Law as an Autopoietic System

Gunther Teubner
The present debate in legal theory is dominated by an unfruitful schism. On the one hand, analytical theories are concerned with the positivity of law, running the risk of missing the law’s relation to society. On the other hand, sociological approaches analyze all sorts of social interactions of law, but have developed no conceptual tools to do justice to the autonomy of law. The theory of autopoiesis offers law a chance of getting round the falsely posed alternative between an autonomous rule system or a socially conditioned decision-making process. It is a theory of law that sees the law’s autonomy in the self-reproduction of a communication network and understands its relation to society as interference with other autonomous communication networks.

Building on the ideas of Humberto Maturana, Heinz von Foerster and Niklas Luhmann, Gunther Teubner uses the concepts of self-organization and autopoiesis to develop a concept of law as a hypercylically closed social system.

This book will stand as a landmark in legal theory and become a standard point of departure in the sociology of law.
## Contents

1 ‘And God Laughed . . .’ ................................................................. 1
2 The New Self-Referentiality ......................................................... 13
3 Law – A Hypercycle? ................................................................. 25
4 Blind Legal Evolution ................................................................. 47
5 Social Regulation through Reflexive Law ..................................... 64
6 Intersystemic Law of Conflict ...................................................... 100
7 *Unitas multiplex*: Corporate Governance as an Example .......... 123

Bibliography ................................................................................. 159
Index ............................................................................................. 192
The Talmud tells us how once, during a heated halachic discussion when no agreement could be reached, Rabbi Eliezer, whose detailed, elegantly justified legal opinion was not shared by the majority, claimed that if he were right, then the tree outside would move a yard or two to prove it. When the tree did in fact move, the other rabbis remained unimpressed. Thereupon he announced that the river would begin to flow backwards and the walls of the synagogue to bend. But the rabbis were not impressed by these wonders either. Finally he said that heaven itself would prove him right. When a heavenly voice did indeed confirm Eliezer’s point of view, the rabbis shook their heads and said: ‘We are not going to pay any heed to a voice from heaven, for you yourself wrote in the Torah on Mount Sinai: “One must bend to the will of the majority.’” And God laughed, and said: ‘My sons have defeated me, my sons have defeated me.’

The best way of getting to the spirit of a new theory – in this case autopoiesis in law – is by telling an old story. Joseph Weiler told me this one while we were discussing whether the concepts of self-reference and autopoiesis could inform our understanding of law.

We can read this as a story about self-reference in law. As with all good stories, several interpretations are possible. Starting with the most obvious reading, the emphasis is on the absence of an Archimedean point of reference outside the law. Law, as Rabbi Eliezer had to learn the hard way, is not determined by external authorities, or by the authority of the Scriptures, secular power, the

1 Talmud, Baba Mezia 59b.
law of nature, or divine revelation. Rather, law arises from the arbitrary nature of its own positivity.

It is the self-referential nature of law, the application of legal operations to the results of legal operations which gives the law validity. Legal validity cannot be brought in from outside; it can only be produced within the law. We can agree with Luhmann and say: 'There is no law outside the law, therefore no input or output of law in relation to the social environment of the system.' Even the fiat of the legislative or divine will has first to be approved by the rabbis: it is their discourse which ultimately decides how it is to be received in the law. According to our first reading of the story, then, positive law is self-produced law— not only in the sense that it is made by men, but in the sense of law produced by law.

Another way of interpreting this story would be to emphasize the fact that law is essentially self-referential and unpredictable. The ideal of legal certainty, essentially based on the predictability of law in its application to actual cases, founders on the law's self-referentiality. So does the notion that predictability can be obtained by causal analyses of the sociology of law.

In this context von Förster would interpret Eliezer's legal dispute in the following way: God laughed because the rabbis had anticipated the impotence of the Laplacian world spirit. For the latter only has power over what von Förster describes as ‘trivial’ machines. These link particular inputs with particular outputs in a fixed, ordered way. 'Trivial' machines are synthetically determined, analytically determinable, independent of the past, and predictable. Law, on the other hand, if it is indeed autonomous rabbinical law, would have to be understood as a self-producing and self-reproducing process. As the operations of the law are dependent on its inner states, it would have to be defined as a ‘non-trivial’ machine. Law is certainly synthetically determined, but it is not analytically determinable: it is dependent on the past, but cannot be predicted. According to this way of looking at it, the indeterminate nature of law is inextricably bound up with its autonomy. In fact, according to Hejl, it is precisely this indeterminacy which is the main feature of the system's autonomy. Hejl defines autonomy as input-independence of living systems. Inputs which appear identical to the outside observer do not necessarily have the same internal effect.

2 Luhmann, 1986c, pp. 20 ff.
These are two rather obvious ways of interpreting self-reference in law. They only say something about the fact that law cannot be determined from the outside, that it is impenetrable and uncontrollable. We can get at a far deeper issue by interpreting the story in a third way which reveals its essential circularity. Rabbi Eliezer makes good use of the entire hierarchy of legal norms. He goes through the stages one after another – the legal discussion of the rabbis, the text of the Talmud, natural law, secular power, and divine revelation – only to perform a strange loop at the end and land right back where he started from. ‘Tangled hierarchies’ is the term used by Hofstadter to describe the phenomenon whereby the highest level in a hierarchy ‘loops into’ the lowest one. In the last analysis, the final arbiter of the validity of divine law is the triviality of procedural norms (‘One must bend to the will of the majority’).

Hofstadter himself makes clear that even the hierarchy of legal sources is not immune to the circular ‘looping together’ of hierarchies: ‘The irony is that once you hit your head against the ceiling like this, where you are prevented from jumping out of the system to a yet higher authority, the only recourse is to forces which seem less well defined by rules, but which are the only source of higher-level rules anyway: the lower-level rules.’

What the story of the dissenting Rabbi Eliezer is getting at is the ineluctable self-referentiality of law. Admittedly, it is presented to us in a highly elaborate form in the story. The hierarchy of legal sources has only one small flaw; the highest level draws on the

Things change somewhat when we look at them in yet another way and consider the original self-reference which underlies the ‘tangled hierarchy’ of law in the Talmud. As soon as the simple distinction between legal and illegal is applied in any context whatsoever, self-reference poses a threat to the law. If the distinction between legal and illegal is applied not merely ad hoc, but with claims to universality, then at some stage it will be applied to

---

5 D. Hofstadter, 1979, pp. 684 ff.
7 D. Hofstadter, 1979, pp. 692 f.
8 Escher, 1961; see Locher, 1971.
itself. Indeed, its very claim to universality forces it to become self-referential. It is at this point that ‘paradoxes of self-reference’ emerge. As the desperate attempts of the dissenting Rabbi Eliezer demonstrate, the hierarchy of legal sources is merely an inadequate attempt to avoid this original self-reference by piling layer upon layer of meta-levels, the top level of which, however, is identical with the bottom.

There are those, like Spencer Brown, who want to put a stop to this type of ‘self-indication’ because the distinction cancels itself out in it. Others, like Francesco Varela, see ‘self-indication’ as an opportunity for a new logical calculus. These are assessments of an operation which can always be carried out, at least in theory: namely, the application of a distinction to itself. The danger is that this type of self-application ends up blocking any decision. If the positive value of a distinction is applied to itself, then one ends up with a tautology, albeit a fairly harmless one: ‘It is legal to apply the distinction legal/illegal.’ If we turn this the other way round, it becomes much more of a problem: the statement ‘It is illegal to apply the distinction legal/illegal’ leads to an insoluble paradox: legal-illegal-legal-illegal...

As soon as one becomes aware of the problem, one sees self-references, paradoxes, and antinomies everywhere in the law. As Hofstadter says, ‘Reflexivity dilemmas... crop up with astonishing regularity in the down-to-earth discipline of law.’ The great paradoxical issues of the repeal of the law through the ‘right of resistance’ and raison d’état are well known, as are the paradoxical creation of law through the force majeure of revolution (‘Each act of illegitimacy carries within it the possibility of its own legitimacy’), the paradox of the hierarchy of norms which we noted above, and the Münchhausen trilemma of the foundation of norms: infinite regression, circularity, or voluntary rupture.

We can come up with many other more concrete examples of legal self-reference which lead to paradoxes: ‘Who watches the

---

10 Spencer-Brown, 1972, p. 135.
11 Varela, 1975, p. 5.
watchman' as the problem of constitutional jurisdiction; 'the paradox of self-amendment' in constitutional law; *tu quoque*, or 'equity must come with clean hands'; *renvoi* in conflict of laws; 'ignorance is no excuse'; the prohibition of bigamy; 'prospective overruling'; circularity in defining 'the interests of an organization'; frustration in contract as 'the relevance of the irrelevant'; or the 'fiction theory' of the legal person, according to which the State as a legal person must, like Münchhausen, pull itself up by its own bootstraps by inventing itself.17

III

Self-reference, paradox, indeterminacy everywhere! Yet the real problem arises when we ask ourselves the next question: how do we deal with paradoxes induced by self-reference?18 Like Lüderssen, we can make it easy for ourselves and dismiss the 'messing around with self-referentiality, which is passed off as unadorned circularity' as 'a dubious piece of intellectual fancifulness... which has long since plagued intellectual history and which has rightly been rejected as sterile'.19 Otherwise we are left with three ways of dealing with the 'paradoxes of self-reference' that appear in law, each of which is the subject of intense debate.20

One of the ways of dealing with self-reference which is currently favoured by the Critical Legal Studies movement is radical legal critique.21 Their subtle analyses of legal doctrine are in fact an exercise in deconstruction, and a strange one at that. Legal doctrine's claim to consistency and its practical-moral hopes are reduced to the point where all kinds of contradictions, antinomies, and paradoxes are shown up within the doctrine itself.22

---

18 Krippendorff, 1984, pp. 51 ff.
19 Lüderssen, 1986, pp. 343, 349.
22 For a good overview, see Gordon, 1984, p. 101.
It all started with the uncovering of contradictions between formality and materiality, between individualism and altruism in contract law; with policy-oriented law in the welfare state's inherent instability and tendency to fragment; and with the paradox that for every rule there is counter-rule. Trubek reduced this kind of legal critique to the formula ‘indeterminacy, antiformality, contradiction and marginality’. The approach rapidly caught on. Now there is hardly an area of law left that has not been deconstructed by the Critical Legal Studies movement.

There are numerous variants of this critique. The indeterminacy of law is ascribed to a variety of quite different causes: individual case decisions, legal institutions, the logic of legal argumentation, legal doctrine, social interests or policies. There is always an element of determinacy, however, in the position adopted by Critical Legal scholars. This varies according to the area they choose to focus on: social context, institutional environment, political ideologies, or ‘social hegemony’.

But just how radical a critique of law is this? It appears to me that the rediscovery of indeterminacy, the ideological demystification of legal doctrine, all the ‘debunking’ and ‘trashing’, only gets to the superstructural phenomena of legal self-descriptions but never to the heart of the fundamental legal paradox. Is not Sophocles’ critique of law much more radical when he has Antigone express her opposition to Creon’s law prohibiting her from burying her brother?

CREON: And yet wert bold enough to break the law?
ANTIGONE: Yea, for these laws were not ordained of Zeus,
And she who sits enthroned with gods below,
Justice, enacted not these human laws.
Nor did I deem that thou, a mortal man,
Could’st by a breath annul and override
The immutable unwritten laws of Heaven.
They were not born to-day nor yesterday;
They die not; and none knoweth whence they sprang.
I was not like, who feared no mortal’s frown,
To disobey these laws and so provoke
The wrath of Heaven.

(Sophocles, Antigone, p. 349)

24 Trubek, 1986, p. 70.
27 For a critical view, see David Kennedy, 1985; Frankenberg, 1989.
One should not see this purely as a conflict between divine and secular law, but rather as an insoluble paradox. Antigone maintains that Creon’s laying-down of what is legal or illegal is itself illegal. It is at this point that the radical nature of Sophocles’ critique of the law becomes clear. It is not, as contemporary critique would have it, individual legal norms, principles, or doctrines that lead to antinomies and paradoxes. Rather, it is the fact that the law itself is based on a fundamental paradox which even alternative visions of a communal law cannot escape.

Contrary to all the hopes of the Enlightenment, the uncovering of contradictions and paradoxes cannot lead to a ‘deconstruction’ of the law, but at most to a ‘reconstruction’ of its latent foundations, to a reconstruction of the relationships between self-reference, paradox, indeterminacy, and the evolution of the law. One cannot argue that when lawyers are made aware of the latent contradictions and paradoxes in law, these are thereby irrevocably destroyed. This would be to underestimate the difference between the reflective awareness of lawyers as individuals and of law as a social process. It would also downplay the operative closure of legal discourse vis-à-vis theoretical discourses, including that of legal theory. Wiethölder regards it as

the dominating phenomenon of the last 10 to 15 years that the work of lawyers as socially oriented and exercised practice has remained almost untouched by all the more fundamental challenges facing our legal system, jurisprudence and legal doctrine.29

Heller supplies the post-structuralist explanation: ‘Law is essentially a cognitive and professional, rather than a normative, discipline, referring to theory only in the liminal cases where the content of the settled practice comes into crisis.’30 This makes him rightly sceptical as to the enlightening effects of a legal critical ‘delegitimative analysis’.

Joerges concludes that ‘the problem of indeterminacy proves to be a paradox. One knows that one does not know why the law functions; but one also knows that one can act precisely because it functions.’31

There are other legal theorists who favour a more civilized way of dealing with the profoundly self-referential nature of the law. They define the problem of self-reference in law as a problem of the

29 Wiethölder, 1986b, p. 53.
30 Heller, 1985, p. 185.
'And God Laughed'

'paradoxes in legal thought'. By defining the problem in this way, they have made the relation between self-reference and paradox appear to be a 'fallacy' of human thought and can then set about re-establishing the consistency of legal thought. The entire exercise becomes merely a matter of finding an effective method of getting rid of paradoxes: 'The main way of solving the problem is to elaborate distinctions.' This is obviously a reference to the famous theory of types. There are, however, other ways of getting round the paradox of self-reference. In any case, one should not be rattled by unresolved paradoxes and antimonies: they pose 'a challenge to legal theory that we cannot ignore. If we are committed to the consistency of our legal principles, we shall someday have to devise a construct or a theory that will resolve this antimony.'

All respect for 'consistency as an overriding legal value'! But who is to make sure that these mental gymnasts don't get caught up in a 'tangled hierarchy' as they leap from levels to meta-levels to meta-meta-levels? Who is to see that they don't perform a 'strange loop' on the highwire, leap right out of the system, and land right back where they started from? Perhaps Fletcher is taking the easy way out when, having got bogged down with paradoxes as intellectual games, he understands paradoxes as purely intellectual mistakes.

We certainly cannot help the dissenting rabbi of our story by offering him a new distinction which would be a way of getting over an alleged fallacy in his thinking about law. Rabbi Eliezer ends up in exile anyway. His problem is not merely 'paradoxes in legal thought' but 'paradoxes in legal practice'. He has to discover the hard way that it is the reality of the law itself, not merely thinking about it, that is paradoxical. And this brings us to the third way of dealing with legal paradoxes induced by self-reference: namely, to shift the paradox from the world of thinking about law into the social reality of law. This third way out breaks a legal taboo: the taboo of circularity. Legal doctrine, legal theory, and sociology of law are at one in seeing circular arguments as logically inadmissible. In all three disciplines circular arguments are banned as petitio principii. This taboo also characterizes the exertions of

32 Fletcher, 1985, pp. 1263; see also H. Hart, 1983; Ophuels, 1968; Ross, 1969.
33 Fletcher, 1985, pp. 1263, 1279.
34 Hart, 1983; Ross, 1969; for a critical view, see Suber, 1990.
35 Fletcher, 1985, p. 1284.
36 Ibid., p. 1265.
our mental gymnasts, whose acrobatics are premissed on the prohibition of circularity. This is also the tacit premiss of the critical deconstructionists, whose critique would be meaningless if the prohibition on circularity were lifted.

The theory of autopoiesis does not lift the taboo on circular inferences only to declare them logically acceptable. That would only produce meaningless tautologies or block the process of thought altogether. What autopoiesis does is to find a way around the taboo. Circularity is seen no longer as an intellectual problem but as a problem of legal practice. The social reality of law resides in an abundance of circular relations. The components of the legal system – actions, norms, processes, identity, legal reality – are constituted in a circular fashion, and are cyclically bound up with each other in a variety of ways. Self-references, paradoxes, and indeterminacy are real problems of social life, not merely errors in the intellectual reconstruction of this reality.

This new way of dealing with self-reference is more than ambitious. Circularity, which was hitherto looked upon as a fundamentally unacceptable mode of thought, is now regarded as a productive and heuristically valuable practice. It is a way of revolutionizing not only legal theory, but our whole way of thinking about society. As Luhmann put it, ‘The concept of self-reference is generalized to a description of existence as such which at the same time establishes the conditions of observability.’ As Zolo has demonstrated, it is based on a generalization of the following ‘circular’ phenomena:

1 linguistic self-reference of cognitive processes (W. V. O. Quine, O. Neurath),
2 theories of order through fluctuation and dissipative structures in the physics of irreversible processes (I. Prigogine),
3 logical circularity in mathematically axiomatized structures (K. Gödel) and general paradoxes and contradictions in recurrence and in logical-linguistic self-inclusion (B. Russell, K. Grelling, A. Tarski),
4 reflexivity of the mechanisms of homeostatic or self-catalysing self-regulation in molecular biology or neurophysiology (L. von Bertalanffy, M. Eigen, H. von Förster),
5 recursive phenomena (feedback, re-entry) in cybernetics and in

38 Teubner, 1988b.
'And God Laughed'

the cybernetics of cybernetics (second-order cybernetics) (W. B. Ashby, H. von Förster),
6 processes of spontaneous morphogenesis and the self-organisation of social groups (F. A. von Hayek),
7 the traditional concept of mental awareness in man and in anthropoid primates (H. Maturana, G. Pask, N. Luhmann).

The dynamic character of this way of dealing with self-reference and the potential significance of its contribution stem from its central thesis that reality has a circular structure, independent of its cognition. This has been rather rashly criticized by some as a naive mixture of idealistic and realistic cognitive premisses. But why should a rigidly constructivist world-view be unable to distinguish between the environmental constructs of systems and their real environments, if it is clear that both are merely constructs of the observer?

