1

THE ECONOMIC-LEGAL SYSTEM AND THE ROLE OF PROPERTY RIGHTS: AN INTRODUCTION

"I am saying how things have evolved. I am not saying how we humans morally ought to behave."

Richard Dawkins (1976)

1.1 A View of Human Society

Visualize three fascinating and puzzling phenomena of the animal world: a V-shaped flight of birds, an anthill, and a hunting pack of wolves. By sticking together in a special, elegant formation, birds such as wild-ducks can easily and safely cover very long distances, as for example from Scandinavia north of the Arctic Circle down to Africa in the early fall and back again in the spring. The ants in their hill survive and thrive by means of an elaborate division of tasks. The wolves in the hunting pack know how to spread out strategically to capture their prey. All three are examples of social systems bringing about a remarkably accomplished coordination of activities: each participating individual is induced to do something useful for the other members, and in turn gains from it. How is it achieved? Essentially by a combination of genetically-programmed propensities and "cultural" factors, propagated by imitation and learning. Sophisticated signals are exchanged, many of which biological research has only recently begun to observe and understand. The systems arise spontaneously. Almost self-evidently, there is no conscious planning of any kind.

Human society is basically of the same type — and of course, the human species belongs to the animal world. In trying to understand human society and how it functions, should thus be of some value to us to be aware of its fundamental similarity to animal, non-human societies. Not too much is gained, however, at least from the present level of knowledge. It is easy to see why: for animal societies, genetic predispositions play a considerably more important role than for human society in which culturally determined behavior patterns seem to dominate. This is mainly because of the superiority of human brainpower, generating a unique self-awareness and an extraordinary capacity to frame and use language and store information. Genetic factors are relatively more important for animal societies also because many of these are dominated by individuals of the same kin, with similar genetic set-ups. At least in the modern world, human societies embrace so many individuals as to rule out widespread kinship relations.

Animal societies other than modern man's seem in fact to comprise collections of individuals sticking together geographically: they consist of herds, flocks, swarms or similar groupings. A major factor behind such a phenomenon is that coordination among non-humans mostly requires *direct* signals between individuals. The signals may be very sophisticated, far beyond the powers of humans: bees can communicate by varying their dancing, and elephants by infrasound, for example. But the possibility of communicating by an enormously well-developed language, spoken and written, enlarges the scope of coordination among humans drastically. Whether or not we like it, there is a substantial degree of coordination among virtually every human individual living now: to this extent there is one single, global human society. The miner in Australia, for example, extracts a piece of ore to be used in a car produced in Japan and bought by a person in Rio de Janeiro. The people involved have no direct contact with each other; they do not even know of each other's identity. Still, the relations among them are not incidental. There is an organizing structure of relations.

Arguments in terms of the relative importance of genetic factors and cultural elements are loose. Especially when it comes to the behavior of human beings, the two elements usually cannot be separated, as the genetic set-up does not really determine what becomes of an individual; it determines only the general ways he or she will react to various influences. Parts of the genetic set-up are in fact such as to directly favor flexibility of human reactions, which complicates the problem further. Still, it is useful to have the biological perspective combining “nature” and “culture” at the back of one’s mind when trying to grasp and explain the basic organizing structure of human interaction. Findings from evolutionary biology will, however, be invoked explicitly only on a few occasions in the following, and then just briefly. In a similar book twenty or thirty years from now, they are likely to play a significantly bigger role.

Interaction among humans need not be cooperative; it can certainly be disruptive and antagonistic. But cooperative coordination is the distinctive feature of what we call a society, and probably even harder to explain than anarchy and chaos. We observe first of all that human beings work together, exchange things, and adjust to each other in a number of ways. All this may be pleasing and rewarding in itself. But similarly to our examples from the animal world, it is also the way coordination of activities takes place among people, making a division of tasks possible whereby material returns can be enhanced dramatically as each individual can do what he or she is relatively good at. As we have discussed, much of this positive interaction occurs among people who are not in direct contact with their counterparts and do not even know each other. Markets and political processes mainly operate that way. But often closeness is essential, as with interaction in families or work teams. We do not only wish to cooperate and enjoy each other’s company, however. We also want to be safeguarded from contacts or dealings we find harmful. No one is willing to accept interference from other people that goes beyond the limit where it becomes disturbing or painful, or that affronts our integrity. Coordination also entails absence of painful disturbances.

In a scientific endeavor it is often fruitful to look for structural components all over the phenomena to be analyzed. The best example is physics, with its search for the elementary particles of which the world is made up. But physics provides no primary source of inspiration when it comes to understanding the structure of human society; if anything, it is rather biology, as we have seen.[1] We can in fact discern a kind of

[1] It is another matter that physics might be of some use for the understanding of the short-term workings of the market system, including its tendency to exhibit fluctuations.

structural component of almost all interaction among people, regardless of its form. Whether it is a question of division of tasks or of protection against harmful interferences, what matters are the spheres of decision possibilities open to each single individual. The delineation of such spheres determines the division of tasks and activities among us, as well as the degree of our privacy and protection from injury and annoyance. The spheres may overlap: several individuals share decision power, and they change over time, not least because they are switched by exchange. Hence decision possibilities are a kind of structural units. They may be seen as elementary particles of society.

A clear and viable delineation of people's decision possibilities should be generally beneficial as it facilitates the division of activities among people as well as the enjoyment of privacy. Moreover, resources are usually scarce in relation to our ambitions. If each single individual is free to decide on the use of every single resource, there would be continuous fighting and the resources would soon be squandered. But if the possibilities to decide are made exclusive parts of individual spheres of decision, or at least are shared in an orderly manner, chaos can be avoided. It might, however, mean that some individuals get much more wealthier than others, which then creates a new source of conflicts.

What do we observe? Here are some examples, all relatively tangible. Decisions on how to use a piece of farmland and its yield are usually left to a single person. But if you are a sharecropper, you cannot command the full crop of the fields you cultivate; another person claims part of it. Second-rate pasture is often used jointly by a number of cattle-breeders, creating a case of shared decisions — overlapping spheres. The piece of bread in your kitchen is at your disposal only; the starving beggar outside your entrance gate cannot claim it. You and your family are the only ones who can decide what to do in the apartment you have rented. But facilities in the basement can be used by everyone living in the house, and the stairs and elevators by even more people (at least until the entrance is locked in the evening). If you have made an invention, you might be the only person free to use it directly, at least for a certain time; others are kept out unless you yourself consent to their using it. If you are a foreman in a factory, you can decide on the use of the time and efforts of the workers, within certain limits. You may be free to pollute the air in your vicinity *somewhat*, along with other people. But you may be free to pollute it *substantially* only if you have a special permit or license. As for your bodily integrity, you expect to decide on it yourself. Still, if someone carries out a useful activity and happens to injure some other person bodily, or damage something basically considered to belong to someone else, he or she might escape any consequences because it was not a question of outright carelessness. Hence the acting person was free to make the decision: it belonged to his or her sphere of decision possibilities. The list can be made very long.

