights at the individual level (Demsetz 1967).

We should, however, note that this is not a sufficient precondition for any rule to be defined. Rules do not automatically get established as soon as the above precondition is met. Before establishing a rule through a dispute resolution or through spontaneous imitation of an individual's conduct, the rule must first be *discovered* by someone. 'It is always an individual who starts a new method of doing things, and then other people imitate his example' (Mises 1957, 192). The rules of private property and individual rights may have been defined in some form so long ago that some are ready to give such rules a semi-divine status by defining them as »natural»: 'customary law is not viewed as the recent creation of rational men but as something that was laid down by semi-divine ancestral law-givers in remote antiquity. The justification for conforming to custom is not that it makes sense, but that "*that is what our ancestors said we should do*". . . . There is an implicit social contract with divine ancestors to obey the rules that they laid down. Failure to conform to conservative custom amounts to an act of sacrilege which will automatically bring about supernatural disaster.' (Leach 1977, 31) Equating customary law with the notion of natural law is misleading because even if some rules of customary law were passed down from our ancestors, those ancestors were rational humans, not gods, and they developed their rules by considering their advantages of doing so (Benson 1993, 58). There is

no such thing as a perennial standard of what is just and what is unjust. Nature is alien to the idea of right and wrong. . . . The notion of right and wrong is a human device, a utilitarian precept designed to make social cooperation under the division of labor possible. All moral rules and human laws are means for the realization of definite ends. There is no method available for the appreciation of their goodness or badness other than to scrutinize their usefulness for the attainment of the ends chosen and aimed at. (Mises 1949, 720)

Let us suppose that one member of an anarchic group begins to respect the property rights of another for whatever reason (fear, respect, etc.). When that second member recognises the resulting personal benefit from the mode of behaviour of the first member, she may respond reciprocally. If she does reciprocate the chances are that the first member recognises the resulting personal benefit and reinforces the mode of behaviour, and eventually, through imitation by other members, the mode of behaviour may become defined as a rule of private property.

This imaginary example seeks to show that although in retrospect we may say that a rule of private property is beneficial for everyone and that it was defined because the benefits of doing so cover the costs of defining and enforcing such rights, there is no *guarantee* that such a rule is discovered. Let us imagine further that the members of the anarchic group in consideration cannot even imagine the long-run consequences that respect for property rights might bring about. In such a case it may turn out that the second member does not see any reciprocal benefit resulting from the mode of behaviour of the first member, and she goes and kills the coward and seizes her property. What are considered benefits or costs are determined by the local individuals themselves in contextual circumstances.

Development of contracts in customary law

Customs spread, as we have learned, through imitation by people. Individuals create obligations to one another to continue the adopted behavioural patterns. A new contract application may emerge to improve the existing forms by reducing transaction costs through alleviating uncertainty. As customs spread, they tend to become more formal and thus more contractual (Benson 1993, 60). Furthermore, as inter-group interaction expands breaking the trust relationships based on recurrent intra-group interaction, conflicts can be avoided by an *a priori* statement of the terms of interaction, i.e., by contracting. An appropriate contract can hence substitute localised sources of trust that characterise intra-group interaction. (Ibid.)

In so far as the term contract law refers primarily not to the law about contracts but to the law a contract itself brings to existence (Fuller 1981, 224), an analogy between contract law and customary law approaches identity: 'If problems arise which are left without verbal solution in the parties' contract these will commonly

be resolved by asking what "standard practice" is with respect to the issues in question' (Ibid., 176). On the one hand, by observing the standard procedure the parties are in fact reproducing customary law; on the other hand, we can consider the parties having incorporated standard practice into the terms of the contract by tacit agreement (Ibid.).

Inter-group interaction

Groups generally exist in close proximity to other groups and therefore they tend to develop legal systems that are sufficiently similar or flexible to facilitate interaction between different groups. Inter-group competition and cooperation become thus possible. Coexistence of diverse sets of rules creates incentives for groups to compete to attract or hold membership (Benson 1993, 61). Groups may try to avoid losing members to other groups by imitating desirable rules developed elsewhere. There is hence a tendency for the rules of interacting groups to develop to similar degrees of sophistication (Ibid.). We must, however, bear in mind that a rule that brings about desirable consequences in one group, may not do so in another. Therefore, the members of groups cannot always rely on the results the rules have developed elsewhere.