IV

It is this insistence on ‘real paradoxes’, to coin a phrase which brings to mind Karl Marx’s ‘real contradictions’, that makes theories of self-reference and autopoiesis potentially so promising. For the research strategy is to reveal blanks on the map of social (and legal) phenomena by identifying circular relations in law and society and investigating their internal dynamics and external interactions. There have, of course, been many attempts to do this already. Legal hermeneutics, which studies the intricacies of the hermeneutic circle, has made the greatest progress in this area. In legal theory, it has been mainly Hart and Ross who have been concerned with self-referential norms. On the other hand, legal methodology and argumentation theory have relatively little to say on the circularity of the relation between legal norm and purpose in teleological explanation. And until now the sociology of law has thought of

40 Zolo, 1992.
41 Luhmann, 1992b, ch. 12.
42 Cf. e.g. Zolo, 1992.
43 See e.g. Esser, 1970.
45 See e.g. Alexy, 1989, pp. 235 ff.
circularity only in terms of simple feedback relations between law and society.\textsuperscript{46}

From the point of view of autopoiesis, however, these phenomena are merely further illustrations of the essentially circular nature of law.\textsuperscript{47} The legal system, like other autopoietic systems, is seen as nothing but an 'endless dance of internal correlations in a closed network of interacting elements, the structure of which is continually being modified... by numerous interwoven domains and meta-domains of structural coupling'.\textsuperscript{48}

The reality of law itself is circularly structured. That would be the final way of interpreting the story 'And God laughed'. Not only is the rabbis' reasoning about law self-referentially constituted, but so is the subject-matter itself. The most important consequence of this shift from thought to practice is that the paradox induced by self-reference need no longer present an obstacle. The rabbis are indefatigable in their attempts to refine and develop Talmudic law, irrespective of the paradoxes which emerge. They thus follow the second alternative in Krippendorff's characterization of a paradoxical situation:

\begin{quote}
Unless one is able to escape a paradoxical situation which is what Whitehead and Russell achieved with the theory of logical types, paradoxes paralyze an observer and may lead either to a collapse of the construction of his or her world, or to a growth in complexity in his or her representation of this world. It is the latter case which could be characterized as morphogenesis.\textsuperscript{49}
\end{quote}

We can now analyse how legal practice copes with the blocks imposed by the paradoxes of self-reference and how it stabilizes itself despite extreme fluctuations. The practice of law transforms total indeterminacy into relative determinacy. The theory of autopoiesis is ultimately concerned with the relation between the following elements: self-reference, paradox, indeterminacy, and stability through eigenvalues. In applying the distinction between legal and illegal, the legal system founds itself upon a self-referential circle. This inevitably leads to tautology and paradox, and thus to the fundamental indeterminacy of the law. But this indeterminacy should not necessarily prove an obstacle; nor should we give way to

\textsuperscript{46} e.g. Weiss, 1971; Eckhoff, 1978, pp. 41 ff.
\textsuperscript{47} Febbrajo, 1988.
\textsuperscript{48} Maturana, 1982, p. 28.
\textsuperscript{49} Krippendorff, 1984, pp. 51 ff.
it. For there are practical solutions to the problem of indeterminacy induced by paradox. The key lies in ‘deparadoxizing paradoxes’, in the ‘creative application of paradoxes, in the transformation of the infinite into a finite burden of information, in the translation of indeterminable complexity into determinable complexity’.50

One may, like von Förster, rely on the fact that self-reference ultimately leads to stable solutions.51 When an operation is constantly reapplied to itself, stable eigenvalues are formed. A classic example of an eigenvalue is ‘This sentence has x letters’. The number thirty-one is the eigenvalue of that sentence. To put it more generally, through recursive ‘computation of computation’, a system learns the modes of operation which hold good in an environment which is inaccessible to the system. Or we may, like Boaventura de Sousa Santos, look for inspiration to poets, who ‘overcome the anxiety of influence by misreading (or distorting) poetic reality’ and interpret law as a continuous ‘misreading of reality’.52 Or, like Luhmann, we may try to get round the problem altogether and interpret the resulting pattern as a structure of order, as a morphogenetic development of the system.53 In this way we can look for social solutions to self-reference by concealing paradox, neutralizing it, by thinking of it as a mere contradiction, and attempting to ‘deparadoxize’ it in a variety of other ways. The establishment of the legal system on the basis of the legal code (legal/illegal) which renders the paradox of self-reference a harmless, albeit forbidden contradiction would effectively eliminate paradoxes from the law. The paradoxes of self-reference would not be resolved, however; they would merely be held in check. The hierarchy of legal sources, the apex of which is best left in the penumbra of natural or divine law, is a good symbol of this latency. Yet, no sooner has it been pushed into the background than self-reference creeps in through the back door: ‘And God laughed.’

52 Santos, 1987, p. 281.
How does autopoiesis change the concept of law? In particular, what does it have to offer as opposed to the notion of law as a system which is open to the environment, as it has been described in cybernetic and functionalist theories?¹

Systems theory owed much of its success and dynamic quality to the fact that it viewed systems as open to the environment and adaptive.² By ceasing to regard systems as closed, windowless monads, it was possible to focus on the way they interacted with their respective environments, and in particular on how they were dependent upon them. It was the environment which determined the operating conditions of systems. Systems had to adapt to survive — a view shared by both neo-Darwinist evolutionary theory and the contingency theory of sociology of organization.³

Given that systems were seen as being both open to the environment and adaptive, it seemed obvious that they could be directly influenced, regulated, and even determined, by their environment. For their very flexibility and adaptability depended upon their being able to respond to changes in the environment, either by making internal modifications, or, in the case of ultra-stable systems, by altering their mode of operation. As far as the regulation of social systems is concerned — and this would include social regulation through law — this had two main implications: first, it was a question of making the systems to be regulated as flexible as possible; secondly, it involved enabling the regulating actors (administration, ¹ On law as an environmentally open system, see e.g. Weiss, 1971; Rottleuthner, 1973, pp. 142 ff.; Friedman, 1975, pp. 5 ff.; Parsons, 1981, pp. 60 ff.; and on Parsons, Damm, 1976.
³ Lawrence and Lorsch, 1967a,b, 1969.
management, State) to intervene directly by defining environmental constraints.

This way of thinking of systems as environmentally open and adaptive was a considerable step forward. The environment undoubtedly has an effect on systems, be they organisms or organizations. It is also obvious that politics and administration, through the medium of the law, exert some influence in practically all areas of society. This has lead to widespread criticism of the ‘juridification’ not only of all societal subsystems, but of the life-world itself.4

The distinction between system and environment was a key feature of the open system, and was replicated within it in the form of self-differentiation. It focused attention on concepts like the relationship between input and output, the ability of a system to adapt to its environment, the re-establishment of equilibrium by control and regulation, or the ‘rational’ organization of a system towards a particular end. Purpose rationality, control, management, adaptation to the environment, and the maintenance of the system’s equilibrium also inform political strategies of reform. These were aimed at effecting specific changes through the law in various social domains. Being based on an understanding of law as a means of direct social intervention, this could be compared to an analogous understanding of other forms of intervention: power, money, knowledge, and technology.

While it is undoubtedly true that intervention of this type had some effect, it has become increasingly clear that its impact on the social systems concerned has been somewhat unexpected. Sometimes it has been too slight, at other times too great. Sometimes this type of intervention has been effective only for a short period: sometimes it has been counterproductive, often counter-intuitive, and frequently has somehow got ‘swallowed up’ by the system.5 People have been quick to attribute blame. It was either too much or too little policy, or too much or too little law. Sometimes the implementation policy was considered inadequate, the reform too zealously implemented, the wrong instruments used, and the procedure no longer adequate. The main culprits, however, were traditional reform policy and traditional methods of direct, purpose-rational intervention in general.6

It is perhaps not entirely coincidental that at this very moment the

5 See Teubner, 1987d.
6 Görlitz and Voigt, 1985, pp. 27 ff.
notion of self-organization became increasingly attractive. The further development of this notion towards a theory of autopoietic systems appeared absurd at first, in that it seemed to be harking back to the idea of a closed system, which was considered to have had its day. For the theory of self-referential systems is based on the assumption that a system’s unity and identity are derived from its being entirely self-referential in its operations and processes. This means that it is only with reference to themselves that systems can continue to organize and reproduce as systems which are differentiated from the environment. It is the operations of a system which produce its elements, structures, and processes, its boundaries and its unity in a circular way.

The idea of self-reference and autopoiesis presupposes that systems seek the fixed points of their mode of operation in themselves and not in the environmental conditions to which they adapt themselves as best they can (as is assumed in open systems). To put it more precisely, they look for these points in a self-description which functions as a programme of internal regulation, organizing the system in such a way that it corresponds to this self-description. This interplay between self-description and the way the system operates presupposes that it is possible to explain its molecular and biochemical bases, at least in outline. However, it is by no means easy to determine their equivalents in those systems which are constituted in the world of meaning.

It does at least seem clear that self-referential closure occurs when complex processes revert back to the production of their original conditions in a hypercyclical fashion or in an ultra-cyclical fashion. In so doing, they become independent of their environment. Self-referentiality and ‘organizational closure’ thus mean one and the same thing: the closed form of organization of the recursive, self-reproducing processes of a system.

The question then, of course, is what does self-referentiality have to offer as against an open system? The answer is basically this: without self-referentiality, without ‘basic circularity’ and organizational closure, stabilization of self-maintaining systems is not

---

10 Eigen and Schuster, 1979; Ballmer and Weizsäcker, 1974.
11 Varela, 1981b, pp. 37 ff.
possible. It is only the recursive closure of a self-referential process – which must thus comprehend all the sub-reaction cycles and therefore be closed – which makes it possible to reconstruct this whole process according to immanent rules of regulation. The latter make a self-referential system appear independent of its environment and not subject to its direct influence. If this were not so, it would be the environment which determined whether or not the system continued and reproduced. Its development would then be contingent, rather than the necessary consequence of its recursively organized operations. If the process of making the connection and selection of operations in the system is stabilized by self-description, we arrive at the extremely complex process of autopoiesis, which is the basis of self-producing systems.

II

During this brief excursus into recent developments in general systems theory, we have come across the basic concepts which are the starting-point for all further developments: autopoiesis, self-reference, self-description, reflection, self-organization, and self-regulation. If we are to use these constructs to inform our understanding of law as an autopoietic system, we must be careful to distinguish clearly between different dimensions of self-reference and not merely equate every self-referential phenomenon with autopoiesis.

There is considerable conceptual confusion surrounding this term. Self-reference, self-production, self-organization, reflexivity, and autopoiesis are often equated with one another without a moment’s thought. A particularly glaring example of this conceptual confusion is found in Jantsch, who has no difficulty in constructing a complete theory round it. Yet, even the masters of autopoiesis,
who are generally far more careful when it comes to making con­ceptual distinctions, frequently treat self-reference and autopoiesis as one and the same thing. Sometimes ad hoc definitions are used, or distinctions drawn from concrete examples which are lacking in any systematic foundation. Zolo is not entirely wrong when he speaks of a ‘pathological syndrome’ of ‘conceptual inflation and disorder’, for which he considers a ‘linguistic therapy for the whole autopoietic lexicon’ advisable.

Varela’s attempt at a conceptual definition gets us no further either. He defines autonomy as self-referential closure in very general terms. He views autopoiesis as a special case, characterized by the fact that the components of the system ‘produce’ each other in the strict sense of the term. This effectively limits the concept of autopoiesis to the domain of natural science, and makes it impossible to apply it to social phenomena. It hardly seems right that a key concept – namely, the production of the elements of a system – should be restricted to a single phenomenological domain. Moreover, the definition of autopoiesis as a particular instance of self-reference does not provide a complete description of its conceptual assumptions.

Roth comes up with the following categories: self-organization, self-production, self-maintenance, and self-referentiality. In his view, systems are self-organizing if their components are so constituted that they ‘spontaneously’ assume a particular order. Self-production, on the other hand, arises from the cyclical linkage of self-organizing processes. Self-maintenance – that is, the preservation of the identity of the system, the maintenance of a boundary and the supply of energy – must be added to self-production so that the autopoiesis of a system, in the sense of the self-reproduction of its elements as Maturana understood it, is possible. According to Roth, a system becomes self-referential when its elements interact in a cyclical way. This does not mean, however, that it is self-reproducing in the strict sense of the term.

These distinctions are obviously arrived at on the basis of close observation of particular chemical reactions (self-organization), cellular processes (autopoiesis as self-production plus self-maintenance), and neurological processes (the brain as a self-referential but not an autopoietic system). This does not necessarily

21 Roth, 1986, 1987a,b.
mean that they can be generalized for systems theory. The concept of element and structure is also unclear. Are the elements of purely self-referential systems not merely part of another type of autopoiesis? Does self-organization mean only the production of a particular order (structure), or is it the circular production of elements that is being referred to? However, what makes Roth’s categories interesting is the clear distinction between self-reference and autopoiesis, between self-production and self-maintenance, and the idea that if circularly organized processes are cyclically linked, a higher degree of stability is achieved.

Even Luhmann has not yet given a systematic treatment of the whole field. He has developed series of concepts which do not, however, give a consistent overall picture. The problem with these is that not only do they alter characteristics within one dimension; they affect other dimensions as well.

One way of treating the issue in a systematic way would be to regard self-reference as the most general concept. This would encompass the notions of circularity and recursivity. Self-reference in such a broad sense would include phenomena such as circular causality, feedback, re-entry, auto-catalytic self-regulation, as well as intra-discursive reference, self-observation, spontaneous order formation, and self-reproduction. Circular logical relations such as tautologies, contradictions, infinite regress, and paradoxes would merely represent special cases of self-reference.

As a consequence, a system can be self-referential without necessarily being self-organizing, self-regulating, or even autopoietic. For example, if one understands the legal system as a system of rules, or more generally as a system of symbols, then it is clearly self-referential, since the legal rules and concepts refer to each other. There is, however, no self-regulation or even autopoiesis here. For how are norms to produce norms or symbols to generate symbols? We can only conceive of the law producing itself if we understand it no longer as a mere system of rules but as a system of actions.

Once self-reference has been defined in this way, then other self-referential phenomena can be derived by differentiating between both dimensions of self-reference: that is, from different types of ‘self’ and different types of ‘reference’. A third dimension of differentiation emerges from the fact that the subject and the object of self-reference are identical only in situations of pure tautology.

22 Luhmann, 1992b, ch. 11, sect. I.
23 For a detailed critique of Luhmann, see Teubner, 1988b, pp. 49 ff.
24 e.g. Coing, 1962; Canaris, 1969.
Self-reference normally includes additional aspects, such as feedback from a third party, and excludes others, as when referring to the part from the whole.

There is therefore a need to construct a conceptual space for self-reference, the dimensions of which are shaped from a typology of ‘autos’, a typology of ‘reference’, and a typology of referrer/reference relations. It is in this conceptual space that the various phenomena of self-referentiality must be located.

III

Our discussion of the conceptual space of self-reference will focus not so much on the ‘auto’ types as on the various types of reference. With this typology we can distinguish various phenomena of self-reference, ranging from self-observation, self-organization, and self-regulation to self-production, self-maintenance, and autopoiesis.

Self-observation describes the capacity of a system to influence its own operations in a way that goes beyond merely linking them together in a sequential manner. The system reconstructs its own operations in such a way as to inform its future development in a system-specific way. Self-observations take on a structural value, and self-description is the term used to describe this type of effect on the complex unity of the system. Self-observation and self-description open up an additional plane in the system, described by von Förster as ‘second-order cybernetics’.

The notions of self-observation and self-description are crucial to our understanding of self-referential systems. In formal organizations, for example, the ‘corporate actor’ cannot be identified with the primary operations of the organization (sequences of decision), but only with its secondary operations (descriptions of identity). A corporate actor is the self-description of an organization to which the capacity for action is ascribed. Another example is legal doctrine. As the ‘second-order cybernetics’ of law, legal doctrine does not produce valid law, it merely produces self-descriptions of the primary legal operations and their structures.

Self-organization refers to the ability of a system spontaneously to produce an autonomous order. Order is not imposed from the

25 see Teubner, 1988b, pp. 52 ff.
28 See Luhmann, 1984a, pp. 42 ff.
outside, but is produced internally through the interplay of the components of the system. A legal system is self-organizing when it uses what Hart describes as ‘secondary rules’ to produce ‘primary’ rules of conduct through forms of identification and procedure.29

Self-regulation is the dynamic variant of self-organization. A system can be described as self-regulating if it is able not only to build up and stabilize its own structures, but also to alter them according to its own criteria.30 Law can be said to be self-regulating when it has developed not only secondary rules for identification but also norms and procedures for changing the law.

If self-regulation and self-description are combined with each other in such a way that the (self-constituted) identity is used as a criterion of structural change, then the system effectively becomes self-reflexive. The development of a coherent form of argumentation about the identity of the system makes the system self-reflexive. One can thus speak of reflexive law in the strict sense of the term only if legal theory and legal doctrine deal with the prevailing social conditions of law (particularly its role in the general process of social differentiation) and if it informs decision-making practice in law (see chapter 5 below).

The concept of self-production is particularly difficult to grasp, and needs to be discussed in more detail. A system can be said to be self-productive when it produces its own components. The concept of ‘production’ has been particularly prone to misunderstanding. Rottleuthner considers it a ‘woolly’, inappropriate metaphor, and asks what precisely is meant by it: causal determination, function, or ‘illustration’?32 Mayntz considers it a kind of sociological shorthand to speak of the self-reproduction of communication through communication.33 If one were to emphasize the dynamic element of communication, one could say only that communication is ‘stimulated’ by communication, but generated by the social agent. Even Luhmann has given only a brief sketch of the concept of production. He defines self-production as the control of some, but not all, causes in a system.34 This has merely resulted in a shift in emphasis from production to control.

The problem with self-production is that it appears to contradict

31 Teubner and Willke, 1984; Luhmann, 1992c.
33 Mayntz, 1987, pp. 100 ff.
34 Luhmann, 1992b, ch. 1, sect. II.
The New Self-Referentiality

the obvious fact that much of what occurs within a system is brought about by external factors. For the legal system in particular, the notion of self-production seems difficult to reconcile with the fact that law is determined to a considerable extent by political influences, economic structures, and social factors. Does the idea of legal self-production lead to a revival of positivism or decisionism? Or to an imaginary legal autarchy? It is reservations like these which lead some people, particularly legal sociologists, to reject the notion of autopoiesis in law.35

To allay all suspicion of autarchy, I should like to make it clear that self-production does not imply that all causes are located within the system; neither does it imply that the more important of these (and who or what determines the criteria of importance?) or even most causes have their origins within the system. Despite what has been said to the contrary, a self-producing legal system is strongly influenced by social, economic, and political factors. Indeed, it is assumed that this will necessarily be the case. What is different, however, is the way in which the environment influences self-producing law. We will examine this in more detail in chapter 3, section III.

In response to Mayntz’s criticism, it must be emphasized that the role of the social agent is certainly not diminished by the idea of social self-production. Social agents as psychic systems do exert a considerable external influence on communication; what is more, ‘persons’, as social constructs, are absolutely necessary for the attribution of actions. Mayntz differentiates between stimulation (communication through communication) and production (communication through actors). This distinction does not do justice, however, to the productive role of the social system in the self-reproductive process of communication. Nevertheless, Mayntz does make the point that the way the social system functions in the production of communications must be defined more precisely.

It needs to be stressed that self-reproduction presupposes that the system is influenced by its environment. Indeed, the role of the environment is vital. Both external and internal factors influence the way a system reproduces itself. However, this also happens in allopoietic systems. What distinguishes a self-producing system from all others is that it reproduces itself by extracting and constituting, as it were, new elements from the flow of events, which it then uses by linking them up selectively.

Chess is a good example. The flow of events made up of words, gestures, and movements is ‘organized’ by the game of chess in such a way that it is possible to derive a sequence of ‘moves’ from it. One move produces another by opening up a limited number of possibilities. Self-production in this context is the constitution of the basic element ‘move’, the production of the next ‘move’ by the first ‘move’, and the incorporation of these ‘moves’ into the concrete system of the game of chess itself. However, this example is less suited to elucidating the dynamics of self-production. For in chess the rules are fixed, and in any one particular game self-regulation in the sense of dynamic structural change is not possible. The legal system provides a better example of this. Hofstadter’s essay illustrates the difference in a simplified form.36 Whereas in standard games there is a certain continuity which stems from the fact that the rules remain the same, law is self-regulating: it is a rule-governed set of systems, directives, and processes undergoing constant rule-governed change.

On the one hand there is less to the concept of self-production than its opponents would lead us to believe. Self-producing systems do not simply arise out of a vacuum; rather, they emerge from an existing material substructure. On the other hand, there is more to self-production than the ‘spontaneous’ formation of an order, as Hayek would have it.37 For the emerging system does not merely re-order existing elements: it extracts new elements from ongoing processes. These elements form the new system.

Autopoiesis, which of all the new forms of self-referentiality is perhaps the most difficult to define, should not be confused with any of the above-mentioned phenomena, not even self-production. Autopoiesis is a particular combination of various mechanisms of self-reference. The self-production of elements can be regarded as only a minimum condition for autopoiesis.

This minimum condition is certainly enshrined in the ‘official’ definition of autopoiesis: ‘Autopoietic organization is defined as a unit through a network of constituents which (1) have a recursive effect on the network of the production of constituents which also produces these constituents and (2) which realize the network of production as a unit in the same space in which the constituents are located.’38 Whether autopoiesis is in fact any more than the self-

37 See e.g. Hayek, 1973, p. 18.
38 Maturana, 1982, p. 158.
The New Self-Referentiality

production of elements is, of course, a matter of some dispute. In my view, one has to take on board certain additional conditions, which can be read into the ‘official’ definition.