1.2 A Grand Hypothesis

A person's sphere of decision amounts to the collection of all the possibilities he or she has to decide regarding the use of assets of whatever kind they may be. For such a possibility to exist, there should be no significant risk of unwished interference from others. Risks of interference and infringement have to be fended off reasonably well, one way or another.

How are the possibilities delineated and established? By a combination of private doings and arrangements, and the legal system. To begin with the latter, its major task is exactly to delineate which acts each individual is free to undertake, and protect him or her against too burdensome interferences from others. Rights to use a piece of land, for instance, are legally registered, as are patents. Threats of punishment or having to pay damages if we harm other people confront us all. We can be ordered by a court to do some particular act, such as to stop polluting. We have to obey strict, legal rules when we drive our cars. There is again a list that can be made very long.

Since the possibilities to decide are supported (more or less effectively) by law, it is natural to think of them as "rights". We will however choose mostly to speak of *property rights*, as this term has become standard in analyses of this kind. They will be defined more sharply below. Another important analytical component will also be introduced: rights to transfer a property right to someone else. These rights are obviously second-level components as they *concern* property rights; hence, they should not be regarded as elementary particles. We will in fact find that not even property rights are true elementary particles as they are endogenous, determined within the system. If there are truly fundamental elementary particles, they seem to lie even deeper.

Private delineation of property rights is of many kinds. We all raise fences, install locks, see to it that people sign important agreements, refrain from dealing with people who do not keep promises, and so forth. Some of us may even take a recourse to physical force to defend our belongings and ourselves. And there are private arrangements bringing forth rules very similar to legal rules, which all the people involved are supposed to obey. If there is a transgression, the person responsible for it may face consequences somewhat similar to legal sanctions, or at least ostracism in one form or the other. The *lex mercatoria* regulating international trade in Europe many centuries ago is a prominent example, coming close to a formal legal arrangement. There may be a further force of some importance, more private than legal: social norms of behavior not expressed in law.

Whatever the importance of private factors (it is obviously substantial), almost all interaction among people relies on formal law to some extent and is influenced by it. The reverse is just as true: law is framed under the influence of the private motives, wishes and inducements behind interaction among people. Now, much or most human interaction is of a kind we must regard as economic. So let us restate: Law, or at least a substantial part of it, is indispensable for economic life. It affects people's situations and dispositions in a number of ways. But although a product of the state, including its judicial branch, law is not created in a vacuum. Much or most of it has evolved in response to the needs of economic life. There is a mutual interdependence, a "symbiotic" relation. Hence, basically, there is a single, interrelated *economic-legal* system. This system makes up the major structure of human society. It is the real object of our analysis.

A caveat, already touched on, is in order. Society is coordination — but coordination can hardly ever be perfect. The organization of society can even break down. There are civil wars. There may be disintegration as a consequence of widespread corruption and mafia activities, or very serious political disorder. No attempt at analyzing such phenomena will be made here. In a sense, the economic-legal system is the "success story" of human society. The most serious failures of human relations fall outside and constitute problems of a different nature.

The influence of law on economic life has been an object of much study in economics and other social sciences. We know a lot about the effects of specific legal rules in particular fields, such as taxation, environmental legislation, or traffic regulation. Much of this material is standard matter in economic textbooks. But the basic delineation and upholding of people's decision spheres and personal integrity, that is, their property rights, amounts to a more fundamental and pervasive influence of law on the economy and society as a whole than the effects of ever so important specific regulations. These basic segments of the legal system are found under headings such as general laws of property, contracts, torts and crime. Traditional economic theory takes them for granted, which implies that it disregards the major institutional component of the economic system. Obviously, this theory is incomplete.

Little attention is paid to the influences in the opposite direction: the extent to which the demands and pressures of economic life put their stamp on law. Economic theory has mostly ignored these phenomena. Many or most lawyers like to say that they could not be important, and claim that law is based on considerations of a completely different nature. But during the last few decades, a number of scholars, most of them on the legal side, have begun to argue that most basic law is called forth by considerations and ambitions of an economic nature. The aims and wishes of economic players, that is, all of us in most of our doings, can be forwarded if the legal system is framed in certain ways. Consequently, there *will* be a strong tendency for this to materialize.

Combining these new strands of thinking, something worth calling a truly "grand hypothesis" has emerged. It will be introduced in the form of strict propositions later on. The main content is as follows.

To begin with, law in "Western", democratically oriented societies is either made by legal people professionally trained or accustomed to reason along certain lines, or a product of parliamentary politics. We will speak of *judge-made and politically-based law, respectively*.

The first part of the hypothesis claims that judge-made law is directed towards encouraging behavior that increases wealth defined broadly, and striking back against attempts to destroy wealth. It is thus systematically biased towards forwarding the growth of "society's cake", regardless of how the cake is divided among people. It achieves this by consistently striving to delineate property rights and rights of transfer so as to stimulate the creation of wealth, facilitate and support exchange by contracts, or step in when exchange is infeasible for practical reasons.

From this part of the hypothesis we seem to be able to explain a great number of legal phenomena that have usually just been taken for granted, their rationales not being clearly understood. Examples range from comparatively transparent cases such as patents and copyrights and their fields of application, or eminent domain, to more challenging phenomena such as the "division of labor" between tort law and criminal law, the decisions by the judiciary when to apply negligence, intent, or strict liability in order for sanctions to be triggered off, the tendency for disputing parties to settle rather than rely on court decisions, or the basic principles of corporate law. There are also legal phenomena that, we can see, have been misunderstood. Awarding damages and other compensatory payments to people who have been harmed has, for instance, been regarded as conditioned mainly by feelings that it is "naturally" right to restore victims of harmful acts to their previous positions. In the light of our hypothesis on judge-made law, it seems more likely that it is rather a question of stimulating victims to sue harm-doers as this is instrumental to preserving and developing the disincentive forces of legal rules. Redress may be a nice by-product — but it is a by-product only.

The second part of the hypothesis concerns *politically-based* law, which is more of a mixed bag but to a very large extent the exact opposite to judge-made law. Apart from those segments that concern what we may call constitutional matters and the provision of society's basic "night-watch" services, it is claimed to systematically influence the distribution of wealth and welfare in society, with no regard to whether the creation of wealth is forwarded or counteracted. It thus focuses on the partitioning of society's cake, without regard to its size. This does not mean that politically-based law is less economically oriented than judge-made law, but that its relations to economic life are different.

A third step needed is to explain the division of authority between judge-made and politically-based law. The claim here is that each one of us is eager to secure a substantial scope for wealth-promoting incentives in society. Striving for a desirable partitioning of the total "cake" may be ever so important, but there are limits, even dangers, so we want to guarantee a significant scope for judge-made law. Reserving a role in the constitution for an independent judiciary that can be expected to generate it is the method.