Inter-group cooperation may arise whenever members of different groups discover possibilities for mutual gain. Cooperation may, however, be hindered by the assurance problem whenever there is a recognisable possibility that a member of one group can take advantage of a member of another group and get protection from her own group. Thus, an inter-group insurance arrangement becomes desirable, as well as a system for inter-group dispute resolution does. For instance, a group can guarantee payment if a member of that group is judged to be in the wrong in a dispute with a member of another group. The group can thus build up a reputation which it can capitalise on in inter-group cooperation. (Benson 1993, 62)

An inter-group dispute resolution system is needed to resolve conflicts that arise between members of different groups. Judgements will have to be considered fair by the members of groups involved, therefore an arbitration board comprehending an equal number of members of both sides or a mutually acceptable arbitrator might be chosen. (Benson 1993, 62)

Groups cannot impose their own morality rules on outsiders, who comply with a different set of rules, and simultaneously initiate inter-group interaction (Benson 1993, 63). Therefore, if the expected interaction is considered valuable, a group needs to recognise the differences in rules of other groups. Rules for group members may thus be more restrictive than rules that apply to outsiders if the group wishes to succeed in a free and competitive environment.

The customary law process can produce desirable outcomes for the members of community. The sources of change in rules are private disputes through which new applications of customs are spread into the whole community. New rules must be, in order to give rise to consent, deeply interwoven into the prevailing customs. The principles of the customary law process meet the requirement of open-endedness of the rule-making process as it is based on the principles of voluntary reciprocity and unforced agreement in dispute resolution.

4 SOCIAL CONTRACT AS A DESIGNED ELEMENT IN ECONOMIC EVOLUTION

In earlier sections we have studied the nature of spontaneous processes of rule change which may emerge among exchanging people. In this chapter we try to investigate the conditions under which an intended constitutional agreement may be facilitated in real choice situations. When considering rules of deliberately designed origin we should distinguish between an agreement upon *general rules* and *interventionism*. That is, between a unanimous agreement upon general rules within which the market process discloses, and a policy that pursues particular outcomes by intervening in the market process by specific measures. When Hayek refers to »appropriate rules«, he is indicating not only that the intentional design of rules *based on mutual agreement* is compatible with the market process, but that it is an essential instrument by which we can seek to make markets work better, judged by the members of society themselves.

We can preserve an order of such complexity not by the method of directing the members, but only indirectly by enforcing and improving the rules conducive to the formation of a spontaneous order. . . . This is the gist of the argument against 'interference' or 'intervention' in the market order. . . . What the general argument against 'interference' thus amounts to is that, although we can endeavor to improve a spontaneous order by revising the general rules on which it rests, . . . we cannot improve the results by specific commands that deprive its members of the possibility of using their knowledge for their purposes. (Hayek 1973, 51)

Deliberate institutional design is not only compatible with the principles of an open-ended evolutionary process but is necessarily linked with it (Vanberg 1994b, 190). The spontaneous market order is interdependent with the nature of general rules. It is not necessary, however, for these rules to be of spontaneous origin themselves, they may well be intentionally designed. What is essential is that the framing rules allow and maintain a market process with desirable characteristics, judged by the persons involved (Ibid., 192). The evolutionary nature of the overall

process is related to the prerequisite that the experimental inputs are subject to selection in an environment that is open for the entry of alternatives. The established practices can be challenged by new institutional experiments, whether they are deliberately designed or emerge spontaneously. The self-interested individual has an incentive to change the rules of the game to her advantage.

4.1 Constitutional order

The market process brings about a continuous flow of exchange situations through which the participants gain. In a two-participant-two-commodity example it is fairly easy to understand that if a voluntary exchange takes place, it must be beneficial for both parties.

Constitutional choices are about the choice of (a set of) rules for a community. Rules are of public nature in the sense that they affect everyone in the community (though not necessarily everyone in the same way). The publicness of constitutional rules brings common externality problems. The degree to which these problems can be solved in society depends on the extent of agreement among members. A complete unanimity is analogical to a voluntary exchange situation between any number of participants.