Not only the elements of the system, but all its components – the elements, structures, processes, boundaries, identity, and unity of the system – have to be self-produced.\textsuperscript{39} Not only must the system be self-producing, but the self-producing cycle must also be capable of maintaining itself.\textsuperscript{40} This is achieved through the interlinking of the first self-producing cycle with a second one which makes cyclical production possible by guaranteeing the conditions of its production (hypercycle).\textsuperscript{41} Finally, autopoiesis is unthinkable without second-order cybernetics.

There is some dispute among autopoieticians as to whether more than one self-referential operation is admissible. The relationship of the ‘hard’ operations of the system, such as production and reproduction, to the ‘soft’ ones, such as observation, information, and control, is also the subject of continued debate.

In his ‘second-order cybernetics’, von Förster concentrates on the soft operations of ‘computations of computations of computations’ without looking at how they facilitate the self-perpetuation of the system.\textsuperscript{42} Maturana, by contrast, represents a rigorously ‘behaviourist’ approach to the concept of autopoiesis.\textsuperscript{43} He restricts the term to describing how elements of the system and the system itself reproduce themselves in a cyclical fashion. All ‘soft’ operations like observation, control, regulation, functionalization, and instrumentalization are relegated to the external perspective of the observer. According to Maturana, in the autopoietic system there is ‘no processing of information, no attempt to make behaviour correspond to the conditions of the external world, no goal-oriented processes in the functioning of the organism’. There are only reproductive operations, the ‘endless dance of internal correlations’.\textsuperscript{44}

Several writers, Varela, Roth, Braten, and Luhmann among them, have, in their own ways, attempted to get round the tension between reproduction and observation in the system. Varela tries to arrive at a synthesis by declaring that ‘operative’ and ‘symbolic’ explanations are two different, equally valid, complementary ways of explaining

\textsuperscript{39} Luhmann, 1987e, pp. 14 ff.
\textsuperscript{40} Roth, 1986, 1987a.
\textsuperscript{41} Eigen and Schuster, 1979; Zeleny, 1981a; Teubner, 1988b, p. 56.
\textsuperscript{42} von Förster, 1981, 1984a,b.
\textsuperscript{43} Maturana, 1982, pp. 18 ff.
\textsuperscript{44} Ibid., p. 28.
autonomous systems. However, he too is merely looking at the problem from the point of view of the observer, albeit in a different way from Maturana. Roth, on the other hand, focuses on the operational level, and differentiates between 'hard' reproductive operations and 'soft' interactions of states. However, he also tends to associate them exclusively with different types of system, and distinguishes accordingly between autopoietic systems (cell, organism) and self-referential systems (cognitive and social systems).

Braten attempts to overcome the limitations of the 'mechanical' conception of autopoiesis by 'opening up' the closed realm of self-reproduction by means of a model of dialogue. He envisages a constant dialogue and exchange between organized closure and symbolic representation. In this situation autopoietic reproduction effectively makes the system closed, and acts of observation open it up.

Luhmann approaches the problem in yet another way. He puts forward a type of 'big bang' theory of autopoiesis in which a combination of 'hard' and 'soft' operations makes autopoietic reproduction possible. Autopoiesis can only come into being when self-reproduction and self-description coincide. Self-descriptions are for their part self-reproductive operations. They facilitate the interlinking of individual operations by determining that they belong to the system. Self-descriptions introduce the distinction between system and environment into the system, and thus serve to regulate self-reproduction. To put it in more concrete terms, communications must be defined by reflexive communication as belonging to the system; only when they are defined as 'actions' in this way can further actions connect with them.

If we take these additional features into account, then the concept of autopoiesis becomes very complex. Nevertheless, its main features can be summarized as follows:

1. self-production of all the components of the system,
2. self-maintenance of the self-producing cycles by means of hypercyclical linking,
3. self-description as the regulation of self-production.

45 Varela, 1981a,b.  
48 Luhmann, 1992b, ch. 11, sect. I.
Law – A Hypercycle?

1. Is law an autopoietic system? Can it be said to reproduce itself? The answer is a qualified yes. Law is in fact a second-order autopoietic system. It distinguishes itself from society, the first-order autopoietic system, by constituting its components in a self-referential way and linking them together in a hypercycle.

This rather summary definition of legal autopoiesis, which will be explained in more detail below, has its opponents. There are those, such as Lempert, Mayntz, and Rottleuthner, who are sceptical about the whole idea of autopoiesis. However, even its most staunch defenders, such as Maturana, Varela, Hejl, and Luhmann have their doubts. In order to simplify things somewhat, I shall merely list the various objections and my responses to them, then go on to look at the issues in more detail in the succeeding sections of this chapter.

(1) As one might expect, biologists dispute the fact that a social phenomenon such as law can be described as autopoietic. In their view, the term can be applied only to the production of organic life. However, they are prepared to admit that the autopoietic character of living and cognitive systems also has some influence on social phenomena. But law as a social subsystem – and this is the line taken by sociologists with some knowledge of biology – is neither autopoietic nor self-referential. At most it is ‘synreferential’. Is it meaningful to apply the concept of autopoiesis to law on the basis

1 Varela, 1979, pp. 53 ff.; 1981b, p. 38.
3 Hejl, 1986.
of life, or does autopoiesis in law come to life on the basis of meaning?

My response is as follows: compared to biological autopoiesis, social and legal autopoiesis are distinguished by their emergent properties. New and different self-referential circles have to be formed in order to provide the basis for higher-level autopoietic systems.

(2) The ‘productive forces’ of legal autopoiesis are also a matter of some controversy: what produces itself? Rottleuthner’s doubts as to whether law spawns law stem from the understandable concern that symbolic systems cannot be self-generating.4 What is the role of human agents in all of this?5 Will justice, as Renate Mayntz fears, become ‘a woman without a body…and all its real driving power?’6 What elements of the legal system can then be said to ‘produce’ each other in the strict sense of the term? Jurists, the bar, legal organizations, legal norms, legal communications?

I shall keep my answer brief for the moment. It is not only the elements of the system, the legal acts, that are involved in the process of self-reproduction; elements, structures, processes, boundaries, identity, function, and performance all play their part. Human agents play an important double role in this process. They function as semantic constructs of the legal system and as independent autopoietic (psychic) systems in the environment of the law.

(3) Legal sociologists find the ‘circular closure’ of autopoietic law a stumbling block. Obviously this goes against their ideas of law as an open system which both shapes and is shaped by its social environment.7 (See chapter 2, section III.) Some see this type of operative closure as the beginning of a new legal formalism.8

My answer to this is as follows: self-reference and autopoiesis establish a high degree of legal autonomy based upon the constitution of circular relationships. This new kind of autonomy does not exclude causal interdependencies in the relationship between law and society. Quite the reverse! However, it demands that these

5 Schimank, 1985, p. 421.
7 Friedman, 1975, ch. 1; 1986, pp. 313 ff.
interdependencies be viewed in a new way and be seen as subject to the external influences of ‘non-trivial’ machines.

(4) There is one final objection directed against the idea of the hypercycle itself. Some see it as an over-complicated construct, and doubt whether it is really necessary to establish the independent autopoiesis of law. Luhmann has a very much simpler solution. Social subsystems achieve autopoietic closure merely by constituting independent elements. The ‘discovery’ of the legal act thus makes it possible for the legal system to become self-referentially closed. It is continually reproducing itself by adding new legal acts. The development of legal autopoiesis is thus described as an ‘all-or-nothing’ process. For Luhmann, the concept of autopoiesis is one of ‘inflexible hardness’. Law either reproduces itself or it doesn’t. According to Luhmann, there is no such thing as partial autopoiesis.

In my view, autonomy and autopoiesis should rather be understood as questions of degree. Whether one is analysing the historical development of law or the legal systems in existence at any particular time, it is always possible to identify different degrees of autonomy. Self-reference and autopoiesis can then be turned into rather exact criteria for these gradual stages of autonomy. This is only possible if one views legal autopoiesis as a slightly more complex construct than does Luhmann. A minor modification of Eigen and Schuster’s notion of ‘hypercycle’ might serve our purpose here. We may conclude by saying that a legal system becomes autonomous to the extent that it manages to constitute its components – action, norm, process, identity – into self-referential cycles. It achieves autopoietic autonomy only when the components of the system formed in this way are linked together to form a hypercycle.

II

The concept of autopoiesis was intended to elucidate basic processes of life, particularly at the level of the cell and of the central nervous system. As various people have pointed out, the difficulties of

9 Luhmann, 1992b, ch. 11, sect. VII.
applying this concept to social phenomena are considerable. In particular, it is unclear whether autopoiesis should be limited to biological phenomena or whether it can be meaningfully developed into a concept of social autopoiesis.

Biologists, such as Maturana and Varela, have opted for the first method, as have the social scientists influenced by them, notably Hejl, Krohn, and Küppers. Autopoietic systems are best left to the realms of biology and psychology, and are used only as a ‘generative mechanics’ for social phenomena. Social phenomena are then construed as interactions between individuals understood as autopoietic systems. Societies appear as ‘systems of coupled human beings’, and, as far as society is concerned, it seems that we are dealing with autopoietic bio-systems of a higher order.

Maturana has gone into the question of the build-up of first-, second-, and third-order autopoietic systems in the area of multicellular patterns of organization, as well as in animal and human societies. His distinctions can also be applied to other fields. Maturana distinguishes three instances of autopoiesis: (1) the simple coupling of autopoietic systems, in which the systems neither lose their identity nor blend into a new unity; (2) the establishment of a new autopoietic unity, in which the subsystems lose their identity; and (3) a higher-order autopoietic system, whose autopoiesis necessarily presupposes that of the coupled autopoietic unities.

This model might help us deal with certain problems in the social domain, such as problems of umbrella organizations and corporate groups and the corresponding questions of ‘unity and multiplicity’. However, the model breaks down when it is applied to all autopoietic systems that emerge beyond the level of the organism. This becomes particularly clear when we look at Maturana’s concept of society. If one thinks of societies as ‘systems of coupled human beings’, then one can consider societies only as ‘apparently autopoietic’. Even if we follow Hejl and make individual cognitive

18 Maturana, 1982, pp. 37, 211 ff.
19 See Maturana and Varela, 1988, pp. 98 ff., 195 ff.
20 For more of these types of distinction, see Mossakowski and Nettmann, 1981.
21 Bälz, 1974, 1985; see also ch. 7 below.
systems or parts of them, rather than organisms, the basic unit of society, then social systems cannot be seen as self-organizing, self-maintaining, or self-referential. They are at best 'synreferential'.

The 'category mistake' lies in the following statement: 'It is a constitutive feature of a social system that its components are living beings.' The mistake is to structure higher autopoietic systems exclusively according to the pattern which dictates that the autopoietic system of the first order (organism, cognitive system) necessarily becomes an element of the higher-order autopoietic system (society). This way of looking at things ultimately leads to the notorious hypostasization of social systems as collectives. Not surprisingly, Maturana and Hejl are somewhat irritated by this consequence of their theory.

Luhmann has come up with a way out of this impasse: higher-order autopoietic systems can be formed in such a way that emergent unities are constituted which provide their elements. In the case of society, these emergent unities are communications (not human beings or cognitive systems). Thus society is not a bio-system, but a system of meaning. This opens the second way of applying autopoiesis to social science: by describing social systems as themselves emergent autopoietic systems. The real issue does not concern analogies, however, whether social systems are organisms or even whether they have a kind of life principle. Analogies are replaced by a controllable context of generalization and respecification.

This second way, which is the one Luhmann opted for, can be described briefly in the following terms. Social autopoiesis is autonomous from the autopoiesis of living organisms. Social systems are autopoietic systems in the strict sense of the word. They are not only self-organizing in the sense described above: namely, that they spontaneously produce an autonomous order. They are self-producing in that they produce their own elements. They differ from biological systems (cell, organism, nervous system) in that their basis

27 Luhmann, 1986a, pp. 172 ff.
28 In regard to the biological point of departure, when the focus is on social systems, see Stichweh, 1987, p. 447.
29 Luhmann, 1992b.
is not life. Social systems, including face-to-face interactions, formal organizations, and society as a whole, reproduce themselves on the basis of meaning. The components of all these social systems are communications, not individual human beings. Communications as a unity of communication, information, and understanding constitute social systems by reproducing recursive communications.

If, like Luhmann, we opt for a concept of social autopoiesis, we soon find ourselves confronted with a new problem: where does law fit in? It is not surprising that we are faced with this kind of dilemma, for ‘the question of how, if indeed at all, one can conceive of autopoietic systems within autopoietic systems’ entails ‘an irritating objection to the concept of autopoiesis’. Is the law also organized autopoietically? And if so, how? Does a social subsystem merely have to constitute its own elements from the flow of communication? Or do we have to set up a second-order autopoietic system in order to establish the autonomy of law?

Higher-order autopoietic systems develop on the basis of an autopoietic system if they really ‘produce’ their own components themselves. Moreover, these self-producing components are not identical with the basic autopoietic system, nor with its components. In other words, one has to be able to identify emergent properties if one is to speak of higher-order autopoiesis. Roth claims that there has to be a change on a phenomenological level before there can be higher-order autopoiesis. However, this may be asking too much. Why should it not be possible for new components to arise on the same level? All it takes is the formation of new and different self-referential circles to constitute the elements of a higher-level autopoietic system. This also serves to illustrate the difference between our concept of emergent properties and the traditional one, according to which the decisive factor is the formation of new structures on the basis of given elements. In the case of the law, this means that autopoietic closure can occur only when commu-

---

30 For two differing views, see Luhmann, 1987a, p. 318; Teubner, 1988b, pp. 45, 60 ff.
31 Luhmann, 1987a, p. 318.
32 Roth, 1987b, p. 398.
nication about law constitutes its own elements — legal acts. These legal acts change legal structures, and thereby set in motion the autopoietic cycle of legal act, change in the law, legal act.\textsuperscript{34} Thus, the ‘invention’ of the legal act establishes the autonomy of the law.

But this does not yet help us fully understand the self-reproductive character of the law. It is not only legal acts that have to be self-constituting; all the components of the system — structures, processes, boundaries, and environments — have to be self-generating and linked together in a self-reproductive hypercycle.

For a subtle enough understanding of the autonomy of law, we have to rid ourselves of the idea that autopoiesis is a completely ‘rigid and inflexible’ concept.\textsuperscript{35} According to Luhmann, a system is either autopoietic or it is not: ‘There are no half autopoietic, half allopietic systems.’\textsuperscript{36} Obviously one cannot dispute the fact that a system either reproduces itself in a circular pattern or it does not. Nevertheless, it is possible to think of degrees of autonomy. For our purposes it is useful to think of autonomy as the cumulative emergence of self-referential relationships which enables the entire system to reproduce itself under certain conditions.

Roth puts forward an alternative view of autopoiesis which contrasts with the ‘inflexible rigidity’ of Luhmann’s and Maturana’s approach:

Self-referentiality and autonomy are not necessarily all-or-nothing states: they can be present to varying degrees and gain or diminish in importance as the system develops. A system can become increasingly self-referential if the network of its components undergoes the following modifications:

1. greater feedback between the components,
2. variability in the strength of the coupling of the components (functional plasticity) or re-formation of the couplings (structural plasticity),
3. reconstitution of components within the network (self-differentiation).\textsuperscript{37}

The cumulative increase in circular relationships thus makes autopoiesis a gradual process.\textsuperscript{38} In order to understand this step-by-step

\textsuperscript{34} Luhmann, 1987e, p. 17.
\textsuperscript{36} Luhmann, 1987a, p. 318.
\textsuperscript{37} Roth, 1987b, p. 400.
\textsuperscript{38} See also Stichweh, 1987; Mayntz, 1988, pp. 20 ff.
process, it is useful to distinguish more precisely between self-observation, self-constitution, and self-reproduction. It is one thing for a social system to observe its components as elements, structures, processes, boundaries, environments, and identity through reflexive communication. However, it is quite another for it to constitute them itself and to put these self-defined components into operation. Self-reproduction — that is, the capacity of the system to produce components recursively by the network of components — is something else again. Self-observation does not necessarily include self-constitution, and self-constitution does not necessarily include self-reproduction. For the system to be able to reproduce itself, its components must be in a complementary relationship to each other. This has to happen to enable a self-reproductive cycle to come into existence in the first place. Or, to put it another way, the existence of a self-reproducing hypercycle is dependent upon the cyclical interlinking of the components of the system, which are in turn cyclically organized.

To put it more precisely, social subsystems acquire increasing autonomy if their components (element, structure, process, identity, boundary, environment, performance, function) are self-referentially defined via reflexive communication (self-observation). The degree of their autonomy is also determined by whether these self-observations are made operational in the system (self-constitution). Finally, their autonomy is dependent upon whether their components are linked together in a hypercycle and produce each other on a reciprocal basis (autopoiesis).

Historically, complex hypercycles do not develop according to a predetermined pattern or towards a particular goal. ‘Blind’ sociocultural evolution prevails. Self-observations arise spontaneously, as it were. Whenever a distinction is applied to empirical phenomena, sooner or later it also applies itself to itself. If God and the world are the subject of conversation, then at some point or other the nature of the conversation itself will also be discussed. In this way the components of social subsystems are also communicatively observed; they are discussed in the language of the system itself. These random observations form the mechanism of variation for the evolution of social self-reference. How they are selected then depends upon whether they are successfully constituted — that is, upon whether the system has anything to gain from them. This does not mean that the system becomes better adapted to its environ-

ment. Indeed, the reverse is the case. The system benefits only if it
frees itself from its turbulent environment, if it becomes independ­
ent. It is the hypercycle which ultimately stabilizes the selected
variations, making the production of the components of the system
more independent of the environment, so that they guarantee the
conditions of their production on a reciprocal basis. ‘The circular
organisation of the processes of production and replication must be
stable, precise and protected from environmental turbulence.’40
Whereas self-reference takes over the function of the self-production
of the components, self-maintenance is the main function of hyper-
cyclical linkage.41

The key to understanding law’s autonomy lies in this three-tiered
As soon as legal communications on the fundamental distinction
between legal and illegal begin to be differentiated from general
social communication, they inevitably become self-referential, and
are forced to consider themselves in terms of legal categories. This
leads to ‘vicious’ and ‘virtuous’ circles, tautologies, contradictions,
paradoxes, and infinite regress.42 The law is forced to describe its
components using its own categories. It begins to establish norms
for its own operations, structures, processes, boundaries, and en­
vironments – indeed, for its own identity. When it actually uses
these self-descriptions, it has begun to constitute its own com­
ponents. This leads to the emergence of self-referential circles in
relation to legal acts, legal norms, legal process, and legal dogmatics,
with the result that the law becomes increasingly ‘autonomous’. The
law itself determines which presuppositions must be present before
one can speak of a legally relevant event, a valid norm, and so forth.
Law begins to reproduce itself in the strict sense of the word if its
self-referentially organized components are linked in such a way that
norms and legal acts produce each other reciprocally and process
and dogmatics establish some relationship between these. It is only
when the components of the cyclically organized system interact in
this way that the legal hypercycle becomes possible.

This definition of legal autonomy is in marked contrast to pre­
vious ones. The degree to which law becomes autonomous is
determined by the extent to which it constitutes self-referential
relationships, ranging from minor normative cross-referencing to

41 For an overview of the evolution of the hypercycle, see also ibid., pp. 100 ff.
42 Varela, 1979; 1981a, p. 19; see also ch. 1, sect. II.
the circular closure of a hypercyclically constituted law. We have already discussed how this resembles Luhmann’s concept of autonomy and how it differs from it. As we have seen, Luhmann identifies autonomy with autopoiesis. However, since he endows both with ‘unyielding inflexibility’, he can no longer accommodate varying degrees of autonomy.