The "grand hypothesis" thus consists of three major assertions, one on the contents of judge-made law, another on the contents of politically-based law, and a third on the mixture of the two kinds of law. Later on, they will (somewhat formally) be subsumed under two propositions, the first dealing with the thrust of the two kinds of law and called the *Proposition on the Contents of the Law*, the second with the division of authority between them and called the *Proposition on the Constitution*. Most of this book is devoted to a scrutiny of their validity. The verdict will be that they gain much support. They are not new, however; they can be put together from literature of quite recent origin. Much of the material here will in fact consist of a presentation of some profound achievements of a number of economic and legal scholars during the last three or four decades. The forerunners who laid the foundations and set the course will be introduced in the following section. There will also be a brief review of certain analyses within the legal field discarded in favor of the approach chosen.

1.3 Founding Fathers and Jurisprudential Traditions

Foremost among the scholars whose work provides the foundation is *Ronald Coase.* In his two major articles "The Nature of the Firm" (1937) and "The Problem of Social Cost" (1960) as well as a number of other studies, Coase demonstrated that the institutional structure of the economic system can be explained if the hitherto neglected costs of organizing interaction among people, such as transaction costs incurred in contracting, are taken into account. In doing it, he laid bare the essential characteristics of firms and showed why firms emerge. He also put forward the daring idea that much of the legal system has evolved so as to systematically enhance wealth-promoting incentives. He, moreover, suggested that the economic system, including its legal scaffolding, should basically be analyzed not in terms of goods, commodities and similar phenomena, but in terms of property rights, although he did not use that expression.

These ideas were taken up and investigated by two legal scientists, *Guido Calabresi*,[2] who arrived at some of them independently of Coase, and *Richard Posner. T*his book owes a great deal to both these scholars, in particular Posner who undertook a remarkable research project, devoted to the study of every nook and cranny of the legal system from the perspective of the hypothesis on a wealth-promoting tendency of basic parts of it. His central work is the book *Economic Analysis of Law* (1973b, 1998).

Further back, the legal scholar *Wesley Newcomb Hohfeld* (1913, 1917) had presented a rigorous scheme of what he called the "lowest common denominators of the law" (1913, p. 64), consisting of types of rights, duties, liabilities, etc. Hohfeld is included here mainly because of his relentless insistence on the importance of a strict conceptual framework for an analysis of law. He has provided much general inspiration for the importance attached here to property rights as "elementary particles", and "rights of transfer" as further basic elements. In itself, his scheme is somewhat too ambitious for our purposes here, and will not be followed.

In their book *The Calculus of Consent* (1962), *James Buchanan* and *Gordon Tullock* analyze the formation of the constitutional framework in non-authoritarian, democratically-oriented societies. Their study provides a direct basis for the hypothesis that the legal system can be seen as emerging from a constitutional separation of power between an independent judiciary, making judge-made law, and the purely political part of the state, producing politically-based law. The substantial scope allotted to simple-majority voting procedures plays a substantial role here. Further studies by Buchanan (e.g. 1975, 1989) on the role and function of constitutions have also influenced the argument of this book strongly.

In a number of studies, *Douglass North* has investigated the conflicting tendencies of modern states to both encourage the creation of wealth and counteract it by giving groups able to bend decisions to their own advantage a substantial degree of free play (see especially North, 1981, 1990). His findings are of considerable relevance for our hypothesis on

[2] See Calabresi (1961). For certain basic arguments of this book, another study by Calabresi and a co-author is of particular importance (see Calabresi and Melamed, 1972).

the division of authority between political processes and an independent judiciary. *Mancur Olson* has added substantially to our understanding of how politically influential organizations, intent on extending the scope of political processes and able to influence them in their own favor, establish themselves — and ultimately may lose their power, usually because of strong external shocks (see Olson, 1965, 1982). This has provided inspiration and support for the claims concerning the contents of politically-based law in this book.

Friedrich Hayek has also forwarded ideas by adding substantially to the general background for our analyses. In a series of works, Hayek (1960, 1973, 1976, 1979) argued strongly for the view that the vital institutions of society (such as markets and the legal structure) are mainly results of spontaneous, evolutionary processes. Viable social and legal orders cannot be constructed deliberately by acts of social engineering. Hayek's ideas bear strong resemblance to those of Adam Smith, the father of modern economic theory. Other studies by Hayek of significance for arguments in this book concern the basic character of the knowledge or information held by the individuals in their interaction with each other (especially Hayek, 1937, 1945).

Kenneth Arrow is foremost among those who have opened new vistas for the study of the importance of information — or, rather, *lack* of information — for the framing of the economic and legal systems and individuals' behavior. In a number of studies, Arrow analyzed both uncertainty and the fact that individuals usually do not have the same information: information is "asymmetric" (see for instance Arrow, 1963, 1970a). Much of the behavior and many (perhaps most) of the institutional arrangements we observe in the economic-legal system are responses to such phenomena. These findings have an affinity with Coase's ideas on the importance of transaction costs, which primarily consist of costs of overcoming and adjusting to lack of information. In his famous book *Social Choice and Individual Values* (1951), Arrow also dealt a blow to an idea, cherished for a long time, that political processes tend to be intrinsically rational and nearly self-evidently so constituted as to operate in favor of the "common good". Adopting their own approach, Buchanan and Tullock came to similar conclusions which support basic arguments in this book.

Turning now to *jurisprudential analysis*, this is to some, rather substantial extent mainly normative, directed towards the study of what ought to be the aims of law and how these aims could be implemented. But efforts have also been devoted to the positive problem of how law, as we observe it, is to be explained. Still, only a few scholars from the legal side have been emphasized here, all at some variance with more traditional legal analysis. For background and contrast, it is useful to take a look at some major, competing theories more in line with traditional legal analysis, although they are hard to tie to particular authors. The presentations have to be brief and schematic.

Two major types of explanation of law compete in this literature. The first (and oldest) is that law expresses "moral" commands and convictions. Law constitutes what is "right" and "fair", it is "justice". This type of explanation is vague and its validity hard to assess. It appears rather difficult to derive more specific propositions from arguments along these lines, to confront with observations on what law looks like in practice and how the legal system actually operates. The empirical content may therefore seem somewhat limited. Still, such explanations have had a substantial general impact on discussions and interpretations of law. On a very general plane, they certainly add to our understanding of the nature and genesis of law.

The second type of explanation centers on the fact that, from a technical-practical point of view, legal rules and procedures are creations of the state. It may well be that parts of law emerge from the branch of the state consisting of a judiciary enjoying a substantial degree of independence. But in this approach, the ultimately determining force is taken always to be the political process and the power constellations behind it. Explanations of this kind belong to a family of "realist" legal doctrines.