The nature of rules is instrumental, that is, they are typically not valued in themselves, instead they are valued because of the expected outcomes they produce. Constitutional preferences thus describe the evaluation of the constitutional environment. (Buchanan 1991, 54)

The reason for collective action

In economic literature, the market is perceived to »fail» to produce efficient outcomes because of the imperfectly defined institutions. Individual market participants lack incentive to produce goods which are subject to extensive free-riding. For instance, it would be extremely difficult to exclude anyone from the benefit of national defence or to strike a deal with and collect charges from all the parties. The use of private property may also give rise to negative external effects for third parties.

Private responses to externalities operate through exchanging rights within

prevailing rules. Parties may trade a right to continue causing, or an obligation to cease causing, harm, or they may, through a merger, internalise the problem. When exchanging becomes more difficult and costly (numerous parties involved, asymmetric information among the parties, etc.) it may be impossible to reach an efficient solution through private corrections. Then it becomes appealing to investigate if an increase in efficiency might be achieved by changing the rules of the game.

The crucial issue is whether we can predict that an intentional redefinition of rights will bring about better outcomes in the long run or not. The fact that the market process is imperfect does not necessarily indicate that a better result is achieved through deliberate change of the rules. It is extremely difficult to *ex ante* design a rule considering particular outcomes which themselves are the results of that rule, in so far as the future is genuinely uncertain and the nature of outcomes is discovered only as they emerge (Brennan and Buchanan 1985, 14-5). The true dimension of a »market failure« cannot therefore be known to us.

The market failure notion can be approached from an alternative direction: the market process, being far from consummate, produces imperfect outcomes just as collective processes do. Together they construe an imperfect open-ended system, a socioeconomic process which is evolving and open to new discoveries. The market »fails« only in producing idealised-type situations for the idealised-type »economic man«.

Individuals as sources of value

Contractarian construction stands on the normative presupposition of value located solely in the individual (Brennan and Buchanan 1985, 21). This methodological statement precludes any interpersonal comparisons of value. Consistency requires hence that every member of society is treated as individuals equally capable of expressing evaluations. No one is charged with authority to evaluate the objectives of other members.

Contractarian explanation of social order is founded on unanimous agreement by individuals to establish constitutional rules and a body to execute them. There is thus

no resort to any source of value external to the expressed preferences of individuals who join together in political community. The state does not emerge to protect "natural rights". . . . More important, the state does not exist as an organic entity independent of the individuals in the polity. ... "Social welfare" cannot be defined independently, since, as such, it cannot exist. (Brennan and Buchanan 1985, 22)

A perfect unanimity is the only effective way to ensure that a social contract is truly advantageous for the members of community.

Unanimity as the contractual ideal

An observed set of rules must have either emerged from general agreement or be such that it might conceptually have done so (Brennan and Buchanan 1985, 27). Customary law, for instance, is observed by the community although a change of rule is brought about by a contract among few. On a practical level the requirement for complete unanimity is not easily satisfied. Individuals have their own separate goals which they pursue. People also possess knowledge about their personal qualities, their strengths and weaknesses, and they can hence predict at least some of the potential consequences alternative rules would bring about on their own future (Vihanto 1994, 56). Therefore, it seems realistic to assume that individuals may unanimously contract on general rules only, the particular consequences of which are not predictable in the long run. If individuals know that the rules must be equally applicable to all of them, they have less incentive to pursue their own distributional gains (Brennan and Buchanan 1985, 28).