Generally, however, autonomy is equated with the capacity for self-regulation. In the language of systems theory, this would describe the system’s ability ‘spontaneously’ to organize its own structures (self-organization) or alter them as it saw fit (self-regulation). Although this conception of autonomy is not incorrect, it gives only part of the picture, albeit an important one: namely, that the system is able to establish its own rules. Other aspects of autonomy are no less important, however. These include the capacity of the system to generate its own operations in the first place or to produce its own identity. Legal autonomy thus refers not only to law’s capacity to generate its own order, but also to the self-constitution of legal actions, the regulation of processes, and the invention of new schemata in legal dogmatics.

There is another conception of legal autonomy which is modelled on base–superstructure constructs: namely, that of freedom from external causal influences, particularly political and economic ones. The question of causal dependence/independence/interdependence is a central issue in the Marxist-inspired discussion of the relative autonomy of law. The same applies to the post-realism of the ‘law and society movement’. I should make it clear that we are dealing with quite different concepts of legal autonomy here. The sociologists of law who criticize autopoiesis, from either the materialist or the bourgeois point of view, could have saved their breath had they looked at the issue in more detail. Then it certainly would not have been possible to argue that the notion of the operative autonomy of an autopoietically closed legal system amounts to the promotion of legal autarchy. Nor could they have adduced empirical evidence of the law’s dependence on politics and economics. As Walter Bühl, a keen critic of social autopoiesis, has rightly pointed out, autopoiesis ‘has nothing to do with an exclusive

43 Luhmann, 1992c.
44 See e.g. Dupuy, 1987, pp. 55 ff.
45 See ch. 2, sect. III.
internal determination which is in alleged contrast to an equally exclusive “external regulation” or “external explanation”.

We need to insist on the sharp conceptual distinction between circularity on the one hand and causal independence on the other. Legal autonomy refers to the circularity of the way in which law produces itself, not to its causal independence of the environment. That is not to say that these two issues are not related. On the contrary, legal autonomy understood as the circularity of legal operations is eminently suited to generating hypotheses for causal relationships. When the internal organization of law is circular, then the causal models of its external influences are necessarily more complex. There has to be a move away from the simple logic of cause and effect towards a logic of ‘perturbation’. Factors which influence law from the outside have to be described according to the model of ‘non-trivial machines’, as discussed in chapter 1. Legal autonomy in this sense thus does not exclude the possibility that law, economics, and politics are interdependent. In fact, it assumes that they will be interdependent to a considerable extent, with the proviso that this be seen as a problem of how circular, causal processes are subject to external influences. We will examine the implications for social regulation through law in more detail in chapter 5.

Finally, there is another phenomenon which can be reconciled readily with the idea of a high degree of legal autonomy. This is the adoption of social meanings into law, particularly the ‘latching on’ to current social values. In fact, these are often adduced as empirical evidence against the notion of legal autonomy. In our terms it is not a question of legal autonomy, but a problem which has arisen as a consequence of the interplay of closure and openness in law as an autopoietic system. In cognitive openness, law refers to social meanings in a variety of ways, as well as to constructs of reality and social values. In a self-referentially closed legal system, however, these forays into current social values assume the guise of normativization in its legal form. Their normative content is produced from within the law itself, by constitutive norms which refer back to these values. It is a condition of all forays into current social values that they be subject to legal reformulation. As soon as they are in dispute, a decision has to be made about them according

49 Roth, 1982.
to criteria established by the law itself. In some cases it may be necessary to redefine them.

IV

On a slightly ironic note, Rottleuthner reproached the autopoieticists for their obscure metaphorical language. In his view their concept of production and constitution is extremely vague. It reminds him of the similarly blurred conceptual distinctions which commonly marred interpretations of legal theory from a Marxist perspective in the early 1970s. What are the autopoieticists really getting at? Is it the recursive production of legal acts by legal acts, the circular relationship between legal norm and decision, the reflexive relation between primary and secondary norms, the legal constitution of ‘institutional facts’, or the specifically legal way of describing actions? Why, Rottleuthner asks with some justification, should the term ‘self-production’ with respect to law be used to describe all these differing aspects? Luhmann does indeed use the term ‘self-made law’ to describe a whole range of circular relationships (circularity between legal decisions, circularity between higher- and lower-ranking rules, between the decision and the rule, and so forth). As well as asking for conceptual clarification, Rottleuthner makes an ‘urgent request’ for greater precision as regards time and place: ‘At what point does the legal system become autopoietically closed?’

There is an answer to Rottleuthner — at least to the extent that the typologies of self-reference introduced here maintain a clear division between the phenomena to which he refers. The thesis of autonomization through hypercyclical linkage also allows us empirically to identify critical threshold values — at least with the same degree of precision as Hart’s theory of ‘secondary rules’ or Bohannan’s concept of the ‘double institutionalization of norms’.

If we apply the idea of the hypercycle to law, we see that legal autonomy develops in three phases (see figure 1). In the initial phase of ‘socially diffuse law’, the elements, structures, processes, and boundaries of legal discourse are identical to those of general social

---

53 e.g. Luhmann, 1981d, p. 99; 1985b, pp. 113 ff.; 1987e, pp. 19 ff.
55 H. Hart, 1961, p. 77; Bohannan, 1968, p. 73.
Law — A Hypercycle?

Fig. 1. Self-reference and hypercycle in law.

communication — or, at least, are heteronomously determined by social communication. Law enters the ‘partially autonomous’ phase when the legal discourse begins to define its own components and use them operatively. Law only becomes ‘autopoietic’ when the components of the legal system are linked together in a hypercycle. It is tempting to apply this model to legal history and legal
ethnology and to test its applicability to legal evolution. It is perhaps even more interesting to apply it, within the framework of a ‘pluralist concept of law’, to an examination of contemporary phenomena of a socially diffuse law – for example, in conflict regulation within groups or organizations. It can also give us an insight into present-day forms of partially autonomous law – for example, international law, the *lex mercatoria*, or the internal laws of international organizations.

‘Socially diffuse law’ is, by definition, hard to differentiate from other norm-oriented social communications, such as co-ordination by means of social norms or unspecified forms of conflict resolution. Not every institutionalized conflict resolution should be identified with law. In particular, the ending of conflict by suppression, enforcement on the basis of power, arbitration, or compromise is still a non-legal form of conflict resolution. One can speak of law only in a rudimentary sense when (1) conflicts are defined as a divergence of expectations that calls for a decision and (2) this conflict of expectation is resolved by using the distinction between legal and illegal. Archaic forms of law are not the only examples of this: the phenomenon of ‘indigenous law’ in family or group conflicts, very much a feature of contemporary society, should also be taken into consideration. If family or group disputes are resolved by testing the controversial behaviour against group norms and describing it as legal or illegal accordingly, we are dealing with genuine legal processes. This is the case even when such rudimentary legal orders are independent of official law, or, as in the case of the Mafia, downright illegal.

However, this type of law is still produced by reference to external factors. For expectations are essentially based on social norms which are shaped not in the context of conflict resolution but in the quite different context of the co-ordination of behaviour. One cannot yet speak of a legal system in the strict sense, since legal actions are identical with general social actions, as are legal norms with social norms and legal processes with the general processes of conflict resolution.

The critical threshold of ‘partially autonomous law’ is reached when one or more of the components of the legal system become

---

57 e.g. Galanter, 1981; Cotterell, 1983; Griffiths, 1986; Santos, 1987.
58 Cf. Wesel, 1985, pp. 52 ff.
Law – A Hypercycle?

independent through self-description and self-constitution. The best-known example of legal self-description is Hart’s idea of ‘secondary rules’. According to Hart, we can speak of law only if the primary rules of conduct are overlaid and regulated by secondary rules of identification and procedure. For Hart, ‘the heart of a legal system ... [is] the structure which has resulted from the combination of primary rules of obligation with the secondary rules of recognition, change and adjudication.’ In our terms, legal communications arise which deal with legal communications – ‘le droit du droit’. They form structures which regulate the selection of other structures. However, according to our view, the mechanism of secondary rules cannot be equated with legal autopoiesis. The law does not yet reproduce itself entirely. ‘Secondary rules’ constitute only one of many self-referential circles which takes the form of the self-description of legal structures.

‘Secondary rules’ thus mark an important stage in the development towards a partially autonomous law. However, from our point of view they provide an incomplete picture of self-referential relationships. For similar self-referential operations are possible in relation to other components of the law. These include the conceptualization of elements of the law, the legalization of processes, the legal definition of the categories of legal and illegal, and the description in legal categories of the world outside law. As we have said already, all this is merely self-description; it cannot be described as self-constitution, and certainly not as second-order autopoiesis.

As we saw in section III, the components of the legal system can be said to be self-constituting only if the self-descriptions are in fact used to regulate communications in law. As we said above, constructing secondary rules or demanding their implementation (self-description) is one thing, but actually using them in the decision-making process (self-constitution) is quite another. In modern law, the distinction between self-description and self-constitution is institutionalized in the separation of legal doctrine, as pursued in the law schools, and adjudicatory and legislative practice, which applies or rejects these self-descriptions. Being quoted by the Federal Supreme Court, the highest accolade of the German law professor,

64 Cf. Deggau, 1987a.
marks the transition from mere self-description to self-constitution in the legal system.

It might be worth differentiating between legal systems according to the extent that, if at all, they can be said to be self-constituting. It is particularly important to differentiate them according to the components of the system to which they relate. It should be no more difficult to identify them empirically than to describe legal systems in which secondary rules are already in operation.

As has often been pointed out, one consequence of the fact that law is self-constituting is that legal rules begin to take on a ‘life of their own’. They no longer appear as (legal) means to a (social) end, but as an end in themselves. As Alan Watson points out in *The Evolution of Law*, it seems as if the law begins to lead a life of its own and stops merely being a reflex of other aspects of society. Legal rules become a kind of shorthand for underlying social values. At the same time, however, they begin to free themselves from these values. As a result, the relationship between law and society becomes more tenuous. Law does not always adequately reflect social needs and values. As Watson points out, it is always possible to situate legal provisions in a completely different social context. He explains this by reference to the role of legal elites, legal culture, and the legal consciousness of jurists. However, professionalism is of minor importance compared with the structural phenomenon of self-reference in law. The fact that legal standards appear to have a life of their own can be explained by the relation between self-reference and formality. If legal norms are constituted in the manner described above, they become ‘formal’ in the sense that references to the social environment are eliminated in favour of exclusive self-reference.

Even if legal systems are to some degree self-generating, they are still not autopoietic in Maturana’s sense of the term. They do not generate new elements through their existing elements and networks. Legal autopoiesis can arise only if the self-referential circles referred to above are constituted so as to link together in a self-reproductive hypercycle. Once again, we can explain this by reference to secondary rules. Legal techniques of norm identification may take their criteria from very different sources. These include religious texts, divine revelations, true cognitions of nature, long-established

---

tradition, group-specific usages, or the straightforward exercise of power. This is an obvious case of the legal self-constitution of norms; but it is not yet autopoiesis in the full sense of the word. It is the legal system itself which uses ‘secondary rules’ to establish and use the criteria, even if the ‘substance’ of the rules is determined by outside agents.69 The way in which the legal order refers to social norms in general clauses is an excellent example of this.70 Unlike socially diffuse law, social norms are not simply legal norms. It requires a secondary rule from either a legislator or a judge to make it possible for some social norms to become legal norms.

There is one particular instance of self-constitution which is of interest to us here. This occurs when the rules for the recognition of norms are constituted in such a way that they do not refer to extra-legal sources, but to internal components of the legal system. Law becomes autopoietic when its self-descriptions develop a theory of legal sources in which norms can be generated by precedents or other processes of law creation internal to the law itself. Legal norms are thus defined by reference to legal acts; that is, legal components are produced by legal components. This is what normally happens in modern ‘positive’ law.71 In positive law, legal norms can be produced only by way of precisely defined legal acts, be they statutes, decrees, or intra-organizational acts. Nowadays, even customary law must be seen as judge-made law, since it has to go through a ‘constitutive’ (not merely a ‘declaratory’) legal act if it is to count as positive law.72

In some respects the key to autopoiesis lies in self-description, as it is this which determines the actual course of the reproduction process.73 This does not mean that self-description follows self-reproduction precisely. They overlap to the extent that self-description directs self-reproduction even if that direction is not ‘recognized’ conceptually. A familiar example of this is the production of law from subjective rights whose subjects have disappeared, leaving the law to refer to itself.74

What has just been said about legal structures (legal norms) applies equally to other components of the legal system (elements, processes, boundaries, and so on). Legal acts, the elements of a legal

71 Luhmann, 1985c, ch. 4; Dreier, 1983, pp. 419 ff.
73 Ladeur, 1987b.
74 Luhmann, 1981d, pp. 96 ff.
system, must then be constituted so as to be capable of producing legal norms in a manner appropriate for autopoiesis. But this is not self-evident. Legal acts can also be defined in other ways: for example, as behaviour which is subject to the law, as opposed to ‘law-free zones’, such as social acts, acts of sovereignty, and extra-territorial acts. These legal acts are self-constituted elements of the system. They are not, however, linked to other components of the system in a hypercycle. This only comes about when such acts which bring about a real change in the law are seen as elementary operations of the law. Only then can elements be said to produce structures.

This hypercyclical linking of element and structure as the reciprocal production of legal act and legal norm seems to be the hallmark of modern law. Ladeur, for instance, speaks of a ‘looping together’ of the levels of action and norm. The circular relationship of rule and decision is at the heart of positive law. Statute law acquires validity only through the judge’s act, the validity of which can in turn be established only by reference to a statute. The same applies to the other components of the system, particularly dogmatics and process. Both must be made to refer to legal acts on the one hand and legal norms on the other. If one looks at it more closely, neither legal process nor legal dogmatics is directly linked to the other components of the system. It is the relationship between the components that provides the link. Process and dogmatics are linked to the relationship between norm and decision. They regulate the way in which the law reproduces itself. It is only when the system has created the necessary conditions for hypercyclical linking by describing and producing its own components that the actual autopoiesis of law can begin. Legal communications generate themselves through the network of legal expectations, and are regulated by legal dogmatics and legal process.

V

This view of legal autonomy has far-reaching consequences for the four basic categories used here: action, norm, process, and

75 Luhmann, 1987e, p. 17.
76 Ladeur, 1987b, pp. 265 ff.
78 See also Fikentscher’s ‘case norm’ (1977, pp. 202 ff.).
dogmatics. At this point we shall concern ourselves merely with the consequences for a legal concept of action. If actions represent self-descriptions of communications which make it possible for communication systems to reproduce themselves, then concepts of action must be seen as a system-relative construct. It is not an outside observer who defines the concept of action but the system itself. There is thus no universally valid concept of action, whether of a philosophical, sociological, or purely practical nature. It is also true that no one system-relative concept of action is superior to another. This means that it is impossible to interpret action as a phenomenon which unfolds over time and can be directly observed scientifically. Instead, we are dealing with a self-simplification of the system which can, however, then be reconstructed by an outside observer. Nevertheless, concepts of action are not arbitrary. They have to be suited to autopoiesis; that is, they have to be adapted, as self-descriptions, to describing the elementary operations which are responsible for the closure and reproduction of the system.

Even if there is no universally valid concept of action, it is still possible to formulate a general theory which can analyse the function of system-specific constructs of action. Such a theory would have to work out the relationship between communication, action, and self-reproduction.

Can this help us explain system-relative, as well as legal, concepts of action? It appears that it can, but only by confirming the system-relativity and autonomy of the various concepts of action. It can also do it in a positive way by stating the abstract conditions which must be fulfilled for a system to develop an operatively successful concept of action. In general the conditions are such that the action must represent a self-description which is suited to specific autopoiesis of the focal system. If, therefore, a new concept of action is put forward in a subsystem, either as a result of internal reflection or as the result of an external proposition, then it only makes sense to accept it if the following criteria are fulfilled: (a) as a self-description it must make further self-descriptions possible; (b) it must be capable of avoiding paradoxes if it is to avoid getting into a ‘vicious circle’; (c) it must make use of the guiding distinction in the system and not use any others, for otherwise it would not be capable of autopoiesis; (d) it can, as it were, incorporate other guiding distinctions as subcategories. These must, however, all refer back to the original guiding distinction. This means that a legal concept of action must always be made to fit the code legal/illegal. It can absorb elements of other concepts of action – for example, psy-
Law - A Hypercycle?

...chological, philosophical, or sociological ones - but these must not impair the capacity to make a decision according to the criterion of the legality or illegality of an action. A completely deterministic concept of action is thus inadmissible in law, since this would mean that the individual was no longer judged fit to choose freely. It would therefore no longer be possible to determine whether this behaviour was lawful or not. Finally (e) the concept of action must in some way meet the needs of the social environment to which it applies. It must, however imperfectly, take into account the functional requirements of other systems. One example of this is the change in the legal ascription of guilt from a subjective, individualistic concept to a more standardized, objective one which has regard only to objective states of affairs. The effect of this is that individualized elements of liability become more and more like objectivized role descriptions.

We have gone into the consequences of the theory of autopoiesis for a legal concept of action in order to draw attention to an important consequence of the paradigmatic change in systems theory. Abstract legal thought, dogmatics, and construction as self-descriptions of the legal system have to become central to legal-sociological analyses in a way that would have appeared impossible in the wake of sociological disillusionment over law, be it in the tradition of ideological critique, that of legal realism, or in the 'law and society movement'. Sociological enlightenment - does this mean today that constructivist jurisprudence is dead - long live constructivist jurisprudence?

VI

But where is the individual in all this? Does the legal hypercycle not mean that law is dehumanized?79 'No subject, no reason'?80 Is Frankenberg right in claiming that the hypercycle is 'as postmodern as the neutron bomb which eliminates the subject while leaving everything else as it was'?81 Frankenberg can take comfort and lay down his arms. He is so blinded by systems theory that he fails to notice that it is reinstating the autonomy of the individual. Despite

80 Podak, 1984, p. 734.
the rumours of the destruction of the individual, ‘the autopoiesis of consciousness’\(^8^2\) is a radical attempt to reformulate the individual’s consciousness and his capacity for self-reflection in a system-theoretical way. The objection that systems theory marginalizes the human individual for society, that it treats individuals as ‘blind agents’, as ‘dolls, without which the game could not go on’\(^8^3\) is without foundation. On the contrary, the human subject which is consigned to the social environment involves society to a considerable extent. On the one hand, the social constructs of ‘persons’ are absolutely essential for society to be able to constitute actions from communications by means of self-observation. On the other hand, the social system is disturbed by turbulent psychic systems by means of operative and structural coupling.

Autopoiesis thus breathes new life into the individual. Yet its real contribution lies elsewhere. It breaks up the unity of the individual and society, and makes us view human thought and social communication as autonomous processes which reproduce themselves according to a logic of their own. These processes are linked in three ways: through reciprocal observation, interpenetration, and co-evolution. Despite premature reports to the contrary, the autonomous reflecting subject is still with us. It has certainly not been deconstructed, merely decentred. In its unique position it is threatened by communicating social systems, law among them, which have at their disposal independent (communicative) mechanisms for understanding the world and for self-reflection. Herein lies one of the most important innovations of systems theory, one which makes it so relevant, particularly for law. Law is not identical with the sum of lawyers’ consciousnesses. Rather, it is the product of an emergent reality, the inner dynamics of legal communications.

Legal norms are not psychic phenomena. Nor are they social-psychological phenomena in the sense that they represent an aggregation of individual preferences or a consensus of actors. They are autonomous social phenomena, the reality of which resides in the mere fact that they are communicated. ‘Legal reality’ is not that part of social reality which relates to law. Nor is it a reflection of how lawyers view the world. Rather, it is the construction of a world as it comes into existence through the specific limitations (and specific opportunities) of legal communication. ‘Legal reality’ is to be distinguished from the lawyers’ view of the world in two ways. It is a

---

82 Luhmann, 1985a, p. 402.
83 Blanke, 1987, p. 162.
social, not a psychic construct; that is, it is the product of communications. And among social constructs, it is a highly selective one, since it has come into existence within an autonomous social system, the hypercyclically constituted legal system.
If we understand legal autopoiesis as hypercyclical self-closure, what does this mean for the evolution of law? The unfolding of an inner logic of development? Is the development of law an exclusively internal process? Is it appropriate to view it as dependent on social conditions if changes in the law proceed only on a circular, self-referential, closed basis?