If all law is formed in the political arena, we would expect views on what constitutes a desirable distribution of income, wealth and welfare to provide the basic influence, whether the views are egalitarian or in favor of particular, influential groups already comparatively well-off. It might be argued that thinking along "realist" lines tends towards the general view that law cannot be much more than a "cookbook" emanating from politics, devoid of systematic structure. The realist doctrines sometimes also exhibit a tendency towards the claim that, in a fundamental sense, the state cannot *deprive* people of rights as all rights enjoyed by people have been *conferred* on them by the state.[3]

The first type of jurisprudential explanation, leaning on concepts like "justice", is difficult to confront with empirical observations. The second type appears deficient as it makes us expect law to lack any systematic structure. This is hardly in accordance with what we observe. It certainly seems possible to discern regularities in vast strata of law, difficult to conceive of as results of pure politics only, influenced as it is by shifting power positions. The "grand hypothesis" may, in a way, be seen as a kind of mixture of the two explanations. If the moral values of the first explanation are replaced by "striving to enhance wealth", it holds for judge-made law. Perhaps such a striving *can* be seen as a "moral value"? The second, "realist" explanation should be relevant for politically-based law.

1.4 Property Rights

We found that the elementary particles consisting of possibilities of individuals to decide on uses of assets and resources have come to be called *property rights* in economic parlance. The expression is somewhat infelicitous as it directs our thoughts too much toward the command of very tangible, durable assets such as land. With some reluctance, we mainly adopt the term here — but now and then, for a change, just "rights".[4] Here a more formal definition:

[3] It seems possible to discern views of this kind in the writings of representatives of a branch sometimes called "Scandinavian realism". These scholars took it for granted, of course, that the political system is democratic.

[4] An objection against the word "right" might be that it is too "lofty" for a number of decision possibilities. A further objection is that there are already too many meanings of the word in legal texts and elsewhere. Hohfeld (1917) compares the word with a chameleon able to change color according to the context.

> **Property Right**
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> There is a *property right* when it is possible for someone to decide, without any significant threat of interference from others, on a particular use of an asset or resource in the widest sense of these words (hence including services, physical yields, environmental phenomena, intellectual achievements, etc.).

The definition is very broad. It implies that we speak of property right even for very limited possibilities to decide over quite insignificant assets, whatever their character. If you have bought a newspaper, for instance, you are regarded as the holder of the property rights to it.

Property rights have been introduced as *possibilities* for the holder to act, reasonably undisturbed by other people. They might at the same time be seen as constraints on the holder's activities, as they define bounds he or she[5] should not transgress. Some authors stress this perspective.

How do legally delineated property rights emerge? Some are of very old origin, such as those pertaining to land or certain marks of identification. These rights may still exist in their original form, but have of course changed hands and usually been redefined. Some property rights are established directly by the state through its power to make binding statutes. Some emanate from legal precedents, that is, decision by courts providing guidelines and standards for decisions and acts in the future. In a very direct sense, individuals themselves can frame property rights through clauses in contracts. Such rights are mostly the result of a partitioning, bundling or rebundling of property rights already delineated, or pertain to yields and products brought about by activity within spheres defined by existing property rights.

Property rights finally delineated by contracts probably comprise a majority. The way such delineation takes place is important. In order to enter into a contract by which property rights are transferred and see to it that mutual obligations are fulfilled, the parties have to find each other, exchange information, make the agreement, monitor each other's performance, etc. This gives rise to transaction costs. These may be so

[5]For simplicity, let us henceforth refer to an individual as "he", rather than the clumsy "he or she".

high as to prevent a contract altogether. At least as important, parties may be induced to adjust the delineation of the property rights to be transferred just in order to save on transaction costs.

Property rights not only emerge, but they disappear as well, due to various reasons. One is that the assets to which the rights pertain vanish because they are consumed or worn out, or that they were transitory in nature. Another is that the property rights were constructed so as to elapse after a certain time. This is the case with many property rights defined by contracts, such as rights to housing or land held by tenants. A third reason is that property rights are just abandoned because it is no longer in anyone's interest to uphold them, or the assets to which they pertain.

1.5 Various Types of Property Rights

An individual's possibilities to act form a collection of property rights, pertaining to a number of assets. It is broad and varied even for people regarded as poor. From the point of view of an individual, which property rights does he hold?

We can also focus our attention on a particular asset and ask which property rights pertain to it. As an asset can usually be employed or handled in various ways, at various points in time, etc., it is mostly a broad bundle of particular, more specified rights. How is the bundle held? One individual may hold the full bundle, or the particular property rights included in the bundle may be divided among various holders. There is also the possibility that a bundle, or a part of a bundle, is held by several individuals simultaneously.

Property rights are thus of various kinds. To prepare the ground for subsequent analysis, some major classifications will be introduced.[6] A

[6] For other general presentations, see Coase (1960), Alchian (1965, 1987), Barzel (1989), Cheung (1969, 1974), Demsetz (1967) and Eggertsson (1990), all economists. The ambitious classification by Hohfeld (1913, 1917) has been mentioned above. There is also a somewhat related, detailed classification of "ownership" by Honoré (1961), a legal scholar.

first important subdivision of property rights concerns the number of holders. Property rights may be

- *private (*or *exclusive),*
- *communal,* or
- *collective.*

A private property right is held by a single person (or decision-maker), to the exclusion of all others.[7] Some authors prefer to speak of exclusive property right. A communal property right is held by a particular, limited group of people, related to each other by an agreement or formal arrangement, also to the exclusion of all others (making it less suitable to use the term "exclusive rights" for private rights). Typical examples are rights to various facilities in a housing estate, the grounds and facilities of a golf or yacht club, and a common grazing ground of a village. Rights to the premises and equipment of a factory or an office are also examples. A collective property right is held by everyone, such as the right to walk on a pavement. Some might argue that such rights are not true property rights. But they can be — and are — delimited and enforced by the legal system. Suppose someone tries to prevent you from walking on a public pavement (without hurting you, which would mean an infringement of another kind, on your rights to bodily integrity). You can call the police and bring about legal sanctions against him for having interfered. The very fact that you can do so makes it natural to speak of collective property right.

Observations of this kind lead to a distinction between property rights which are defined by the legal system and enforced by it through threats of sanction (although not always effectively), perhaps along with private arrangements, and property rights which are defined and enforced by private arrangements *only*. To the extent the two categories have been distinguished in the literature, they seem often to have been called "legal" and "economic", respectively (see Barzel, 1990). As these terms have

[7] Some authors speak of "private property right" only when the rights are accompanied by full rights of transfer. This is just one example of the terminological muddle that mars the field. It seems to be too late to try to set things straight.

also been interpreted somewhat differently, we use the concepts legally defined versus legally undefined property rights.[8]

Two subcategories of legally undefined property rights are of particular interest. One is illustrated by rights to virgin land, as they were constituted long ago. Such land was open for anyone to occupy and consider his own. Once seized, it was up to the usurper to delimit it and enforce his holding as best as he could. Its acknowledgment by the legal system came afterwards. When achieved, the right became legally defined, and private.