Not all the rules of society need a unanimity standard, though. The members may unanimously agree that changing rules that belong to a certain category does not require approval of all members, or they may all contract that individuals may be allowed to take certain actions that other individuals oppose (for instance, a right to enter into an established industry). (Brennan and Buchanan 1985, 27)

The veil of uncertainty

Personal interests of individuals are not as readily identified in choices among

general rules as they are in choices among specific outcomes within particular rules (Brennan and Buchanan 1985, 28-9). This is because the particular outcomes of alternative rules are not as easily predictable as are the consequences of particular outcomes. The scope for agreement on rules is thus wider than that for agreement on outcomes within rules. The loss of interest identity among rules results from two general attributes of rules: first, rules are applicable to a number of instances; second, rules embody an extended time dimension (Ibid., 29). Because rules, by definition, are applicable to a number of situations which are dissimilar to each other but which belong to a certain type of situations, the particular outcomes are less predictable. Furthermore, rules must exist through a sequence of time periods. If a new set of rules of the game are made up at the beginning of every round of play, the game can hardly be described by its rules. The longer the time a rule is appropriate the wider the scope of situations it is applicable to and the less predictable are the particular outcomes the rule generates in the future. Both the *generality* and the *durability* of rules increase the thickness of the veil of uncertainty behind which the agreement is to be reached. Increased uncertainty in any choice among rules makes agreement more likely.

The notion of the veil of uncertainty differs here from Rawls's more idealistic construction of the veil of ignorance according to which it is assumed that utter ignorance makes it impossible for the choosers to know anything specific about how they are personally affected by alternative rules. At the same time the choosers are assumed to be perfectly knowledgeable about the outcomes of alternative rules. (Rawls, 1971) Thus the choosers' constitutional theories are supposed to be perfect. In the real world, individuals' theories about the working properties of alternative rules vary and are far from perfect, and, as mentioned above, we usually know something specific about how we are personally affected by alternative rules because we know our personal qualities. Therefore, it appears justifiable to temper the Rawlsian extreme.

4.2 Reality of social contract

Contractarian agreement may seem idealistic in its emphasis on perfect unanimity as the »goodness criterion» of rules. However, in so far as our individualistic and

subjectivistic presumptions are recognised, there is no alternate method to assure that the net result of collective decision-making is positive. Brennan and Buchanan maintain that 'social conventions that emerge historically and take on the status of "unwritten rules" do not necessarily produce the best conceivable pattern of outcomes' (Brennan and Buchanan 1985, 9). They give an example of the »drive on the left« rule to emphasise that close-ended rules have little or no evolutionary pressure (Ibid., 10). This is, of course, true. Rules of spontaneous origin do not produce the best conceivable outcomes, but neither do rules of purposeful design. The problem is that we really cannot tell which ones are fundamentally »better« because unwritten or spontaneous rules are already in use and therefore conceived as »good enough«, and purposefully designed rules can be equally »good enough« if they are collectively agreed upon.

Hayek on the other hand writes that '[t]hrough deliberate social contracting it is only possible to introduce institutions that the people understand by their present reason and knowledge' (Hayek 1973, 10). Through spontaneous emergence beneficial outcomes of a rule can, however, be *learned* by individuals. Benefits of an innovation may first be perceived by only a few who are then imitated by others as they come to perceive the benefits of doing so. This kind of process renders possible the unfolding of rules that are *initially not understood as beneficial by most*. If a new rule requires a unanimous agreement to get selected, it is conceivable that only rules that are understood by everyone can get selected. Rules which might bring about »better« outcomes but which are not commonly understood fail to get selected in the process. This implies that spontaneously emerging rules can be more innovative than socially contracted ones.

Barry notes that the negotiation costs of a unanimous agreement may turn out to be prohibitively high because the last person may try to extract too high a price for consent (Barry 1984, 590). The contractarian approach maintains, however, that constitutional agreement is not possible on rules the particular outcomes of which are already apparent. A unanimous agreement is hence possible only on general rules, the general nature of which are considered good by the choosers. For instance, individual freedom and private property are such rules that *might* emerge by social contract because even the last consenting individual may value her freedom and right for property enough to consent.

Negotiating causes transaction costs. Bargaining over a unanimous agreement can be very costly, but so too can be the consequences if general rules are decided upon by a simple majority. The problem is that we cannot know the opportunity costs of an agreement. This is simply because we only have one path of history to investigate. It is this very fact that precludes the opportunity costs from being calculable.