Before we attempt to answer these questions, we should clear up some misunderstandings about the concept of legal evolution as it stands today. In recent years evolutionary theories have increasingly been used to explain legal developments.\(^1\) This has engendered criticism, and provoked misunderstandings which prevent the concept of evolution being applied to legal phenomena in a fruitful way.\(^2\) The root cause of these misunderstandings lies in the meanings imposed upon the concept of evolution since the nineteenth century. The misunderstandings relate to its normative-analytical status, the range of phenomena which it explains, and the conceptual models therein. In my view, we can only rid the concept of evolution of its burdens by making more realistic claims about what it can and cannot do.

The fiercest criticism is reserved for the controversial issue of

---


2 See e.g. Friedman, 1975, Blankenburg, 1984; Gordon, 1984; Rottleuthner, 1986a,b; Tönnies, 1987.
normative implications. According to Blankenburg, the developmental logic, phasing, and conceptual models of legal developments are haunted by the ‘spectre of evolutionism’. This threatens the clear division between empirically based theory and normative projections. Nevertheless, there is more to it than the simple opposition between theory and practice. It is not simply practical orientation versus a purely theoretical construct: both these come into play, although not at the same time. It depends on the context, be it social-scientific analysis or reflections in legal theory.

In any case we must distinguish between the various elements of the old concept of evolution. Organic growth, progress, natural causation, necessity, universality, irreversibility, unilinearity, and directionality must be separated from the analytical core of evolutionary theory. The distinction between ‘evolutionist’ and ‘evolutionary’ highlights the nature of the problem. ‘Evolutionist’ concepts, in which a particular direction is attributed to processes of change, such as progress, logic of development, and perfection, are not under discussion here. Doubts have been expressed about such evolutionist concepts, particularly as regards their unexplained normative-analytical status. However, ‘evolutionary’ concepts, which are based on the mechanisms of development rather than its direction, give less cause for concern. I am referring here to filter or trial-and-error mechanisms.

Evolution is not unequivocally goal-oriented, it is merely ‘teleonomic’, i.e. it continues to build upon the established system according to particular rules or laws. It recombines successful programmes and eliminates unsuccessful ones. Although this development is irreversible, it does not lead to a state that is ‘better’ or ‘worse’ than its predecessor. Nor does it guarantee greater viability or security, more ‘good fortune’ or ‘consciousness’. In this sense evolution is not ‘evolutionist’, i.e. it does not support the eschatological political doctrine of evolutionism, according to which mankind, following a ‘logic of development’, progresses from stage to stage until the ‘goal’ or merely the ‘end of history’ is reached.

It is not ‘evolutionist models’ of law, directed by a mysterious normative logic, that we are discussing here, but ‘evolutionary’ ones,

5 See Friedman, 1975, pp. 287 ff.
6 Bühl, 1984, p. 303.
in which the historical development of law is regulated by identifiable filter mechanisms. It would be rather difficult to ascribe 'normative projections' to such models. Claims that theories of legal evolution are unable to account for National Socialist law are also unfounded. For an evolutionary view of legal development, 'reprimitivization and mobilization of the masses, merging and subjection, catastrophes and cataclysms are the order of the day.'

The distinction between 'evolutionist' and 'evolutionary' makes it possible to clarify the question of theory and practice. How legal evolution is used depends upon the context, upon whether it is being used in the social sciences or in legal theory. Such a refined concept of evolution can be used by legal sociologists as a theoretical model for explaining the major developmental trends in law. At the same time, however, a concept of evolution as a 'more or less empirical theory with a practical purpose' can be effectively taken up in legal theory in the consideration of 'strategic legal concepts'. I would doubt whether the use of 'evolutionary' constructs in legal theory strengthens 'normative projections'. It is more likely that notions of "blind" interplay between mechanisms of legal evolution put a damper on hopes for legal progress.

I think that a theory of legal evolution has great analytical and practical power if it stops claiming to be able to explain individual events and concentrates instead on explaining structural patterns. Evolutionary theory is concerned with — and should be limited to — how the filter mechanisms of variation, selection, and stabilization interact. Certainly, individual events cannot be predicted by structural models alone. Additional explanations are necessary in order to bridge the gap between structure and events. From the point of view of evolutionary theory, these appear accidental. Causal analyses of a different kind must come in. A theory of legal evolution will be able to explain or even predict general structures of the law. It will not, however, be able to explain individual legal acts, court verdicts, laws, and administrative acts.

Thus, the common criticism of theories of legal evolution that they do not help to explain concrete legal phenomena misunderstands evolutionary explanations by both overestimating and

7 Blankenburg, 1984, p. 284.
10 Rottleuthner, 1986b, p. 222.
12 Gordon, 1984, p. 81.
underestimating them. It overestimates their capacity to explain and predict singular historical phenomena. At the same time it underestimates the value of structural explanations. Explaining structures is no less important than explaining events. Both approaches make a contribution to scientific debate, and have some bearing on practice.

This puts the critique of what Gordon termed ‘evolutionary functionalism’ in law in a somewhat different light. Gordon’s main point is that actual developments are reinterpreted as functional necessities. Legal forms appear as a necessary response to social requirements. However, there is a fundamental misunderstanding here. The point about the combination of functional analysis and evolutionary theory is that it reconstructs history from the perspective of functional equivalents, of possible alternatives. It is precisely this modern ‘equivalence functionalism’ that produces the awareness of contingency, the consciousness of historical alternatives so urgently demanded by Gordon. Gordon draws attention to the submerged ‘human’ progressive alternatives in order to make them available again for political action. That is a commendable normative perspective. The question, however, is whether equivalence functionalism offers more extensive analytical instruments rather than good political intentions do. Elaborating a conceptual apparatus which allows comparison and evaluation of various alternative solutions to historical problems, other resultant problems, and their side-effects seems more likely to be fruitful than lamenting over submerged discourses.

In fact, the idea of submerged discourses must be generalized by breaking down causal relationships between society and law into contingent requirements and contingent solutions to problems. This is precisely what modern equivalence functionalism has taken as its starting-point. It achieves it by making the solutions to a problem functionally equivalent and multifunctional. Furthermore, it must be made clear that every solution to a problem can in turn be defined as a problem. The choice of problem is contingent. This, however, is not a criticism of evolutionary functionalism, but the very basis of it.

Gordon has another criticism of causal models of law and society. It has been demonstrated time after time that the social causes and effects of law vary considerably, despite the fact that they start from similar conditions. Whether one can level this against evolutionary functionalism, as Gordon does, seems doubtful, since equivalence functionalism is always conscious of contingency. It should certainly be seen as an argument, however, for the highly developed autonomy of the legal system. Indeed, it is also an argument for the uncon-
trolled effects which self-reproductive social systems exert on each other in their co-evolution.\textsuperscript{13}

In conclusion Gordon asks whether it might not be more appropriate to abandon grandiose functionalist explanations and opt for more concrete explanations of developments by reference to interest groups and their strategies. Systems theory’s response to this is to build upon functionalist explanations, rather than abandon them entirely. We are dealing with two different levels of analysis. On the level of concrete interactions, particularly in the political system, legal norms can adequately be explained as the result of power and decision-making processes by various interests and interest groups. The question then arises as to what extent, if at all, these legal norms represent functional solutions to social problems.

II

The next step is to determine which elements of evolutionary theory are still relevant today. From the morass of notions of legal progress, the logic of normative development, the universal history of law, and so forth, I should like to single out three key ideas: (1) the ‘blind’ interplay between variation, selection, and retention; (2) the combination of ontogenetic and phylogenetic development; (3) the co-evolution of law and society and other social subsystems. If we set these ideas in the context of autopoiesis, then they can make a useful contribution to further analysis.

It is thanks to Campbell that biological analogies of evolution have become fruitful for social science. Socio-cultural evolution is possible only when the differentiation and interplay of the three universal functions of evolution referred to above are guaranteed by specific social mechanisms.\textsuperscript{14} Luhmann took this idea further, and applied it to the evolution of law. He suggested that specific legal mechanisms should be grafted on to evolutionary functions.\textsuperscript{15} He proposed that in the legal system norms take over the function of variation, institutional structures (particularly procedures) that of selection, and dogmatic conceptual structures that of retention.

This should free us from the unproductive notion of unilinear progress in legal development. More important, it should also free us from the legacy of social Darwinism, which has put major

\textsuperscript{13} For more on this, see sect. II and V.
\textsuperscript{15} Luhmann, 1970; 1985c, ch. 3.
obstacles in the way of an impartial investigation of evolution.\textsuperscript{16} Apart from the normative hypostasizations of evolution in social Darwinism, the main difference between it and socio-cultural evolutionism is that the units of evolution are not human individuals and their aggregates — groups, nations, races — but socio-cultural phenomena — ideas, customs, and forms of organization. ‘Survival of the fittest’ is not the selection mechanism for cultural evolution. This is an extreme, rather improbable case. The co-existence of a variety of viable socio-cultural phenomena represents the normal process of evolution.

Socio-cultural theories of evolution must also be clearly distanced from socio-biological approaches which have recently gained currency in the sociology of law. Socio-biology has stirred up controversy by identifying the ‘selfish’ gene, rather than the individual or the group, as the unit of evolution. This is the basis on which it has attempted to explain the development of patterns of social behaviour.\textsuperscript{17} Socio-biologists insist that social evolution is biological. They thus fail to take account of the autonomy of social systems and their evolution. As we saw in chapter 3, it is the essence of social and legal autopoiesis that society and law represent emergent systems of communication. Although these have an organic and psychic basis, they are self-referentially closed in their mode of operation. Biological evolutionary mechanisms can thus have no direct impact on social or legal development. Socio-legal evolution, defined as the interplay between variation, selection, and retention, can occur only if the corresponding mechanisms have emerged within the communicative sphere. The unit of social or legal evolution is neither the human individual nor a grouping of individuals nor a ‘selfish’ gene, but society or law itself as a system of communications. This does not, of course, exclude the possibility that genuine biological evolution and genuine social evolution might reciprocally influence each other. However, any such influence can be conceived only as a reciprocal relationship between autonomous systems which evolve according to their own logic. It is not ‘biocultural’ evolution in the sense of the biologically determined social development described by Bühl.\textsuperscript{18} What we are talking about here is co-evolution. This is defined as the development of autonomous

\textsuperscript{16} Cf. R. Hofstadter, 1945; Francis, 1981.
\textsuperscript{18} Bühl, 1984, pp. 305 ff.
evolutionary mechanisms in closed systems and their reciprocal structural coupling.19

It appears as if the concept of evolution has given us more problems than we bargained for. For example, the phenomenon of 'stasis'20 is hard to interpret from the point of view of evolutionary theory. If cultural phenomena like law are exposed to the constant pressure of environmental selection, how can we account for the fact that certain legal structures remain stable over a long period of time, despite the many inducements to change? A similar criticism has always been levelled against evolutionary functionalism. How can social systems maintain their ‘identity’ in the face of constant change?21 We must also ask ourselves how we explain the fact that the relationship between social developments and legal developments is underdetermined. As Gordon rightly points out, ‘Comparable social conditions...have generated contrary legal responses, and comparable social forms have produced contrary social effects.’ Moreover, ‘Legal forms and practices don’t shift with every realignment of the balance of political power.’22 How can a post-Darwinian evolutionism deal with these problems?

Obviously the solution must lie in the fact that social phenomena such as law dispose of a higher degree of autonomy in the process of evolution than the theory of selective environmental pressures suggests. According to this theory, evolution is nothing more than a ‘meandering process almost entirely shaped by environmental contingencies, rather than insulated from them’.23

One solution considered by Campbell is that the process of organization which goes on within the system, the ‘organisational “reality”’ itself, could determine whether there is stability or change. However, he rejects this solution on account of its ‘undesirable circularity’. In so doing, he blocks what we will see is the most promising solution to the problem of ‘stasis’. This solution does not avoid circularity: on the contrary, its whole approach is based on it.

It is the autonomy of normative phenomena that leads Habermas to suggest a combination of two different models of evolution.24 In his view, post-Darwinian theories of social evolution, which are

19 For more on this, see sect. V.
20 See Wake et al., 1983.
21 Habermas, 1971, pp. 147 ff.; 1975, p. 3.
22 Gordon, 1984, pp. 100 ff.
23 Campbell, 1969, p. 70.
24 Habermas, 1976, 1979; 1984, ch. 2, sect. 4; 1987, ch. 8, sect. 2.
based on the interplay of variation, selection, and retention, are not in a position to analyse the moral-normative sphere of society and its potential for autonomous development. It is for this reason that Habermas supplements the system/environment model of evolutionary functionalism with a model of ‘rational reconstruction’ which describes autonomous learning processes in the cultural-normative sphere. Following on from the tradition of Piaget and Kohlberg, he uses theories of moral development, and translates them from an individual to a social context. The ‘evolutionary dynamics’ of basic social structures is confronted with an ‘evolutionary logic’ of normative structures of which law is one. The consequence of this interplay is a sequence of ‘principles of social organisation’ which is irreversible, leads to a structured hierarchy, and follows a developmental logic.

An inherent developmental logic in law would in fact solve the three problems of socio-cultural evolution discussed above: evolutionary stasis, the identity of the evolving legal system, and the underdetermined nature of the relationship between society and law. However, by introducing the second model of evolution, an inherent developmental logic in the normative sphere, we lose the advantages of a modern evolutionary theory discussed above. Habermas’s model of ‘rational reconstruction’ is essentially a new variant of the embryological model of development: ‘The evolution from an “indefinite incoherent homogeneity to a definite coherent heterogeneity” takes place as a result of internal dynamics...as an orderly, progressive, goal-directed unfolding.’25 And the question of which mechanisms affect the transfer from the development of the individual to the development of social morality remains unanswered.26

The ‘early’ Luhmann27 resolves the problem of the evolutionary autonomy of law in another way. He leaves the basic model of variation, selection, and retention unchanged, but enriches it by multiplying the system references in which evolutionary mechanisms emerge. The three evolutionary mechanisms thus operate ‘endogenously’ as well as ‘exogenously’. They work in the interplay of rules, institutions, and dogmatics within the law. They also operate through analogous mechanisms in other social subsystems which influence the law. Socio-legal evolution is thus characterized by the
interaction between the ‘endogenous’ evolution of the law on the one hand and the ‘exogenous’ evolution of the social environment on the other. The relative importance of endogenous evolutionary mechanisms (norms, procedures, dogmatics) is either increased or diminished by certain principles of social organization. In either case, these principles influence the internal dynamics of the legal system from the outside. The law is thus adapted to the various developmental stages of social differentiation. The dominant principle of organization in society (segmentation, stratification, functional differentiation) creates distinctive configurations in the legal system and, occasionally, specific ‘bottlenecks’ for the development of law.

In segmental societies, the problem facing the evolution of ‘archaic law’ is the production of a sufficient variety of normative structures. It is possible to resolve this problem only in stratified societies with a differentiated hierarchical order. These are in a position to create a greater wealth of norms. However, one of the problems which besets the law of ‘pre-modern societies’ is the problem of selection. For functionally differentiated societies are characterized by a massive overproduction of norms. ‘Positive law’ may have got round the problem of selection by institutionalizing highly developed legal procedures. However, traditional dogmatic-conceptual structures have so far proved insufficient stabilizing mechanisms.

The problem with this model of interaction between endogenous and exogenous evolution is that it still works with the assumptions of open-systems theory. According to this rather over-simple view, the evolution of the environment has a direct effect on the legal system. As we might expect, therefore, this model offers no solutions to the above-mentioned problems of modern evolutionary theory: namely, ‘stasis’, system identity, and underdeterminacy.

III

Can the theory of autopoiesis solve these problems? As far as general evolutionary theory is concerned, some supporters of autopoiesis have claimed that it can. In their view, autopoiesis has a limiting effect on evolution. It defines the boundaries of every evolutionary change. ‘Stasis’ and the maintenance of the identity of

28 Roth, 1982; Wake et al., 1983.
the system are dependent on the autopoiesis of the system: 'The system can undergo any change, provided the circular organisation is not interrupted.'

In the general discussion of autopoiesis, people have become aware of the need to revise the concept of evolution under the conditions of autopoietic reproduction. These authors criticize an orthodox neo-Darwinism which understands the developmental process as the willingness of an informationally open system to respond to the demands made upon it by the environment. Against these external pressures, the importance of autopoietic organization for evolutionary selection is underlined. By organizing their self-maintenance, self-reproductive systems define the limits of their tolerance of structural change. The most important feature of evolution is the maintenance of the system’s internal cyclical structure, not its ability to adapt to the environment.

I would like to look further at this argument, and expand upon it somewhat. What has been said about selection will now be applied to variation and retention. I shall argue that the main impact of autopoiesis on law is to transpose the evolutionary functions to within the system itself, to internalize the mechanisms for variation, selection, and retention. This process of internalization shifts the dynamic of evolution from the environment into the system itself, and subordinates it to the logic of legal autopoiesis. What we are witnessing here is a shifting of the balance from ‘external’ social mechanisms of evolution towards ‘internal’ legal mechanisms. External evolutionary mechanisms can now have only a ‘modulating’ effect on legal developments, as internal structural determinants begin to play a key role in the evolutionary process. Or, to put it another way, only an autopoietically closed legal system is capable of evolution.

Indeed, it is principally the law’s capacity to evolve, defined as the interplay of specifically legal evolutionary mechanisms, that distinguishes it from the controversial economic theories of legal evolution. There are at least two versions of this theory. According to Hayek, the processes of variation and selection which characterize cultural evolution guarantee the formation of spontaneous orders of appropriate legal rules. This is in sharp contrast to political processes, in which rules are arbitrarily selected and imposed.

29 Wake et al., 1983.
31 Roth, 1982.
on a social order in a blatant act of interventionism. The second version can be viewed as a non-normative, positive version of Posner’s question: ‘Is common law efficient?’ According to this view, common law tends to result in the establishment of (Pareto) efficient legal norms as the inevitable outcome of the conflictual ‘relitigation’ process. A non-efficient distribution of property rights will continue to produce incentives for relitigation until a state of efficiency is reached.

Both versions systematically underplay the autonomy of the legal system, which is equipped with its own evolutionary mechanisms. Legal norms are viewed entirely as the outcome of processes of economic selection. There is no attempt to deal with mechanisms of variation within the law which alter the substance of legal norms; nor is any consideration given to how these are selected by legal institutions according to their own criteria or to their stabilization in legal culture. In Hayek’s case, this leads to a grotesque overvaluation of traditional customary law and similar ‘spontaneously’ formed orders and to a devaluation of political law making as ‘constructivist’. In the case of Posner’s theorem, it leads to a systematic failure to note the capacity of the legal system to select economic input. If we are to find a way out of this impasse, we must adopt models of the co-evolution of economic and legal processes (see section V).

In any case, the autopoietic closure of the legal system means that law cannot be seen simply as a product of social evolution as a whole. Nor is it possible to locate even one of the three evolutionary mechanisms outside it. Models of evolution which lump legal and social development together thus are only plausible for the legal system in its pre-autopoietic state.

If what autopoiesis means for evolution is the internalization of variation, selection, and stabilization, then only in law’s pre-autopoietic state are all three functions external to the legal system. Any changes in the law are brought about by changes in the social environment, particularly by the normative social structures generated by them. Social norms directly determine the extent to which legal norms can vary. The selection process of legal norms is carried out in diffuse social contexts. Norms are tried and tested in society, and gradually gain social recognition. What brings about the

retention of legal norms and thus the establishment of a legal tradition is a body of ideas widely shared in a society – world-views, myths, dogmas, and ideologies. Any form of legal doctrine must be anchored in a wide variety of natural-law ideas.

After the emergence of autopoiesis, internal mechanisms take over the evolutionary functions. Legal evolution can be subject to external triggers, but it can no longer be directly ‘brought about’ by an outside agent. From now on it follows an internal logic of development, the logic of legal autopoiesis.