The second subcategory comprises rights made objects of a contract, where the clauses fail to specify clearly whether they should remain with the one party or be transferred to the other party, and where the legal system does not provide an assignment, usually because none of the parties asks a court for it. Obviously, such a contract is irreparably incomplete. The property right then accrues to the party able to appropriate it most easily (at the lowest cost). It is thus legally undefined. Consider the following example: Someone has an agreement with a plumber and believes that he will clean up after the job is finished. Nothing to that effect has been explicitly mentioned, however, and the plumber does not clean up. The plumber has appropriated the property rights to these particular labor services, without any support (nor rejection) by the legal system as it was not worthwhile for the customer to sue. Such occurrences are common. It might even be claimed that most contracts result in at least some legally undefined property rights, simply because transaction costs make it too costly to specify contracts perfectly.[9]

The major difference between these two subcategories is that in the first case (virgin land) the property rights were free for anyone to seize, while in the second case (the contractual) only one of the parties to a contract could seize them.

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[8] There are, for instance, authors who call a thief's holding of stolen goods an "economic" rather than a "legal" right. In the classification used here, property rights to the stolen goods are "legally defined" with a legally given holder, although encroached on by the thief.

[9] A third, rather special but quite interesting subcategory is exemplified by the behavior of managers of state enterprises in the former Soviet Union. They were able to seize property rights to the assets of the enterprises when the government gave up control, and new property rights had not yet been delineated and allocated (see Sachs, 1992).

Property rights may also be distinguished according to their time dimension. Some last forever (or until they lack relevance), some for a certain period. Leased or rented property rights belong to the latter category.

Property rights defined by contracts include an important category consisting of the rights a party has been promised, but which have not yet been surrendered. A contract between two individuals implies that they voluntarily agree to exchange property rights, obviously because they expect the exchange to be to their mutual benefit.[10] Thus, when there is a contract, person *A* assumes an obligation to give up a certain property right (or bundle of such rights) to person *B* at a certain point in time (perhaps immediately), or successively over a certain period. Until the obligation is fulfilled, *B* holds a "future" right only, which could be regarded as a property right. We could call it a "claim right", but will speak of *contractual right.*[11] It is legally defined, as legal rules enforce *B*'s holding. Once the obligation is fulfilled, it becomes a regular property right. It may still be considered contractual in a "historical" sense, as it derives from clauses in a contract.

A contractual right is thus a property right that materializes at a certain point in time. Another, somewhat similar category consists of property rights that materialize only if certain conditions, other than just the arrival of a certain point in time, are fulfilled. We call them *conditional*, or *contingent*, property rights (and the opposite category *unconditional* property rights).[12] As a contingent property right will materialize only if and when the specified conditions are fulfilled, the analogy to contractual rights is close.

Here are some examples. If a guarantee clause in a contract gives the buyer the right to a new product from the seller in case the initially delivered product turns out to be deficient, the buyer holds a contingent right to a new product. In case the first delivered product actually turns out to be deficient, then the contingent right is transformed into an

[10] In the case of payment only in one direction, it is hardly useful to speak of a property right, however.

[11] Hohfeld reserves the term "right" for this phenomenon, but also speaks of "claim right".

[12] No standard terms seem to be found in the literature.

unconditional property right. (The contingent right is contractual as well.) Take a fire-insurance contract by which the insured will receive a bundle of rights to a new house if the given house burns down. This is a contingent right. Or take a person who holds certain property rights as long as there is no labor conflict at his place of work; if there is a strike, the rights disappear. They are obviously contingent.

The rights to the crop expected to emerge from cultivating a given field exemplify a further type of property rights. In such cases the property rights to the expected yield may be separated from the property rights to the asset producing the yield and held by different people; the former may be called yield rights. The rights to cultivate a field may for instance belong to a sharecropper for a certain period, while the rights to the crops that will emerge are divided in a special way between the sharecropper and the landlord. Even though much discussed in the literature, such a prearranged separation of use rights and yield rights seems to be quite unusual in practice. The reason is probably that it tends to be less advantageous to the people involved, as incentives to take care of the productive resource are hurt.

Most property rights are basically contingent for a very special reason. Suppose person *A* holds certain property rights to an asset. The rights are legally protected by threats of sanctions valid only against infringers who behave “negligently”, to use a standard legal term. Then if person *B* suddenly puts the property right into use under circumstances where he cannot be considered negligent, then there are no legal consequences. *B* may, for instance, happen to damage some belongings of *A*, whom he did not know, as an accidental side effect of some useful activity. Consequently, *B* acted within his legal sphere of property rights. Clearly, *A*’s property right was contingent, namely dependent on other people around him acting non-negligently. It will be an important and interesting task to explain, later on, why the legal system expresses such a seemingly nonchalant attitude to what might appear to be its major task: to delineate and protect unequivocal property rights.

In a more general sense, of little importance to our purposes here, property rights are almost necessarily contingent by their very nature. A property right defines possibilities to act, and these nearly always refer to an *ex ante* perspective. More or less by definition, they are *expected* possibilities. But there is usually some amount of uncertainty (apart from the particular uncertainty arising from the contingency dimension generated by rules such as those on negligence). In spite of the fact that a property right may be well defined and protected, events can occur which obliterate it: a house may be burnt out; illness may deprive someone of physical fitness; etc.

An implicit assumption behind the property rights discussed so far has been that they concern what private individuals can do and command without any significant risk of interference from other individuals acting *privately*. The state has been involved mainly as being responsible for the legal system. The property rights we have discussed are thus rights of individuals *versus other individuals*.[13] But individuals may also hold legally acknowledged property rights *versus the state*, which is the case if the law explicitly forbids the state to behave or act or legislate in some particular way. To the extent such rights are protected by threats of sanctions directed against the state, they almost by necessity take the form of liability to pay damages as the state itself can hardly be punished.[14]

Most of these property rights correspond to what is usually called *human rights* or *civil liberties*. They may amount to rights to express opinions or religious beliefs, choose a place to live and work in, or belong to associations and societies. The right not to be deprived of property rights to land, real estate, etc. by the state, except according to specific, given legal rules, is of a similar kind.

There is another, somewhat tricky kind of rights which individuals might be said to hold versus the state. Governments may issue general promises and pledges that citizens will receive transfers or benefits. The promises can even be enshrined in general statutes, although perhaps in vague terms only. Examples are “rights” to support for people who are ill, “rights” for all parents to a place in a day-care center for their small children, “rights” to specific facilities for disabled persons, even “rights to employment”. In the United States, such rights are often called “entitlements” — but *rights to government benefits* might be a better

[13] Or private legal persons.

[14] Individual politicians or officials responsible for state decisions may face the threat of having to leave their positions.

term. Clearly, they are rather similar to contractual rights. But are they legally protected? This would be the case if someone who does not receive what he has been "promised" can sue the government and be given his due (or damages that compensate). But often or usually, this is not possible. If so, these promises and pledges do not generate property rights.