Barry criticises the social contract theory of accepting any result that is unanimously agreed upon, including, for instance, the emergence of a socialist non-market order (Barry 1984, 583). It should be emphasised, however, that not just any sort of rules can emerge through social contract. People would not, we dare maintain, consent to a rule that would give anyone selected at random the ultimate power to design the rules as she pleases. Although everyone has the same chances of being selected dictator, the risk of not being selected exceeds the potential benefits.

Through social contract, we can secure the »goodness» of collective decision making. The fact that individuals can agree only on general rules is the very power of social contract: general rules that are agreed upon leave space for individual contracting around them⁸.

4.3 Social contract as a discovery process

Buchanan notes that '[p]roperly understood, the economy has neither purpose, function, or intent' (Buchanan 1991, 27). The economy is defined by its set of rules and institutions. For individuals, »better» and »worse» economies exist, whose goodness derives from the rules and institutions implemented in those economies. Individuals act purposefully when deciding whether or not to contract with other people either privately or collectively, but, from a contractarian standpoint, the resulting structure cannot be assigned any purpose.

A moderate form of contractarianism, endorsed by Buchanan (1975) and also by Hayek (1973), considers contractarian reasoning a continuous process during which each agreement to implement alternative rules is made in a situation which

⁸ See the section 3.5 about Common law.

itself is an outcome of earlier agreements. Therefore, the task is to evaluate alternative changes in the institutions relative to the prevailing conventions of an existing society: '[g]iven where we are, can we agree to continue to live by these existing rules; or if not, can we agree to any changes?' (Sugden 1993, 421). Social contract is not seen as a once-and-for-all settlement, but rather it is seen as open to continuous renegotiation.

Social contract can be perceived as an evolutionary process. The variety of institutions from which we can choose is constrained by path dependency, that is, by historical contingencies through which prevailing institutions have evolved. The members of society can only agree upon rules which they perceive as just. Because fairness is something that arises from the culture, the discovery of new rules is therefore constrained by or perhaps even better described as overdetermined⁹, by the culture. The fact that people can only agree upon rules that are somehow perceived as just, prominent, or natural does not preclude the spontaneous nature of the process itself. We cannot foresee what kind of rules our descendants will agree upon and we cannot predict what kind of outcomes our current rules will bring about in the future.

Discoveries through constitutional exploration

The contractarian tradition offers an intellectual shift of inquiry from the processes of spontaneous emergence to the processes of purposefully designed rules and institutions. If we generalise the trading interaction of the market and adhere strictly to individualistic methodology, we may explain political interdependence as a process that embodies political voluntary agreement as an appropriate criterion of legitimation.

The contractarian view emphasises a perception of the distinction between the constitutional and the unconstitutional levels of political interaction, i.e., the difference between the choice among constitutional rules and the choice within a set of constitutional rules. Actual or potential agreement within society on rules functions as the criterion for the normative legitimacy. (Buchanan 1991, 39) 'The "good society" is that which best furthers the interests of its individual members,

⁹ See the section 2.4 about overdetermination

as expressed by these members, . . .’ (Ibid., 83). The state is created by the members of society to exercise coercive power on behalf of them. The state administrators are also members of the community and are considered no more benevolent than other members. Politics, in this individualistic view, becomes a complex process of exchange, in which individuals collectively pursue various objectives which they cannot attain privately in any reasonable manner.

There is strong logical reason to emphasise that the adopted rules of designed origin are not in any way optimal and that they do not lead toward increasing efficiency. In so far as our knowledge is imperfect, we cannot know all available alternatives and their consequences. Nor can we predict the future consequences of already known rules because the future may bring complete surprises.

As far as subjectivism is applied, the contractarian agreement is the only principle that guarantees that intentionally designed rules are beneficial for the members of community.

5. CONCLUDING REMARKS

The central idea of this study has been to investigate whether economic evolution can be seen to embody not only the spontaneous and unintentional elements of human interaction but also the realm of purposefully designed institutions. We maintain that the outcome brought about by this merger remains spontaneous, overdetermined and genuinely open-ended.