Variation within an autopoietic subsystem can take place only within the limits of ‘structural drift’.34 When the legal system is autopoietically closed, then Maturana’s ideas apply also to the law, so that at any moment of its operations the structure of law as an autopoietic system specifies the structural configuration into which it will be transformed as a result of structural change. This happens irrespective of whether it results from its own internal dynamics or from its interaction with the medium.35

Whyte expressed it in a similar way: ‘The conditions of biological organisation restrict to a finite discreet spectrum the possible avenues of evolutionary change from a given starting point. The nature of life limits its variation and is one factor directing phylogeny.’36

Extra-legal processes can have only a ‘modulating’ effect on the production of variety in the law. Events in the outside world do not really have much effect on what goes on inside the system. Environmental factors act only as triggers for possible change within it.37 Social conflicts trigger processes within the law which formulate legally specific conflicts of expectations. It is these which are ultimately responsible for innovations in the law; but they have little in common with the social conflicts of the parties to the dispute. Social conflicts are not merely ‘translated’ into legal terminology; they are reconstructed as autonomous legal conflicts within the legal system. They become conflicts of diverging legal expectations or diverging statements of fact. The minor variations which the law undergoes from day to day and which make it evolve are thus not the direct product of social conflict, but are communicated from within the law itself in a form which is unrecognizable to the participants. Hence the complaint about the ‘expropriation of conflicts’,38 the idealistic demands of the de-legalization move-

34 Maturana and Varela, 1988, ch. 5.
Blind Legal Evolution

ment,\textsuperscript{39} and the calls for ‘alternatives to law’.\textsuperscript{40} Similarly, in the legislative process it is not social interests which produce changes in the law; it is only those social pressures which are perceived on the screens of the legal system itself that can have this innovatory effect. The same applies to the processes of innovation in legal doctrine. Here the success of external innovations depends on the extent to which they can be formulated in terms of legal doctrine’s ‘criteria of relevance’.\textsuperscript{41}

The prime locus of legal selection is also the system itself. Social acceptance is no longer the factor governing selection. Legal autopoiesis ensures that this process takes place within the law. Social norms can no longer be transplanted directly into the law. An autonomous act of selection (for example, a legal standard or a judicial decision) is brought into play. It is this which decides whether a norm is valid or not. The main criteria for selection are whether the innovation fits in with the existing normative structures and whether it is compatible with legal autopoiesis (the legal code). At this point we can refer back to what was said on legal acts (see chapter 3, section V). Of the various claims arising from expectations which are created within the legal system, only a few are accepted as ‘valid’. The only ones which gain acceptance are those which are defined as changes in the law by legal acts which have themselves been defined within the law. Law itself defines the preconditions of a legal act and thus the preconditions of every change in the law.

Finally, stabilization mechanisms have to be created within the system itself to guarantee the retention of legal norms. They are to a diminishing extent embedded in broad social contexts, in the moral, political, and religious spheres, and are increasingly generated from within the law itself by reference to other rulings on conflict, sets of norms, legal principles, and relationships within the system.

IV

It seems to me important, particularly in the context of evolutionary stabilization, to incorporate the distinction between ontogenetic learning and phylogenetic development in the theory of legal evolution.\textsuperscript{42} I consider this a useful distinction in a theory of the

\textsuperscript{39} Abel, 1982.
\textsuperscript{40} Blankenburg et al., 1980.
\textsuperscript{41} Cf. Wiethölter, 1986b, p. 53; Heller, 1985, pp. 183 ff.
\textsuperscript{42} e.g. Maturana and Varela, 1980, pp. 102 ff.; 1988, ch. 5.
evolution of norms as introduced by Habermas. However, I believe that the ontogenetic unit must be defined differently. It is not the child or human beings themselves in their moral development that form the ontogenetic counterpart to social development. Rather, it is the individual interaction which makes social experimentation possible. From the point of view of systems theory, Habermas’s attempts to relate the various stages of the moral development of the child to the development of social norms would be seen as a problem of the co-evolution of two systems which reciprocally influence each other, a problem which is unrelated to the notions of phylogenesis and ontogenesis.

The notions of phylogenesis and ontogenesis are thus applied not to the relationship between the individual and society, but to the relationship of a single interaction to society as a whole or to social subsystems. In law, this distinction is applied to the relation of a trial to the whole legal system. The locus of ontogenetic learning is in the interaction of the trial itself. There are effective mechanisms for variation and selection in the trial. Retention, on the other hand, is limited to the short ‘memory’ of the interaction itself. Phylogenetic development – and hence evolution – occurs only when mechanisms of retention intervene at the level of the legal system as a whole or at the level of functional subsystems. They ‘bequeath’ what has been learned in the process of interaction. A complex transitional mechanism needs to be devised to enable insights gained in one trial to be applied to legal doctrine, and thus to become part of the ‘memory’ of the law.

Such an interweaving of episodes is essential if the law is to evolve, for it establishes principles of selection which extend beyond the individual legal episode. It is responsible for ensuring that evolution proceeds from learning.

Even the individual legal episode represents a differentiated system. The individual trial, which is composed of interactions and other communications (written procedure), uses the legal code, has a procedural history, and develops its own structures. However, it is only transitory; it has a beginning and an end. The interweaving of transitory episodes provides the individual legal process with the necessary legal structures, and makes it possible to skim off the normative ‘surplus’ produced in the course of the procedure for future use in the legal system.

43 Habermas, 1976, pp. 12 ff.
44 For more on this, see Teubner, 1987b, pp. 432 ff.
The combination of phylogenetic and ontogenetic development in the law — that is, the interplay of legal culture and the individual trial — must be conceived of as an interlocking of two communicative cycles. Legal process is, as it were, the area in which legal hypotheses can be tested. It represents the interface between normative expectations as mechanisms of variation and legal decisions as mechanisms of selection. The second communicative cycle, the one concerned with the tradition of legal culture, decides which elements will be retained. It is precisely to the circular relationship between these two cycles of communication that the concept of 'legal validity' refers. On the one hand, decision making in legal process refers back to traditional legal norms which have arisen through recursive reference to other decisions taken in particular legal transactions. On the other hand, it represents the starting-point for new developments in the law within legal culture.

Until now, our discussion of autopoiesis has given the impression that evolution is internalized in social subsystems, and takes place only as an isolated development within autonomous social spheres. It would indeed be misleading to exclude the environment from evolutionary processes. Autopoietic closure does not mean that the system is independent of its environment. Evolution’s relation to the environment is not brought about, however, by direct, causal, external influence on legal developments. Rather, it evolves through processes of co-evolution in which the co-evolving systems exert an indirect influence on each other. In co-evolutionary processes it is not only the autopoiesis of the legal system which selectively influences the development of its own structures. The autopoiesis of other social subsystems and that of society itself — albeit in a much more indirect way — also have an effect on the selection of legal changes.

The relationship between phylogenetic and ontogenetic development is also of crucial importance for this 'process symbiosis'. Co-evolution revolves around the individual episode or, in the case of law, the individual trial. Social interactions do not as a rule participate in the autopoietic cycle of one subsystem only. They

are involved in a variety of different systems. Expectations of the various subsystems coincide, complement, supplement, and conflict with each other in the individual trial, the decision-making process in a business concern, or the family dispute (see chapter 5, section VII below). It is in the individual interaction that it is negotiated, as it were, which expectations will succeed. The individual interaction determines whether or not elements of the various subsystems are compatible. For it is here that it will become clear whether, if at all, communication can be reproduced, given the pressures exerted by diverse sets of expectations.

The regulatory trilemma, which I have analysed elsewhere, becomes apparent in the individual interaction. In the absence of 'structural coupling', we are faced with either the disintegration of one or other of the subsystems or their mutual indifference. In the case of totally divergent expectations, either interaction as a whole breaks down or it does not happen at all. Alternatively, individual elements of expectation are ruled out as incompatible and irrelevant. Thus true disintegration cannot occur at the phylogenetic level, or, at least, only in extreme borderline cases. It does occur at the ontogenetic level, however. The result is an interesting turn-about: what leads to disintegration at the ontogenetic level leads to indifference at the phylogenetic level.

Co-evolution can thus be thought of in the following way. Co-variation is triggered by the impulses to variation which stem from the various subsystems. These must pass through the needle's eye of the singular interaction, and can then exert pressure on each other for change as parts of the system which reciprocally influence each other. Co-selection takes place in the following way: the structures which emerge in the course of interaction develop by being exposed to the process of selection by various autopoietic systems. Co-retention occurs in such a way that the expectation which has been singled out in the process of interaction has to be fitted into the various 'cultures', world-views, and dogmatics of different subsystems. In the long term the cultures of the various subsystems will exert a reciprocal influence on each other. These do not become more like each other through direct comparison of world-views and engagement in cognitive exchange, but through having to be compatible with other expectations in actual interaction. This can mean that the world-views in different subsystems are thoroughly incompatible on the basis of their cognitive assumptions, but are

46 Teubner, 1987d.
nevertheless compatible in the consequences of their expectations for individual interactions. One example would be the idealistic image of the legal subject who has the freedom to choose, on the one hand, and the image of a market-regulated economy, on the other. Although they do not necessarily share the same cognitive assumptions, their expectations have the same consequences: for example, contractual freedom and contractual loyalty.

In co-evolution it is often hard to reconcile the various subsystems at the level of concrete processes of interaction. It is in the processes of interaction that the demands of the various subsystems come into conflict. When these problems threaten the very existence of the system, they can lead to the conscious introduction of regulatory devices which mediate between systems and give fresh impetus to the process of co-evolution. What we are dealing with here, then, are systems of negotiation which operate between the systems and are aimed at reconciling divergent world-views and expectations. This brings us to the subject of regulated co-evolution, an issue we will deal with in more detail in the next chapter, when we look at social regulation through reflexive law.
Can the regulatory goals of modern law be reconciled with hyper-cyclical closure and the 'blind' co-evolution of law and society? Are Nocke, Rottleuthner, and Tönnies right in thinking that legal autopoiesis is an organicist conception of society which is pitted against legislative mania, state activism, and constructivist interventionism? Does autopoiesis once again conjure up Savigny's 'silently operating forces' which will free us from the feeling that the 'pursuit of legislation' is the 'vocation of our time'? This would only confirm what critical observers have always known when they uncovered the political functions of legal autopoiesis in law. And protagonists of autopoiesis seem to confirm these ideological suspicions. Luhmann and Varela both claim that the paradigm change from open systems to autopoietic systems brings about shifts in emphasis from design and control to autonomy and sensitivity to the environment. Put more concisely, they claim a shift from planning to evolution.

I have doubts about this discussion of the political functions of autopoiesis. Who can decide in advance what political camp makes use of which version of autopoiesis and how? There are enough points of contact: for the neo-conservative there is the principle of subsidiarity; for the neo-liberal there is self-regulation through the market; for the neo-socialist there is the autonomy of democratized social subspheres; and finally there are autonomous networks for the neo-ecological theorists. Self-organization is at odds with the

---

Social Regulation through Reflexive Law

...traditional political co-ordinates of the simple left–right model. An ideological critique which intends to reveal the theory's political functions frequently falls short of the mark. It underestimates the autonomy of theoretical and political discourse, as well as the complex relationships between them.

I would like here to analyse the relationship between legal autopoiesis and social regulation. This is obviously related to a central characteristic of autopoietic systems: the relationship between closure and openness. We must attempt to shed some light on Morin’s enigmatic statement ‘L’ouvert s’appuye sur le fermé’ as far as the legal system is concerned. How is it conceivable that the radical closure of legal operations also means its radical openness in relation to social facts, political demands, and human needs? As Zolo put it: ‘Does the organisational closure imply only the circularity of the self-productive process or does one have to postulate a sort of cognitive isolation which renders the relation between the system and its environment and vice versa non-informative?’

My tentative answer is that social regulation through law is accomplished through the combination of two diverse mechanisms: information and interference. They combine operative closure of the law with cognitive openness to the environment. On the one hand, by generating knowledge within the system itself, law produces an ‘autonomous legal reality’. It orients its operations according to this, without any real contact with the outside world. On the other hand, the law is connected with its social environments through mechanisms of interference which operate between systems. The ‘coupling’ of the legal system with its actual environment and the reciprocal restraints that arise from this are the result of the overlapping of events, structures, and processes within and outside the law.

One way of describing the joint action of the two mechanisms of information and interference would be to say that law regulates society by regulating itself. This would be a variation on Piaget’s well-known aphorism ‘Intelligence organizes the world by organizing itself’. It is the theme of the regulation of others through self-regulation that will be the main focus of this chapter.

There are two main questions to answer before we start. First of all, does autopoiesis help us understand better than previous theories

---

5 Zolo, 1992.
the problems that social autonomy poses for legal regulation? Secondly, given the high degree of legal and social autonomy, is the legal regulation of society still possible, however indirect, complicated, paradoxical, circular, or contradictory it may be? With these questions, I hope to contribute something to the elucidation of the new concepts of law that recent debates on the regulatory crisis have thrown up. At the moment, these do the rounds under a variety of exotic headings, such as post-modern law, post-interventionist law, proceduralized law, neo-corporatist law, ecological law, mediating law — or, as I have it, reflexive law.

II

This debate is fraught with misunderstandings, for which I am partly responsible. Three misunderstandings tend to cloud the central issues. One is a technical legal matter, one concerns legal policy, and the third has to do with legal theory.

The term ‘proceduralization’ of law is easily misunderstood from a technical-legal point of view. To interpret it as a recommendation to a ‘post-interventionist’ legislator to do without substantive legal norms and rely exclusively on procedural law instead would be to miss the point. Of course there has been procedural regulation at many times and in many societies. It is also obvious that every act of procedural regulation has substantive premisses and consequences. Of course pure organizational law has a long tradition. Of course pluralistic representative constitutions and ombudsmen within the organization are no panacea for all social ills. But proceduralization can be understood only in the context of its theoretical background. How does legal rationality respond to a high degree of functional differentiation in society? Or, as Wiethölter put it, can we

12 Görlich and Voigt, 1985.
conceive of contemporary law as a basis for "rational" practical actions under "system" conditions? This is where the core of the idea lies, not in the legislator's commitment to procedural law. 'Proceduralization' is thus less a technical-legal recommendation than a reaction to two theoretical developments. First, the theory of legal argumentation has lately turned from the 'systematics versus topics' confrontation to a 'proceduralized' conception of legal discourse. Secondly, in different theoretical contexts, the emphasis has been on how much can be achieved by proceduralized regulation or by planning (decision on the premisses of decision) or reflexivity (application of processes to processes). Proceduralization can be understood as an attempt to bring the two developments together. As G. Schmid has pointed out, substantive legal norms remain indispensable. It is only that the process of their production and justification has to give way to a 'socially adequate' proceduralization.

'Proceduralization' is easily confused with procedural law, and 'materialization' with material legal norms. For example, Hartmann observes a shift in labour conflict from the level of collective bargains to the level of firms and an increase in the case-loads of conciliation agencies and labour courts. He takes both as evidence that that's the end of reflexive law. In posing the issue as if procedural law were the alternative to material law, Hartmann gets it wrong. Tendencies towards juridification on a decentralized level are certainly not irreconcilable with the concept of reflexive law. The question is whether we are dealing with command and control regulation through state economic policy or with regulation through decentralized mechanisms of self-regulation. In the latter case, the law of the state regulates only the contextual conditions. If we look at Hartmann's case-study in this light, we can place it in a line of development marking the beginnings of reflexive law. We can see decentralizing tendencies right down to the level of the firm, activities of conciliation agencies as new collective actors alongside others, increased involvement of lawyers in the legal programming of decentralized regulation, and at the same time increased case-loads for labour courts as a result of that same legal programming.

16 Wiethölder, 1985, p. 247.
Ladeur has given an illuminating answer to the question of what type of substantive orientation could help us find our way around proceduralized legal discourse. At the same time he highlights some differences of opinion in the ‘proceduralist’ camp. Ladeur demands a ‘proceduralist understanding of the law’, which ‘is not based on sound judgement, consensuality, veracity and other primary virtues, but on specifically procedural secondary virtues like keeping a variety of options open, tolerating a variety of opinions (and not reaching a consensus), making a variety of language games mutually accessible and guaranteeing interchangeability among them by breaking up self-reinforcing discourses’.22

A second misunderstanding concerns legal policy. We can interpret the insistence on social autonomy normatively, and read it as a policy programme for ensuring social freedom. ‘Reflexive law’ can thus be equated with neo-liberal conceptions, strategies of deregulation and pluralist self-regulation.23 Social autonomy, however, is first and foremost a cognitive problem for the law. As far as the law is concerned, we are dealing with the factual rather than the normative dimension of social autonomy. Social autonomy presents lawyers or politicians with the problem of knowing what it is they are actually trying to regulate. This is so irrespective of whether the aim is to unleash market forces through legal policy or subject them to political constraints. It also does not depend on whether law is used to safeguard the autonomy of alternative movements or impose discipline on them. To set it in the Italian context, if one wants to fight the Mafia, first of all one has to understand its organizational autonomy. So how does law understand the legal reality of autonomy in order to be able to regulate it — in whatever direction? Or, as Bühl puts it, ‘Autopoiesis does not mean simply letting things run their course. What autopoietic control in fact means is arranging the interaction and the systems which are to be controlled and developed in such a way that they can more or less regulate themselves and control each other.’24

The final misunderstanding concerns the theoretical status of reflexive law.25 Are we dealing with an analytical theory of the development of law-in-society? or a normative conception? Should

---

legal developments be ‘talked into existence’? Should the analytic theory of evolution be used to guarantee ‘normative projections’ in a quasi-scientific way? In chapter 4 I have attempted to vindicate the contemporary theory of legal evolution. Here my aim is to defend the dual character of the idea of reflexive law as both normative and analytic. Reflexion in law means both empirical analysis and normative evaluation.

This does not mean that every theoretical debate within the legal system should be described as reflexive law. The concept needs to be qualified through two further limitations. First, we have to evaluate the current position of law in a functionally differentiated society. Second, we have to consider the operative consequences of such evaluation: that is, the way in which the choices made in law are oriented towards the self-defined legal identity. We can thus talk of reflexive law if, and only if, the legal system identifies itself as an autopoietic system in a world of autopoietic systems and faces up to the consequences. This highlights the three misunderstandings described above. All these approaches tend to focus exclusively on minor aspects of the central problem. They fail to give a complete picture of how the law deals with its own autopoiesis and with the autopoiesis of social subsystems.

III

Let us briefly recapitulate the central elements of autopoietic law, before going on to look at issues of regulation. Society is understood as a self-regulating system of communication. It is made up of acts of communication which generate further communications. Specialized cycles of communication have developed out of the general cycle of social communication. Some have become so thoroughly independent that they have to be regarded as second-order autopoietic social systems. They have constituted autonomous units of communication which, in turn, are self-reproductive. They produce their own elements, structures, processes, and boundaries. They construct their own environment, and define their own identity. The components are self-referentially constituted, and are in turn linked with one another by means of a hypercycle. Social subsystems are operatively closed, but cognitively open to the environment.

26 Münch, 1985, p. 23.
The legal system in its present form can be viewed as a second-order autopoietic social system. It is constituted by specific communications about legality and illegality which reproduce themselves as legal acts by means of legal acts. They are regulated by specialized legal expectations, and define the boundaries of the system through normativity. In its operations the legal system constructs a unique environment. This ‘legal reality’ is to be understood in a strictly system-relative way as the construction of an internal model of the external world. It represents the cognitive openness of the operatively closed legal system.

Other cycles of communication have, like law, also achieved autopoietic closure. This is particularly the case with formal organizations viewed as operatively closed decision-making cycles and with functional subsystems such as politics and the economy. Here, too, the same relations prevail between self-reproducing elements, processes, and structures. Here, too, the systems construct their own environment, and once again we find the interplay between operative closure and cognitive openness.