1.6 Contracts and Rights of Transfer

The word contract is used here for all kinds of voluntary agreements between two or more persons to exchange property rights, or property rights for a payment. Even though it might sound too ceremonial for very simple exchanges such as purchases of inexpensive, non-durable consumer goods, we will stick to the word. A contract may not only lead to a transfer of a given property right or a given bundle of such rights. It may divide a property right into more detailed property rights previously not separate, or combine given property rights into entirely new bundles. A time dimension can be included, and contingency characteristics added and dropped.

As the legal system delimits contractual rights similarly to all other property rights, it also provides a framework for contracting. It protects, hence facilitates exchange. To this extent, the legal system promotes the shift of possibilities to decide on the ways of utilizing assets to those willing to pay or otherwise give up the most for them. These are the people expecting to derive the most wealth from the use.

But the legal system also comprises rules that directly concern the possibilities to enter into a contract, or for parties to frame a contract at will. People may or may not be legally permitted to carry out a transfer of property rights by contract, or to redesign and rebundle property rights to be transferred. Clearly, just as there are rights that concern how a person can *use* assets (resources, yields, etc.), there are "second-level" rights that concern what he can do to *these rights*. We call the second-level category *rights of transfer*, which are delimited and enforced similarly to the property rights themselves. Rights of transfer are so-to-speak "meta-rights", as they are rights that pertain to other rights, namely property rights.

Rights of transfer differ from the property rights that are their objects in that they exist automatically, unless deliberately abolished or restricted.

If there are no special legal rules to the contrary, people are legally free to exchange, sell or buy a property right on whatever conditions they find suitable. Consequently, the *explicit* components of the legal system are *restrictions on rights of transfer* rather than the rights of transfer themselves.

There are various types of restrictions on rights of transfer, and the differences among jurisdictions may be substantial. There is a range from an almost all-pervading lack of freedom to enter into a contract in planned, Soviet-type economies to milder systems in "Western" countries. Restrictions may be directed towards "suppliers" (sellers, etc.), or towards "acquirers" (buyers, etc.), or towards both sides at the same time. One category consists of restrictions which prevent the transfer of an asset altogether; or, more precisely, rule out the transfer of a full (or very comprehensive) bundle of property rights to a given asset. Prohibition of sale of certain drugs is an example.

Another category consists of rules that allow transfer, but on limited conditions only: certain types of clauses are forbidden. Rules on price control comprise an important example, as do rules regulating the quality of products for sale. Tax rules make up yet another case, as most of them prescribe that some share of the value of what is exchanged under a contract should go to the government — an obvious restriction on private parties' freedom to construct their contracts to their best mutual advantage.[15] A further category consists of rules that exclude some people from being parties to a certain kind of transfer. It may, for instance, be forbidden to sell alcoholic drinks to persons below a certain age, or for a woman (or man) to take on a particular type of employment. It may be forbidden to make purchases from foreigners: export and import quotas are important examples. Entry control, that is, rules that prevent people from running specific kinds of businesses without a special permit, is a similar category.

Whereas the basic legal rules on property rights facilitate exchange, restrictions on rights of transfer tend to *counteract* it. Similarly to transaction costs, they seem mainly to obstruct the "gravitation" of property

[15]The major exceptions are wealth and real-estate taxes, as well as head and lump-sum taxes (which are unusual, however).

rights to those who could use them in the most wealth-creating manner. The fact that holders of property rights to an asset are not free to sell the rights also affects the manners in which the rights are used, perhaps profoundly — unless those concerned do not find ways to circumvent the restrictions.

Occasionally, restrictions on rights of transfer provide buyers with useful information hard to convey by other means: this *facilitates* exchange. And while it is true that tax rules are obstacles to the shift of property rights to those best able to use them for wealth-creating purposes, they are necessary in order to carry out a number of essential public activities. The maintenance of the legal system itself is an example. Hence, taking everything into account, tax rules are certainly wealth-promoting to quite a substantial extent. A rather different reason why restrictions on rights of transfer are introduced is that they serve the purpose of transferring wealth and income from certain groups of people to other groups. As we shall find, most restrictions on rights of transfer seem to be of this kind.

Many authors treat rights of transfer as particular characteristics, or attributes, of the property rights to which they pertain, instead of rights of a different kind, on another level than the property rights that are their objects. But rights of transfer are logically distinct from property rights. They are not *attributes* of property rights; they *concern* property rights. Logic calls for a separation. Moreover, restrictions on rights of transfer mostly constitute legal rules that are different in a technical-practical sense from the rules that define and protect property rights. They differ as to both legal techniques and driving forces behind.

1.7 A Survey of the Book

The message of this book is that economic life and the legal order are interlaced into an "economic-legal system". The legal order affects economic life in two competing ways: to promote the formation of wealth without regard to distribution and to affect the distribution of wealth without regard to the effects on wealth. The first influence is exerted primarily by delineating property rights so as to support wealth-increasing activities. It operates mainly by judge-made law, produced by an independent judiciary that can be counted upon to make law of exactly this kind. The latter influence is exerted both by special property-right arrangements and by a flora of legal restrictions on the rights of transfer, mostly the latter. It operates by means of politically-based law, produced by political processes presumed to stress distributional aims. The mixture of judge-made and politically-based law is achieved by a constitutional separation of responsibility between an independent judiciary and political processes, balanced so as to guarantee a significant scope for wealth-promoting law. These were the specific hypotheses or assertions making up our "grand hypothesis".

The first major task in the following is to state the hypotheses in more stringent terms as the *Proposition on the Contents of the Law* and the *Proposition on the Constitution*. This is done in Chapter 4 of Part One, which is called "Foundation Stones" and comprises Chapters 2–5. Two important matters have to be made clear before the two propositions can be formulated. First, they presuppose a dividing up of law into judge-made and politically-based. This is undertaken in Chapter 2, and the result will diverge to some extent from what is most usual in that judge-made law will be regarded as comprising not only case law emerging from court decisions, but also certain parts of statutory law. Second, the concepts of "wealth-increasing" acts and "wealth-promoting" law play a crucial role in the Proposition on the Contents of the Law. In strict economic analysis, the discussion usually proceeds in terms of "efficiency" rather than "wealth", but the meaning is the same. These concepts have to be sharply defined, which is done in Chapter 3.

The primary task of the legal system is to delineate and support property rights. The way it goes about it is a major topic in the following. But there are two important theorems concerning the general logic and role of property rights, both proposed by Ronald Coase. One is the renowned "Coase Theorem", which exhibits the crucial role played by transaction costs. The other is called the "Reciprocity Theorem". Both should be considered part of the fundamental theoretical framework. They hence belong to Part One, and are examined in Chapter 5.

The conceptual foundations are thereby laid, but further theoretical background is essential. The grand hypothesis enshrined in the two basic propositions deals with the influences of law on economic life and, inversely, how economic considerations govern the framing of law. Now, economic life consists of *processes* in society, such as contracting in markets and administrative and political activities. Law influences these processes by providing a foundation and by interfering in their workings. But such processes, on two levels, shape law itself. In a direct and tangible sense law is shaped by the decision processes of the legislature and by the procedures by which courts frame case law. At a more basic level, the processes making up economic life exert a general influence on the Contents of the Law. To conclude, law is both *involved* in processes in society and *shaped* by such processes. For a full understanding, we have to examine these processes. This takes place in Part Two entitled "Society's Machinery", comprising Chapters 6–8.