This conclusion is drawn along the study and is once again illustrated here: Paul D. Bush writes that '[a] conscious awareness of the nature of the choices made in the process of social evolution is a precondition to the planning of that process' (1987, 1108). He maintains further that 'social evolution is subject to the discretionary control of mankind' (Ibid.). It is reasonable to say that social evolution is brought about by actions of people. But to suggest that social evolution, as such, is in control of mankind is a different thing. The latter idea indicates that mankind can have a premeditated end in mind toward which evolution can be guided. Mankind is, however, not one mind. And as it is not one mind, it cannot have consistent and frictionless objectives toward which, even in principle, social evolution could be guided. The fact that everything we do has a larger or smaller effect on socioeconomic evolution should not divert us to think that our actions guide or control the process itself. Individuals plan to correlate their actions with their predictions about the future. To postulate that we could plan social evolution would require that we all were parts of the same plan. In so far as the plans of individuals are, in part, uncoordinated, the resulting social order will be a spontaneous outcome of a myriad of plans of self-interested individuals. Spontaneous the result is by nature because it must be unpredictable to everyone. If it wasn't, at least someone would have to possess perfect knowledge of the plans of everyone else, which is, I dare say, an impossibility.

In this study, economic evolution is perceived to comprise both the spontaneously emerging patterns of socioeconomic phenomena and the intentionally designed elements. The study does not claim that either type can be assigned predominance but, instead, they are taken as interacting and complementary elements in economic evolution. The voluntary exchange in the market, the emerging of spontaneous systems of rules, like Common law and

Customary law, and the intentional design of social contract all realise the open-ended methodological principle of the individual as the only source of value and of valuation. The principles of methodological individualism and subjectivism are so strong that this study is unable to claim any tendency for economic evolution.

This study has attempted to reach a realistic approach to economic evolution, the nature of which is defined through the game of the market and the processes of rules of the game. Every society plays its own game by its own rules. The degree of spontaneity of the market process and the desirability of the rules varies among participants. This study has refrained (or has at least tried to) from stating valuations about the preferability of alternative games or their rules. Individual freedom seems, however, to be a value which one somehow has to deal with because total absence of freedom can prevent the idea of a process as such from being applied at all. Without freedom there are no choices to be made. Therefore, this study has chosen a market economy as an environment for economic evolution. It is noted, however, that market economy is not a homogeneous phenomenon. Societies based on the principles of individual liberty and private property differ in what complementary rules they apply as well as what particular forms of property rules they exercise. It is further noted that economic evolution is not only about development in a »given« market environment. The environment itself is also subject to evolutionary changes. This study has, however, not attempted to specify the particular alternatives because our central interest is to understand the principles of economic evolution. Existing variations are numerous and diverse, not to mention the past and potential future modes.

Socioeconomic evolution brings forward the significance of rules and institutions. The nature of outcomes of socioeconomic processes affect the perceived desirability of existing rules. One of the tasks of an evolutionary-minded institutional economist may thus be to investigate existing processes of rules and institutions and to try to discover and discuss alternatives.

We have attempted to explore how both spontaneous and designed rules emerge and change, and whether we are able to say something about the desirability of alternative rules or systems of rules. The »goodness of rules« is measured by the degree of unanimity of agreement upon the general rules in society as well as by the extent of freedom to privately contract around them.

People reveal their constitutional preferences also by remaining in or moving from a society. Competition between societies in terms of »voting by feet« is, however, hampered, for instance, by restrictive migration rules, discriminatory property rights and various cultural constraints. This study has investigated group competition in terms of innovation and imitation of rules and institutions. Group selection appears justifiable, although not in its most extreme mode.

This study has searched for reasonable answers to the following questions: first, while acknowledging the important realm of purposeful design of rules and institutions in society, can the overall socioeconomic process, even in principle, be perceived to be moving in a particular *direction* or to have a specific premeditated *goal*? Furthermore, can the process, as such, be understood to have some particular *purpose*? We are unable to demonstrate a testable deterministic tendency in economic evolution, nor have we found any particular premeditated objective toward which the process might be moving. We are inclined to conclude that economic evolution, as such, is without a particular purpose. The resulting overall order is an outcome of unintended spontaneity as well as intentional design, and is an open-ended evolutionary process on its own level. It is thoroughly acknowledged by the author that the presented approach in the evolutionary tradition of economics is a limited one and it serves only as a complementary alternative among many.

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