Coping with this dual autonomy — the autopoiesis of law and that of social subsystems — sets the agenda for contemporary regulation. If autonomy is by definition self-regulation, how, then, is legislation as external regulation possible? This would not be so much of a problem if the law’s function were only resolving social conflicts. For the resolution of conflicts through law can be construed as legal self-regulation operating strictly within the system itself. The legal system detects the presence of conflict in its social environment with its internal sensors (roles, concepts, doctrines). It then reconstructs these conflicts in its own terms as conflicts of expectations, processing them through norms, procedures, and doctrines. Finally, it produces a binding resolution of the conflict in the form of the ratio decidendi to which new legal communications can in turn be linked. All this takes place exclusively within the limits of legal communication as defined by the law itself.

Legislation is thus also to be construed as a process which takes place exclusively within the law. The production of norms in the strict sense of the word is divorced from judicial procedures of

---

29 See also Dupuy, 1987.
30 Teubner, 1985b, 1986c, 1988a,b; Gomez and Probst, 1985; Luhmann, 1988a; Knyphausen, 1988; Clune, 1992; see ch. 7, sect. IV below.
conflict resolution, and is subjected to a specialized legal procedure. In a legally constituted procedure which culminates in a legally defined legislative act, legally relevant information is selected, and then brought together into a binding proposition of law.

Difficulties arise when it comes to the enforcement of law’s claims in society, when the verdict is to be put into effect. The bailiff can no longer conduct his business solely within the confines of the law; he must at some stage go out into the big bad world. Things become even more difficult when the law is required to move beyond the individual case and exert a broader, more systematic influence over the environment, when it is required to introduce effective regulation and control. This is precisely what is required of it in modern regulatory law. If politics specifically uses law as a means of control, then the legal system must develop links with social reality. But how can it do so if it is caught up in its own circle?

Social autonomy thus becomes a problem for legal regulation under the following three conditions:

1. autopoietic closure of the law,
2. autopoietic closure of the regulated subsystem,
3. interventionist claims exercised by the political system which is also autopoietically closed.

A truly closed society! There is no way out of the operatively closed legal system. Since legal actions always produce only legal actions, and normative quality is always conferred only on other acts or events, no legal output is conceivable. There is no way into the operative closure of the regulated subsystems. Organizational decisions are produced by organizational decisions, payments by payments. Neither can be regulated directly from outside. As von Förster put it, there is nothing but ‘order from noise’. For society, all legislation does is produce noise in the outside world. In response to this external disturbance, society changes its own internal order.

To sum up, then: social autonomy as a problem for legislation is a relation of twofold circularity. How are we to break out of the circle of the law through legislation and penetrate the closed circle of social worlds?

Before we look at regulatory strategies, we must first ask ourselves how this highly artificial construct helps us understand the problem. Does it help us describe the famous ‘regulatory failures’ more accurately? Does it help us see them differently from previous discussion of the obstacles to legislation, law, and social change; the regulatory crisis; and the problems of policy implementation?

Normally, the debate in law and sociology treats social autonomy as merely the freedom of the individual actor to deviate from the legal norm. Recommendations as to what regulatory strategy should be adopted are then made accordingly. Lawyers see norms being disobeyed and flouted, and react by introducing new norms; disobedience and circumvention of norms is forbidden. Sociologists of law deal with the problem of autonomy as it relates to the individual by applying a model of the efficacy of the norm: norm, sanction, reaction. A classic example is Theodor Geiger, according to whom the extent to which a norm is binding is determined by the relationship between conformity to it and the frequency of sanctions imposed upon transgression. More severe sanctions is the name of the game when autonomy, understood as individual defiance of the law, flouts legislation. The autonomy of social systems is not dealt with in these models.

However, the theme is taken up in the famous formula ‘law in the books’ versus ‘law in action’ which has had such an impact on the sociology of law. These two concepts are in fact related to our theme if book-law and action-law are construed as autonomous social spheres accessible to one another only through a process of mutual observation. But to take book-law seriously goes against the grain: ‘DOCTRINE? This is the big liberating move? You’ve got to be kidding!’

Those who attribute ‘regulatory failures’ essentially to political power structures and interest constellations come closer to dealing with the problem of system autonomy. This is certainly a key issue; but power in this context is, if anything, merely epiphenomenal. The very fact that we are dealing with structural interests which, on the basis of system-conditioned power, can develop superior strategies for thwarting regulatory law indicates this. If one focuses merely

35 Geiger, 1964, p. 70.
36 Podgorecki, 1984, p. 83.
37 Gordon, 1984, p. 117.
on power, the structural contradictions are no longer dealt with. Accordingly, recommendations for a regulatory counter-strategy are thought of in terms of power. These consist of strengthening the political power resources of the regulatory agencies and/or the opposing power of the interests concerned. But is that all there is to it?

Various filter models, contingency theories, and, of course, concepts of input and output are directly concerned with system autonomy. These deal with the structural contradictions between the various social spheres. On the one hand, there are theories about the ‘mismatch’ of regulatory structures and regulated structures. Selznick, for example, emphasizes the internal dynamics of social institutions, which can only be overcome if their ‘opportunity structure’ coincides with the ‘conceptual readiness’ of the law.\(^39\)

In the debate on regulation, ‘regulatory failures’ are frequently attributed to a ‘mismatch’ of regulatory instruments (for example, ‘command and control’ norms) and the internal logic of the regulatory field (for example, an orientation towards economic utility). Appropriate regulatory instruments – for example, transferable pollution rights – are thus also called for.\(^40\) ‘Congruence models’ are similar. Taking the contingency theory of organization\(^41\) as their starting-point, these models deal with the congruency of political programmes, regulatory instruments, and structures in the fields of implementation.\(^42\)

On the other hand, there are theories which emphasize the unavoidable transformation – or indeed perversion – of regulatory programmes when these impinge upon autonomous social structures. Podgorecki’s socio-legal hypothesis of the ‘three levels of the effectiveness of the law’ is well known in law-and-society circles.\(^43\)

According to this, law undergoes a crucial modification as it passes through three filters in the system: the global system, the subsystem, and the individual psyche. In her model of ‘semi-autonomous social fields’, Sally Moore emphasizes the conflict between state laws and mechanisms of social control which operate within social

---

38 Clune, 1983; Reich, 1984; Bercusson, 1987; Dimmel and Noll, 1988, pp. 391 ff.
41 Lawrence and Lorsch, 1967a,b, 1969.
42 Mayntz, 1983a; 1983b, p. 15.
subsystems. Views that regard law and society as having internal logics of their own are similar in approach. These were developed in the debate on juridification, and are much more far-reaching in content. These theories attribute the pathological effects of juridification to the differences in organizational structures, motivations, and rationalities. The best-known example is Habermas’s ‘colonization of the life-world’. Finally, the input/output models developed in the theory of open systems definitely belong in this category. According to these models, legal regulatory inputs are transformed by autonomous processes of conversion in the regulated system.

Despite certain similarities in approach, the autopoiesis model differs from the models outlined above in three respects:

(1) The closure is radicalized. The above approaches take for granted the possibility of direct intervention. They stress only the more or less radical modifications of the regulatory inputs that this can bring about. Autopoiesis postulates the operative closure of the subsystems. This effectively makes it impossible for one system to have anything to do with the autopoiesis of another. The previous, ready assumption that law and social reality are in fact mutually accessible is, for autopoiesis, the key problem. For the theory assumes that, although the environment actually exists, it is inaccessible to the operations of the system. The system can deal only with its own internal construct of the environment.

This has far-reaching consequences. We can no longer see legislation in terms of input/output models or simply view it as an exchange of information between law and society. We must abandon notions of linear causality, where legal norms bring about social changes directly. These can be replaced by notions of an internal circular causality, subject to external ‘modulating’ influences, to ‘chocs exogènes’. We have to change our view of legislation, and cease to

45 Habermas, 1985; see also Offe, 1983.
46 Clune, 1983.
48 Kerchove and Ost, 1988, p. 151.
regard it primarily as a transmitter of information to social spheres. It is not legislation which creates order in the social subsystems. It is the subsystems themselves which deal selectively with legislation and arbitrarily use it, to construct their own order. This is what von Förster meant by 'order from noise': 'Thanks to the little demons in the box, in the long run only those components of the noise were selected which contributed to the increase of order in the system.'

(2) The autonomy of the system is also qualitatively different. The structure and filter models mentioned above are often unclear on a vital question. What is it about social autonomy which makes the business of legislation so difficult? What do 'the little demons in the box' actually look like? Are idiosyncratic norms, values, rationalities, world-views, ideologies, vested interests, constellations of power, material relations of production, or a combination of all of these at work?

The autonomy of the regulated social domain has generally been understood as self-regulation which could be effected in two ways, through normative or non-normative mechanisms. In the autopoiesis model, on the other hand, the concept of autonomy takes on a quite different meaning. Autonomy is circularity. The narrower definition of autopoiesis locates it in the circular self-reproduction of the elements. On this view of it, the autonomy of the economy consists in the self-reproduction of acts of payment, and the autonomy of the organization in the self-reproduction of decisions. Another view, and one to which I subscribe, locates autonomy in the circularity of social self-reference as such. Social autopoiesis is then merely a special case of social autonomy. Wherever an operation, process, or system impinges upon itself in social reality (either as production or as observation), there arises a relation of self-determination which cannot be determined from outside. It is precisely this that we define as autonomy. Autonomy would be the emergent property, the new social quality necessarily arising in every case of social self-reference. The autonomy of the economy would then consist not only in the self-reproduction of its own elements (payments), but also in the self-generation of its own structures (prices), in the orientation of payments towards increasing the capacity to pay (profit), and in its forms of self-observation (economic theory and economic policy). The autonomy of organizations would thus consist not only in the

self-reproduction of decisions, but also in the establishment of formal and informal structures of organization (expectations), in self-limitation through membership (belonging plus being subject to rules), in their self-description as collectivities with capacity for action (legal persons), and in their corporate self-identification (corporate identity). As we can see, the little demons we came across before—norms, values, ideologies, and so forth, are cropping up again—only this time we can recognize them by their (self-referential) horns.

Social autonomy as a problem for legislation is thus to be understood as a question of degree. Here, too, there is no trace of the ‘inflexible rigidity’ of autopoiesis which Maturana and Luhmann rely on when they insist that a woman is either pregnant or she is not. Instead, we have to think of social systems as being autonomous to varying degrees. Systems of this type present legislation with a variety of quite distinct problems. Their nature is determined by the extent to which they form self-referential circles in their operations and observations.

(3) Finally, the autopoiesis model gives us a clearer indication of the nature of the resistance of social autonomy to legislation and other interventions from outside. It is not simply a matter, as in Sally Moore’s ‘semi-autonomous social fields’, of conflicting social and legal norms: ‘[The small field] can generate rules and customs and symbols internally, but... it is also vulnerable to rules and decisions and other forces emanating from the larger world by which it is surrounded.’

It is far more a question of the maintenance of circularity, from the minor self-referential operation up to the autopoiesis of the entire system. This is more than, and different from, the resistance of, say, peasants to official legal centralism. Nor is it quite the old ‘system maintenance’, which, as is well known, cannot cope with the problem of death. The resistance of social subsystems to attempts at external regulation, which is based on their self-referential closure, is expressed in two rather different phenomena: (a) in its ‘indifference with regard to its environmental adequacy’ and (b) in its ‘immunity to the political regulatory measures introduced in response to it’.

52 Maturana, 1982, p. 301.
55 Habermas, 1971, p. 151.
56 Rosewitz and Schimank, 1988, p. 301.
Social Regulation through Reflexive Law

If it is to avoid the disintegration of self-referential relations, the resistance of social autonomy must force legislation to develop in a way determined by the twofold selectivity of legal and social autopoiesis.

We seem now to be somewhat nearer to finding a solution to these dilemmas. We have already made it clear that autopoieticists are a different breed from regulators, implementers, and other agents of change. We have already put a few obstacles in the form of social autonomy in the path of legislation. It is now time to show how legislation can take these obstacles in its stride by using the concept of reflexive law. But we are in for a bitter disappointment. The obstacles prove insurmountable. As usual, our only option is to get round the issue somehow. Even reflection serves only to make the obstacles more clearly visible and, perhaps, to show us a way of getting round the difficulty.

My thesis is that the autonomy of social subsystems, which is rooted in self-referential relationships, makes them inaccessible to direct legislative intervention. Only indirect intervention is possible, and this can have negative consequences. I would like to discuss feasible forms of indirect intervention under the following headings: reciprocal observation, coupling through interference, and communication through organization.

VI

The law imposes a price freeze on the economy. This is normally understood as a clear case of the law intervening directly in the economy. From the point of view of autopoiesis, however, it is merely an act of observation. The law observes the economy through a legal ruling on price control. If we look more closely, then what was an ambitious piece of external regulation becomes mere self-observation. Through the device of the price-control norm, the law is merely observing its own operations, imagining all the while that the economy functions in such and such a way.

This idea of a constructed environment is a well-known feature of epistemological constructivism.\(^{57}\) One of the most important

---

and innovative features of this construction is that it is applicable not only to cognizing human subjects but to communicative social systems as well.\(^{58}\) However, the existence of the environment is not solipsistically denied, but presupposed. According to von Förster, there is such a thing as an environment, but cognizing systems have no direct access to it. They can only ‘observe’ it. Contrary to the common-sense view of it, observation is to be understood as a process which takes place within the system itself. It does not provide access to the reality ‘out there’; nor does it lead from outside the system to within it.\(^{59}\) Observation means only that a system introduces distinctions into its internal operations and that it indicates something on the basis of these distinctions. This applies to every system of communication, including the legal system.

If we reconstruct the operations of the law on the basis of constructivism, the following picture emerges. Legal communications construct ‘legal reality’ in the facts of a legal rule.\(^{60}\) These contain distinctions which are specific to the law and which allow it to make a distinctive indication. In legislative acts the law ‘invents’ its social environment. The process of legal subsumption is not one where by information is relayed from the environment to the law and compared with data already stored there. Instead, a relationship is established between two differently structured internal operational processes: – the interpretative processing of the norm, on the one hand, and the fact-generating processing of evidence, on the other. The law constructs reality according to its own principles precisely through this process of establishing evidence and the collection of ‘hard facts’ under constraint of the rules of evidence. The ‘presence’ of a fact is ‘decided’ on the basis of conceptual distinctions, verification procedures, and criteria of certainty which are all intrinsic to the law. The influence of the external world consists solely in triggering these types of internal selection processes.\(^{61}\) Following Baudrillard,\(^{62}\) we could say that social reality becomes sublimated; it becomes a ‘hyper-reality’ of society, which is reconstructed in legal communications.\(^{63}\) Once again we are dealing with ‘order from noise’ – only this time it is society that is making the noise. From the moment it is promulgated to the moment it is implemented, our

\(^{58}\) Luhmann, 1992b, ch. 12.
\(^{59}\) Richards and von Glasersfeld, 1979, p. 43.
\(^{62}\) Baudrillard, 1976.
price control consists solely in cognitive and normative operations which are played out within the law and which cannot be transferred to the economy.

It makes no difference if you change systems and then observe how price controls work within the economy. Here too there is no way in which information can be brought in from the outside world. Information is produced within the system itself. There are only internal observations in the sense of distinctions and indications that are specific to economic communication. Legal norms are not considered, as they are in the legal system, in virtue of their normative validity. Where they figure at all in economic calculations, they are treated as items in cost-benefit calculations. It is economically rational to make the observance of legal norms dependent upon the severity of the sanction and the likelihood of its being imposed. State-imposed price freezes are regarded in this way. It is hardly surprising that such scant regard is paid to them when a sufficient number of actors is involved.

This kind of 'economistic' legal consciousness has penetrated economic (and legal) theory under the banner of 'efficient breach of contract' and 'optimal sanctions':

Managers do not have an ethical duty to obey economic regulatory laws just because the laws exist. They must determine the importance of these laws. The penalties Congress names for disobedience are a measure of how much it wants firms to sacrifice in order to adhere to the rules: the idea of optimal sanctions is based on the supposition that managers not only may, but also should [sic!] violate the rules when it is profitable to do so.

From the constructivist point of view, the interventions of law in the economy have to be regarded as reciprocal observations between two autonomous, hermetically sealed communication systems. The law 'invents' an image of the economy, and formulates its norms by reference to this image. The economy 'invents' an image of the law and processes its payment procedures by reference to it. These internal models of the outside world can be constantly refined as in today's economic analysis of law. However, this procedure does not lead from legal conceptions of the economy to the reality of the economic system itself.

We can take this refinement of the internal models of the outside world further, and move from observation to Verstehen. In the law of unfair competition, for example, it has been felt for some time that lawyers, and especially judges, should show more ‘understanding’ of economic problems. In the United States nowadays, a great deal of emphasis is put on the systematic training of federal judges in economic analysis. However, Verstehen in a system-theoretical sense is a particular form of observation which is characterized by the fact that the observing system also reconstructs the self-reference of the observed system.67 Thus even Verstehen, understood in this way, does not lead out of the cycle of observation, but only deeper and deeper into the famous hermeneutic circle. The fact remains that information is produced exclusively within the system, and is not ‘relayed’ from subsystem to subsystem.

Changing perspective to that of an outside observer, we can also see that the reciprocal observations of the social systems do not vary arbitrarily with respect to each other. Even though there is no direct contact between them, they evolve similar patterns of variation. The observer can determine the presence or absence of the ‘structural coupling’ of legal and economic operations. The ‘structural coupling’68 of the autopoietic system and its ‘medium’ takes place between different empirical domains which are mutually inaccessible. As we saw in chapter 4, the law and the regulated subsystem can develop only in isolation from each other. This is a process over which the legal system has essentially no control. This ‘blind’ process of co-evolution is apparently regulated by the twofold selectivity of the autopoiesis of the law and that of the social system concerned. Legal acts must ‘stand up’ to the autopoiesis of both systems. Therein lies their regulatory success.

Can a ‘reflexive’ legislative policy learn anything from this ‘blind’ development of two systems engaged in self-observation? Can the law adjust to the fact that its regulations are merely self-regulations which vary, in some obscure way, with the self-referential operations of other subsystems? Perhaps we should take a leaf out of Lindblom’s book and look at regulation in terms of interaction, rather than knowledge.69 The prevailing ‘knowledge strategy’ is that if there are any doubts as to the social adequacy of law in relation to the regulated field, then the ‘mechanism’ must be made ‘more

67 Luhmann, 1986d, pp. 79 ff.
69 Lindblom and Cohen, 1979, p. 58.
intelligent'. The law must improve its knowledge of the processes, functions, and structures within the field of regulation. It must develop scientifically grounded models of the surrounding systems, and tailor its norms accordingly. This is the approach adopted by sociological jurisprudence or the economic analysis of law.

However, we have just seen that even a ‘knowledge strategy’ cannot step outside the bounds of the legal system. It is, therefore, perhaps a better idea to latch on to the process of ‘interaction’ itself, to the blind co-variation of legal system and economic system. In this way we can seek to influence the mechanisms of co-variation through the system’s internal operations. How is this conceivable?

In chapter 4, section III, we looked briefly at a model of the evolutionary processes of law and economy that is very popular in legal economics. A legal situation which is considered unsatisfactory is taken up by economic agents and brought as a lawsuit before the courts. This does not in itself determine the decision taken. However, the legal decision has repercussions on the economy, and sets the process of relitigation in motion. This goes on until we have a Pareto optimum of the legal norms formulated in the decisions.

This evolutionary model is based on grand assumptions, and is particularly unrealistic in relation to the rationality of the agents. It also pays inadequate attention to the selective mechanisms of the legal process (see chapter 4, section III above). Nevertheless, it remains helpful for us as a general model. It implies that the legal system is, as it were, driven by the disorder outside. The noise of the economic agents forces it to make minor modifications in its internal order until relative peace is restored. It also implies that the legal system can deliberately make itself more sensitive to noise from outside. This is not a question of consciously altering law’s concepts of the economy, but of exposing these concepts to the evolutionary mechanisms of variation.