A distinction is made between three major types of processes. There is first the most basic process giving rise to what might be called the constitutional structure of society. Above all, is it possible to discern an actually operating process in society that might result in the mixture of judge-made and politically-based law presumed in the Proposition on the Constitution? Two important strands in the literature propose such a process. One is based on the idea that a constitution is basically a social contract, that is, a multilateral, contractual agreement, entered into by all members of society. The other strand views a constitution as a mutually advantageous winning "strategy" for behavior, emerging from what is essentially a repeated game, played by society's members. The two constructions are similar in principle, and the latter can serve as an underpinning of the former. At an even deeper level of speculations, there is the problem whether findings within evolutionary biology can support the picture and add to it. Chapter 6 presents these strands of literature briefly and selectively, with few pretensions to theoretical sophistication.

Contracting or "markets" is the most spontaneous coordinating process, also the one with the vastest scope. It takes on many forms. At one end of the spectrum, there are simple purchases of non-durable, standardized consumer goods. They are followed by more long-term, elaborate contractual structures of various kinds. Finally, at the far end of the spectrum, there is organization of permanent cooperative endeavors such as corporations and other firms involving substantial amounts of administration. Families might also be seen as contractual arrangements. As a contract is an exchange of property rights, contracting in all its forms relies on property rights being well delineated and protected. Hence contracting is firmly based on law. To the extent contracts are subject to restrictions on rights of transfer (and they nearly always are), the dependence on law becomes even more pronounced. But law also adjusts to the requirements of contracting: the two-way relation is obvious. Although a major object of any textbook in economics, the essential properties of contracting (or "markets") have to be described and analyzed from the perspective relevant here. This is done in Chapter 7, and it turns out that the discussion deviates quite significantly from traditional textbook treatments in that it is more oriented towards institutional aspects.

Law generated by the needs and shortcomings of contracting makes up the bulk of judge-made law. But even though contracting is a major driving force, there must also be a formation process *within* the judiciary framing this kind of law. What makes members of the judiciary produce rules and legal arrangements that are systematically wealth-promoting? Logically this particular process should be analyzed in Part Two, before its results are exhibited and analyzed in Part Three. But it is better understood after a number of its results have been presented. The main treatment will therefore be put off till Chapter 16.

A third major type consists of political processes, discussed in Chapter 8. These serve a number of purposes. Like contracting, they are both *based* on law and *generators of law*. Especially, they are the source of politically-based law. We have presumed such law to be biased towards distribution. From what we know about political processes, is this a reasonable presumption? Our discussion emphasizes the framework presented by Buchanan and Tullock, which is very general and appears to have attracted the most attention. It proves to provide a strong underpinning of the hypothesis that distributional considerations play an important, even dominating role in politically-based law. It also supports the usefulness of regarding constitutions as social contracts. Other approaches to the understanding of political processes will also be presented, even if briefly and selectively only.

Parts One and Two together make up towards thirty percent of the book. If the present chapter is included, it is somewhat above a third. A rather comprehensive theoretical basis is laid for the scrutiny of the Proposition on the Contents of the Law.

Part Three, consisting of Chapters 9–16, is titled “Property, Breach of Contract, Tort, Crime”, comprising the legal structures considered fundamental in most “Western” societies. They appear to be mainly judge-made, and in fact make up the major part of judge-made law. Do they have the characteristics postulated in our scheme; that is, do they exhibit a systematic tendency towards establishing wealth-promoting incentives, in disregard of distribution? This is the major problem dealt with in Part Three.

Chapter 9 begins with a brief survey of the major types of legal rules and arrangements, but is mainly devoted to “formalized” property rights, by which is meant property rights that are specified directly and explicitly by the legal system; *inter alia*, they are subject to public registration in one form or another. Major examples are rights to land, real estate, ships and automobiles, inventions, literary and artistic achievements and trademarks. This is very roughly the field traditionally called “property” in legal textbooks. Chapter 10 is devoted to the “quantitatively” less significant but functionally important legal measures called injunctions, made up of binding orders issued by courts, requiring specific persons (physical or legal) to take, or abstain from, some particular activity. Injunctions are somewhat related to formalization.

Chapters 11–15 analyze the broad and vital fields of law that concern torts, breaches of contract and crimes. Seen from the basic perspective of the influence of law on incentives to act, it is a question of the principles and practices followed when threats of having to pay damages or undergo punishment are issued. Expropriation (using “eminent domain”) and so-called regulatory takings also come in here. The impact of this body of law on the definition and protection of property rights, the safety of contracts by which these rights are exchanged, and individuals’ behavior in general is enormous. Chapter 11 discusses the primary problem of what determines the scopes of application of liability to pay damages on the one hand, and punishment (perhaps accompanied by damages) on the other. Chapters 12–14 analyze the application of “negligence” and “intent” as behavioral preconditions for sanctions, as well as “strict liability” which means that there is a sanction directed against a harm-doer regardless of the level of care he is taking. (More accurately: a *threat* of sanction directed against a *potential* harm-doer.) Chapter 15 discusses what determines the stringency of sanctions for various types of harmful acts: the size of damages, and the form and harshness of punishments.

Chapter 16 supplements the analysis of damages and punishment (or, from another angle, torts, breaches of contract and crimes) in a crucially important respect. As most of this legal structure consists of the part of judge-made law made up of case law, it operates and develops by way of court procedures and decisions. A lot thus depends on the behavior of the parties involved in trials and how the courts argue. The latter component is one of the basic processes in society introduced above. The hypothesis that judge-made law tends to be efficiency-promoting would in fact not be tenable unless the courts "play the game". The chapter includes a discussion on this important problem.

The material of Part Three includes analyses of various important aspects of contracting, especially the principles according to which breach of contract, fraud and deceit are treated by the legal system. There are a great number of phenomena further associated with contracts and the legal rules and arrangements they involve. Part Four with the title "Contracts, Companies, Regulation" and comprising Chapters 17–19, analyzes some of the most important among them. These legal structures are to some extent judge-made, to some extent politically-based.

One major topic of Chapter 17 is what determines when a bilateral relation between two parties is considered to be a legally enforceable contract. Another is what, legally, constitutes a breach of contract, calling for a liability to pay damages (or some other sanction). The latter is especially an immensely important practical problem. Chapter 18 analyzes the contractual and legal structures of corporations (joint-stock companies) and other types of companies. These are matters of great practical significance, as a substantial part of economic life takes place within corporations or other firms and by way of contractual relations among them.

Restrictions on rights of transfer, comprising the dominating part of "regulation", form the topic of Chapter 19. While the legal structures analyzed in Chapters 17 and 18 are mostly judge-made, but sometimes politically-based, nearly all restrictions on rights of transfer are politically based.

The strong impression conveyed by the investigations in Parts Three and Four is that the legal rules and arrangements within the *judge-made* sphere tend to be systematically efficiency-promoting. Any conclusion has to be cautious and preliminary, however. But to all appearances, judge-made law forms a unified structure, the emergence of which it is possible to explain. To this extent, the Proposition on the Contents of the Law appears to be confirmed. The conclusions are somewhat less firm for *politically-based* law, somewhat unexpected perhaps as this kind of law seems more direct and tangible. Certainly there cannot be any doubt that substantial parts of this law are oriented towards redistribution of wealth. The parts that regulate basic, constitutional matters as well as the core of the "night-watch" state are wealth-promoting; but this is acknowledged explicitly in the proposition as it is formulated. Significant parts of other kinds are difficult to judge, however.

Important methodological problems are involved, especially when the wealth- or efficiency-promoting bias of judge-made law is evaluated. They will be commented upon in the following section and discussed again, particularly in the concluding Chapter 20, by itself forming Part Five.

There is finally an Appendix relating the analysis of this book to a competing type of analysis based on the concepts of "externality" and "external effects", often applied in textbooks in economics but found less satisfactory here.

1.8 Some Methodological Points

How do we establish whether judge-made law is systematically biased toward producing wealth-promoting incentives? The conclusions drawn are based on considerations of several kinds, some admittedly rather loose. One method is to assess whether a particular batch of judge-made rules or arrangements appear to encourage wealth-creating behavior, whatever the consequences for distribution, as compared to some other design of the rules and arrangements which might appear as a realistic alternative. A similar method is to try to visualize what a rule should look like to be efficient, then compare it with the actual rule. In both cases, the assessments draw on what is generally known about how people usually behave when confronted with various incentive structures. So far, there is hardly any systematic empirical investigation; none is carried out here. Examples of court cases, drawn from various countries (mostly the United States and Sweden), will be quoted, although mainly in order to illuminate analytical points. They should not be regarded as a more significant body of evidence. The material is somewhat too anecdotic for that.

Such an analysis may invite criticism for several reasons. For example, rules that at first sight appear to hurt efficiency-promoting incentives may be declared efficiency-promoting by pointing at the presence of some hitherto neglected, but actually insignificant, cost factor which “does the trick”, turning an otherwise inefficient rule into an efficient one. Or, rules that are obviously inefficient and of a kind, it might seem, most reasonable to classify as judge-made, are regarded as politically-based exactly *because* they are inefficient; this also “does the trick”. Rules and arrangements appearing inefficient might be taken to be isolated “deviations”, insufficient to refute the hypothesis. And even though the court cases cited are not intended as a more solid body of evidence, the conclusions they hint at may be unreliable as they may have been selected just because they support the hypothesis.

But consider the substance of our hypothesis. The presumption is that judge-made law is systematically efficiency-promoting. It is also presumed that judge-made law has evolved and been allotted a certain, rather wide scope in “Western” countries just because people want to safeguard a substantial amount of leeway for wealth-creating activities. The hypothesis thus is that this important part of the legal system has emerged as a somewhat spontaneous result of very widespread ambitions to increase the combined wealth, “society’s cake”. Clearly it is an *evolutionary* hypothesis, of *in principle* the same kind as the hypotheses formulated within evolutionary biology. Hence comparison with that field of knowledge is natural.

In evolutionary biology, the presumption is that the characteristics of the species of animals, plants and other organisms we observe can be explained as results of processes directed towards maximizing the individuals’ expected offspring.[16] In this book, we presume judge-made law to have developed so as contribute to maximizing wealth. Thus the

[16]Basically, the multiplying of existing genes (or rather, genetic set-ups).

processes in both fields are directed towards the maximization of a particular, one-dimensional phenomenon. The mechanics of the processes may be very different, of course; but this is another matter. For the development of biological species, it is Darwinian natural selection, driven by genetic factors. For the development of law, it seems mainly to be a cultural selection process, even though it is ultimately based on genetic factors.

Specific assertions in evolutionary biology are difficult to verify or refute. They tend to be somewhat flexible, and are often possible to stretch so as to account for almost any observation made.[17] Even prominent modern evolutionary biologists admit that the theory of natural selection contains tautological features (see for instance Maynard Smith, 1969). How, for example, do we explain the spread of thorns over the plants of umbrella acacias, the fact that elephants in spite of their weight walk on their toes, or — the nearly classical case — the peacock's seemingly unpractical tail? The presumption of evolutionary biology is that these characteristics favor the production of offspring by the individuals of the three species by lengthening their fertile lives, facilitating their mating, or in some other way. Hence they have come to dominate. But *how* do the characteristics call forth these effects? Biological research offers explanations that are sometimes very well founded, sometimes rather tentative. Some authors like to speak of them as "adaptive stories". Empirical experiments encounter difficulties. Predictions of how biological species in the open nature will develop are usually out of the question.

Now compare with the task of explaining components of judge-made law such as the "division of labor" between punishment and liability to pay damages, or that the responsibility for suing the harm-doer rests with the victim in case of torts but with a public prosecutor in case of crimes. Our theory is that these arrangements support incentives to create more wealth in human society; hence people have wanted them to be included in the constitutional structure of the country. But how is this proved? The issues are basically the same in the two fields of inquiry and the methodological problems rather similar.

[17] Cf. the discussion in a well-known textbook in evolutionary biology by Futuyuma (1986, p. 17).

It seems as if the methods of analysis in both fields do not comply with the major tenets followed in sciences such as physics and chemistry, where great significance is attached to the well-known falsifiability criterion formulated by Karl Popper, saying that a proposition on some empirical phenomenon is not meaningful unless one can specify some empirical observations that would refute it.[18] But how do we falsify an assertion on the genesis of the peacock's tail, or a proposition that wealth-creating incentives are strengthened if breaches of contracts lead to liability to pay damages but frauds to punishment? Popper himself in fact came to the somewhat provocative conclusion that "Darwinism is not a testable scientific theory, but a *metaphysical research programme*" (Popper, 1976, p. 168). Exposed to sharp criticism, Popper had to revise his standpoint later on (Popper 1978, 1980).

Writings by Ernst Mayr, a prominent biologist and one of the founders of modern evolutionary biology, have been especially fruitful for the assessment of knowledge produced in that field (see especially Mayr, 1997). Mayr stresses the necessity of constructing well-founded historical "narratives" or "convincing scenarios". This is exactly what evolutionary biologists tend to do when explaining the appearance of biological species and their physical and behavioural characteristics by applying the theory of natural selection. And this is also a procedure useful for the investigations of this book. The idea of applying exactly the same criteria of proof to explanations of the immensely complicated phenomena of the legal system and its relations to economic life as we do in the physical sciences seems misdirected.

[18]The criterion is proposed in Popper's classical book *Logik der Forschung* (1934). See also Popper (1963).