This becomes clearest in the variation of the conditions of ‘access to justice’. Among these are the increase in the number of possible types of suit and their extension to particular collective interests and to organizations (for example, class and collective actions). More generally, the opening-up of the two-party adversary procedure to collective interests thus appears as a deliberate attempt to influence

---

the way in which the law and the regulated subsystem vary alongside each other. It is not enough to apply this model to a particular subsystem like the economy. The way in which the law varies along with other subsystems also has to be taken into account. The ‘variety pool’ of the legal system in relation to other systems would then also have to be increased. An interesting starting-point here would be the State’s furtherance of interests which are not protected by strong organization. Joerges’s concept of ‘procedural discovery praxis’ provides us with an interesting theoretical concept for analysing these types of legal mechanisms of variation.

Influencing co-evolutionary processes between systems by deliberately increasing the possibilities for variation within the law is, of course, a highly indirect form of regulation. However, it follows naturally from the general insight that self-referentially closed systems can only regulate other systems by regulating themselves.

VII

Legislation as ‘regulation of others through self-regulation’ seems compelling from a constructivist point of view. It leads writers inspired by systems theory, such as Bechmann, to ‘suspend’ all claims that society can be regulated by law and to treat regulation by reflexive law as a contradiction in terms. According to this view, law cannot be an instrument of control or regulation for other social systems: ‘Systems observe systems, nothing more.’ Luhmann puts the same finding rather more cautiously. There is yet no theoretical explanation, he says, of how autopoietic systems, which are essentially self-regulating, can regulate other systems. He traces this problem back to a ‘dilemma’ facing the theory of self-referentially closed systems. On the one hand, there can be no access to reality outside the system, since the system cannot perform operations in the environment. On the other hand, we have to assume that the environment, which imposes limits on the system, is not contingent, given the rate at which the structure is built up. How are we to resolve this dilemma? ‘Order from music?’

Naturally critics seize upon this problem in order to demonstrate

75 Bechmann, 1984, pp. 200 ff.
77 Luhmann, 1987b, p. 338.
the inability of systems theory to come up with any answers to regulatory problems. It can allegedly only conceive of society as a group of monads which are indifferent one to another. Unable to influence each other directly, they can adapt to each other only instrumentally.\textsuperscript{78} It seems as if systems theory is falling into a trap of its own making, and now finds itself caught up in the self-referential closure of its own conceptual framework.

We might try to resolve the problem through inter-system relationships. For example, can we not view neo-corporatist negotiation as communications between the major functional subsystems of society, politics, the economy, and law? The legal system and the economic system both form specialized frontier posts which can communicate with each other, thus making law and economy mutually accessible.\textsuperscript{79} However, this does not lead us out of our difficulties, for two reasons.

First, it is not feasible to construct the relationships between functional subsystems according to the pattern of interaction between ego and alter. The legal system and the economic system do not as such have the capacity for action. It is a common mistake of corporatist and socialist theory to think of functional subsystems of society as large formal organizations with the capacity for action. In differentiated societies, it is only a section of the functional subsystems that is formally organized (for example, firms, political bureaucracy, court organization). Vast areas within the functional subsystems are ‘spontaneous’ orders, and hence not formally organized spheres of action (for example, the market, the political public, and the legal public). This makes it impossible for ‘the’ economy, politics, and law to communicate with each other as collective agents.\textsuperscript{80}

Secondly, taking this on board and construing inter-system communication through inter-organization communication merely compounds the problem. We now have to deal with not one relationship of reciprocal observation between law and economy but five: between legal system, legal frontier post, communication system as inter-organizational system, frontier post of the economy, and economic system. The question remains as to how, despite this increase in complexity, these systems of negotiation have proved to be relatively successful regulatory mechanisms.\textsuperscript{81}

\textsuperscript{78} Münch, 1985, p. 27.

\textsuperscript{79} Hutter, 1989a, pp. 112 ff.; 1992.

\textsuperscript{80} Cf. Schimank, 1985, p. 430.

\textsuperscript{81} Cf. Marin, 1982; sect. IX below.
Another way of getting around the problem is by exploiting the difference between operative closure and cognitive openness in autopoietic systems. After all, do the autopoietic authorities not claim that operatively closed systems become open by interacting with the ‘medium’?\textsuperscript{82} that the legal system is ‘normatively closed’ and ‘cognitively open’, and that it adjusts to its environment through its ‘cognitive quality’?\textsuperscript{83} Is the economy not closed as a system of payment, on the one hand, but open in relation to social demands, on the other?\textsuperscript{84} Can this ‘openness’ not then be used to establish direct contact with the environment, allowing external conditions to be channelled into the internally determined operational cycles? It would then be a question ‘only’ of reconciling the selectivity of the various system filters. Regulatory intervention would be possible through a ‘transformational grammar’.\textsuperscript{85}

This is a tempting route to take, but in the end it is not possible. It leads to contradictions with central assumptions of autopoiesis. Organisms draw matter and energy from their environment. They thus set up real exchange relationships with it, even if their selection is determined by the system. Cognitive systems, on the other hand, despite being open to the environment, have no direct contact with it.\textsuperscript{86} Instead of being filtered through cognition, information is produced within the system itself.\textsuperscript{87} As shown above, systems of communication, including the legal system, interact only with realities of their own creation. All the operations are generated within the system itself. This is particularly so in the environmentally open dimension of operatively closed autopoietic social systems. Or, to put it another way, cognition = computations of computations of...\textsuperscript{88}

Luhmann puts forward another solution.\textsuperscript{89} If information cannot be obtained from outside the system, then contact has to be established through what Maturana described as the ‘medium’ of the system. Once again we are starting from a strictly constructivist viewpoint. Systems cannot operate upon their environment. On this level there is no input and output of structures and no exchange

\textsuperscript{82} Varela, 1981a, p. 16.
\textsuperscript{83} Luhmann, 1987e, pp. 19 ff.
\textsuperscript{84} Luhmann, 1983, 1984d.
\textsuperscript{85} Willke, 1992.
\textsuperscript{86} Maturana, 1982, p. 19.
\textsuperscript{87} Richards and von Glasersfeld, 1979, p. 39.
\textsuperscript{88} von Förster, 1981, p. 296.
\textsuperscript{89} Luhmann, 1987b, pp. 339 ff.
relationship with the environment. However, this kind of strict constructivism does not exclude the possibility of social systems being founded on a 'materiality continuum'. Indeed, it is presupposed as a basis of system operations. Social systems presuppose physical and chemical processes, organic life, and psychic cognitions as their materiality continuum. These environments have very real contact with the social systems. They exercise massive constraints on communication. All social life has to be compatible with them. To this extent the environment is not merely an internal construct, but a reality capable of affecting things itself.

So far, so good. It becomes a problem only when Luhmann also applies the idea of the materiality continuum to the relationship between society and its subsystems. As soon as he does this, inconsistencies and contradictions begin to appear in his argument. He sees society as part of the materiality continuum of law.90 The result is that social communication 'supports' legal communication, 'furnishes' it with general structures, particularly language, and 'guarantees' its participation in the social construction of reality.

The parallel between physical/chemical/biological and psychic materiality continua and the social 'substructure' of the legal system holds good only on a superficial level. Social communication pays just as little heed to the boundaries of the legal system as do other materiality continua. Social, psychic, and organic processes are within and outside the law. It is at this point, however, that the parallel breaks down. It is inconsistent with the concept of the materiality continuum to assume that the system develops components (operations, structures) which emerge from the continuum. The system and the materiality continuum can have no operations or structures in common. This is generally accepted by Luhmann.91 However, he disregards it when he assumes that in the case of law the general social structures (language, construction of reality) are 'communicated' to it.92 This goes against the definition of the general relationship between the system and its materiality continuum. Obviously, the relationship between law and its social 'substructure' is of a special kind, and must be conceptualized separately. It cannot be subsumed under the general relationship of system to materiality continuum.

Is there no way out of these closed circles of (self-)observation? I

---

90 Ibid., p. 340.
91 Ibid., p. 339.
92 Ibid., p. 340.
think it is possible to break through this circularity in a way that extends beyond the system itself. The key to this lies in a peculiar feature in the make-up of second-order autopoietic systems like law, politics, and the economy. In my view, this feature has been somewhat overlooked in the past. There is a degree of interference between homogeneous autopoietic systems which have resulted from differentiation of an encompassing autopoietic system. Since law, politics, the economy, and other judicial subsystems are the product of an internal differentiation process of society, their ‘structural coupling’ takes on certain specific qualities which I will deal with under the heading of ‘interference’. My suggestion is that it is this interference which enables social systems to come into direct contact with each other in a way which extends beyond mere observation. We must immediately add one qualification to this suggestion, however: the advantages of real contact with the social environment are gained at the expense of problems of information and motivation.

In the case of social systems, one must distinguish between their contacts with the environment within society and those beyond it. The only types of relationships which are possible with the external environment, which also includes people, are those of cognitive observation described above (and of course ‘structural coupling’ with the ominous materiality continua). Social systems communicate only about man and nature, not with them. On the other hand, a kind of direct contact with the environment within society does seem possible. Interference is a bridging mechanism whereby social systems get beyond self-observation and link up with each other through one and the same communicative event. There are three reasons for this. First, they use the same basic stuff, ‘meaning’. Second, they all develop their systems on the basis of the same elementary operations – that is, communication. Third, and most important, all forms of specialized communication in any social subsystem – interaction, organization, functional subsystem – are also at the same time always forms of general societal communication.

These three reasons constitute the essential differences between society and Luhmann’s materiality continua (matter, energy, life) in relation to law. They make it clear that society as the substructure of specialized subsystems is closely connected with them – so much so that the analogy to the material substructure does not hold. In order to avoid misunderstandings, it must be emphasized that this does not amount to a retraction of the thesis of operative closure.93

Interference does not mean that information is conveyed between social systems through a straightforward input/output relation. Information is generated anew in every social system. In the case of interference, however, there is an added dimension. Information is generated simultaneously and on the basis of the same communicative event in the subsystem concerned.

To put it more abstractly, higher-order autopoietic systems come into existence when an autopoietic system becomes so differentiated internally that its components develop their own autonomy in the sense of self-referential closure (on the hypercycle; see chapter 3). The interesting point is that although these subsystems in turn constitute emerging elements, these elements are made of the same ‘stuff’ as first-order autopoietic systems. ‘Emergence’ in the society/subsystem relationship is then quite different from the emergence which characterizes the relationship of an autopoietic system to its materiality continuum. Normally, what emerge as the elements of a new autopoietic system are completely new units (for example, communications in relation to the biological or psychic base). These have nothing in common with the elements of the materiality continuum, and are not even partially identical with them. They belong to another phenomenological domain. Thus they cannot have any structures or any other system components in common. In the particular case of social subsystems, new elements do indeed emerge, in the form of legal acts, payments, and so forth. Nevertheless, they remain essentially social communications. They belong to the same phenomenological domain: society. Whereas normally a system is closed vis-à-vis its materiality continuum and cannot ‘use’ its elements and structures directly, this is not the case here. Social subsystems permeate downwards, as it were. It is tempting to use the metaphor of one-sided ‘osmosis’ or the philosophical concept of ‘monistic epiphenomenalism’. Social subsystems use the flow of social communication, and extract from it special communications as new elements. They use social structures (expectations) for the construction of legal norms and social constructions of reality for the construction of ‘legal reality’. They do not need to create these from scratch, merely to imbue them with new meaning. This is what was meant by the legal hypercycle; although units of communication, structures, and processes are constituted anew and linked with each other in a cyclical way, they nevertheless remain social communications.

94 Luhmann, 1987b.
If this is the case, then it follows that subsystemic and societal elements coincide in a single act of communication. In this way law and society are still linked together. In social subsystems communications take part in at least two different cycles at once: in general social communication and in a separate cycle which forms part of the social subsystem.

To put it more precisely, every specialized legal communication is always at the same time an act of general societal communication. Communication consists of the unity of information, utterance, and understanding. Legal communication differs only in two respects. First, the information it transmits relates to the legal/illegal distinction. Second, the legal system, drawing on the flow of communication, constitutes the components of its system according to criteria that are different from those of society: that is, actions which produce changes in the legal situation. This means that one and the same act of communication is attached to two different cycles, one pertaining to society, the other to law. We can also put it as follows: what actually constitutes the act of utterance is the same in both law and society, whereas the elements of understanding and information vary according to which system the utterance refers to, law or society. The process of selection is the same, but the context of selection varies. The meaning of the judicial locution ‘The defendant is fined £x’ is, first, that of legal communication. It alters the legal situation, and is used as a starting-point for further legal communications – for example, giving notice of appeal. However, it is at one and the same time a social communication. It is understood differently, perhaps misunderstood; and in a particular social context it can produce the exasperated response ‘I don’t know what you’re talking about!’ The mutual interference of systems makes it possible not only for them to observe each other but for there to be real communicative contact between the system and the life-world.

The mutual interference of systems in the sense described above is not the same as interpenetration. If it is used in a precise sense, rather than on every occasion on which systems overlap, then the following distinctions can be made. Interfering social systems share the same world of meaning. The fact that their elements are constituted in a similar way means that they can be coupled together. They are not restricted, as are psychic and social systems

96 Luhmann, 1986d, p. 94; 1992b, ch. 4, sect. 2.
with their different basic elements (thoughts and communications), to reciprocal observation. Interpenetrating systems present each other with a picture of unintelligible complexity, an internal Babel. Interfering systems, on the other hand, present each other with a degree of order imposed on their elements. This makes the processing of meaning across system boundaries possible in more than a metaphorical sense. It should not be understood as the relaying of one piece of information, however, but as the linking of independent pieces of information through one and the same communicative event.

The concept of interference allows us to distinguish at least four different types of selective openness to the environment. The cognitive openness of operatively closed systems (which is not, in fact, openness at all) marks one extreme. Here we have the internal construction of an environment unique to the system, with no real contact with the world outside (for example, reflections on external objects, communication about the non-social environment, and the imposing of a legal norm on a state of affairs). The other extreme is marked by real exchange processes between the system and its environment, which are selected by the system in a variety of ways (for example, the way in which the organism absorbs food and energy). The interpenetration and interference of systems lie between these two poles. In the case of interpenetration, no direct contact is possible, since the elements of the system are so different—even though they overlap to some extent. With interference, on the other hand, direct contact is possible, because the elements are essentially similar.

These different types of environmental openness can be explained by the 'ontological' quality of the relationship between system and environment. If the system and its environment are on the same 'ontological' level, then real contact between them is possible. The only thing which varies is the degree of selectivity, depending on whether we are dealing with an input/output relationship or with interference. If they are on different levels, however, then 'openness' is a matter only of interpenetration or of an entirely internal construction in the system.

We will also have to distinguish between various types of interference. Event-interference is a phenomenon which Luhmann describes as the simultaneous presence of events. This makes it

100 Luhmann, 1987b, p. 342.
possible for systems to link up immediately, to respond, as it were, ‘tangentially’, only to go their own way again immediately after they have come into contact. We will deal with this in the following section. Structural interferences describe the point at which general social expectations intersect with legal expectations. Legal expectations are distinguished by the fact that they have the quality of being legally valid. Another important example of structural interference is the assumption of social constructions of reality by the law. The legal system can, as it were, adopt social constructions of reality for its own operations without testing them out first. However, they are always there with the proviso that they be reconstituted according to the law’s own criteria. An important special case is the ‘overlapping membership’ of persons. This can be described as role-interference, a mechanism which, as is well-known, is used to resolve many inter-system conflicts. In conclusion, we can say that the phenomenon of interference applies not only to elements, but to all components of the system.

VIII

The joy of an interventionist-minded legislator disillusioned with the constructivist approach is somewhat muted, however. For he still has to consider the implications of system interference as a way of influencing systems. What is gained, in terms of direct communicative contact, over mere observation of systems has to be paid for with problems of motivation and information in the interfering worlds of meaning.

One of the advantages of law is precisely that it dramatically increases the probability of a communication being accepted. In the legal system, a norm is either valid, or it is not. Intermediate degrees of validity are not admissible. The question of the legal validity of an expectation is thus unambiguous. But matters are not so clear when it comes to the social validity of the simultaneously formed social expectation. The social validity of a (legal) norm can be a matter of degree. The interference of legal and social norms transforms their validity from a question of ‘either-or’ to one of ‘more or less’. This entitles Geiger101 to speak of a calculus of obligation and Blankenburg102 of law as a question of degree. The price of interference between law and life-world is thus a loss of

102 Blankenburg, 1980, p. 83.
motivation. Legal communications reliably motivate only legal communications. It is well known that their capacity to motivate general social communication is relatively limited. This has to be reinforced by other means of communication, such as moral pressure, persuasion as to the rightness of the law, and above all through sanctions, the use of power based on force.

The problems of motivation are even greater when the law not only colonizes the life-world but expands into other functional subsystems or into formal organizations. Then it has to reckon with the resistance of system-specific sources of motivation. These, although not preventing communication altogether, none the less make it extremely unlikely that the message will be accepted. As Renate Mayntz points out, 'Regulation by law cannot in principle motivate behaviour which is dependent upon personal initiative, innovation and positive commitment.'\(^{103}\) The law has little chance of being obeyed when it comes into direct conflict with the profit motive. It has no chance at all when bankruptcy threatens the very survival of the organization.

*Mutatis mutandis*, there are corresponding problems with information when there is interference between the law and social fields. The loss of motivation and of information is a real headache for regulators. According to Bardach and Kagan, 'site-level unreasonableness... arises from an inescapable tension between the virtues of equal treatment and accountability required of government officials and the opposite virtues of diversity and spontaneity that are the essence of our social and economic life.'\(^{104}\) They recommend a greater degree of flexibility in order to be able to deal with the conflicts of motivation and information in a reasonable manner. In short, 'Going by the book is unreasonable.' The injunction to be flexible in the application of law is hardly new. And, for all its motivational and informational advantages, it cannot get rid of one of the grave disadvantages of interference, unfortunately. It has no permanent impact on the structure of the regulated system. It always homes in on the individual case, starting from the disjunction between structure and event. It is beset with the problem that affects all 'command-and-control' regulations and that cannot be solved merely by advocating greater flexibility. This involves establishing a communication link. However, this can be achieved only by means outside the system, including power-based sanctions, persuasion, moral pressure, an appeal to obey the law, and so on.

\(^{103}\) Mayntz, 1987, p. 98.
A much more elegant solution to the same problem is offered by the old institutions of contracts and rights. They do not use system interference to motivate compliance in the legal environment. On the contrary, they avoid the problem of motivation. They can do this because they directly produce the interference between law and economy. Not two but three actions – namely, legal, social and economic – coincide in the institutions of contracts and rights. A contract is always economic communication, since it is an economic transaction; but it is also always a legal action, since it not only alters the legal position, but produces new legal norms. At the same time, as an exchange, it still remains part of the general social communication.

We are not concerned here with contract as an expression of classical individual autonomy, in the sense of the contractual freedom of the individual. The distinctive feature of contract that concerns us is the structural coupling of the law's autonomy with that of the economy. The link between law and economy need not be produced *ad hoc*, as in the case of the bailiff and the regulatory agency. Rather, this relationship is produced by the economic processes themselves. Admittedly, this is linked with the delegation of substantive law-making power: the will of the parties becomes law. However, this is only a partial externalization because the society exerts a not inconsiderable influence over the non-contractual elements of contract.105 By imposing constraints on itself, the economic system is at the same time exposing itself to external constraints. This mechanism has been deliberately exploited for political and legal ends, through the regulation of the non-contractual elements of contract, the creation of mandatory contractual rules and exclusive types of contract, and the control of contracts of adhesion. Can we get any further 'reflexively'?

A similar mechanism is at work in the case of rights. Their exercise is at the 'discretion' of the legal subject; or, to put it more accurately, the application of the law is made dependent upon economic processes. But when the logic of the economy has triggered the mechanism, it finds itself caught up in the logic of the law. This involvement has been used in an attempt to use rights as a means to public ends. This has been made possible through the idea of the essential two-sidedness of rights, the combination of individual and institutional protection, and the harnessing, for the public good, of the individual’s autonomy to exercise his rights.106

105 Durkheim, 1933, p. 206.

Among the approaches adopted are attempts to use the notion of ‘abuse of rights’ to redirect the exercise of rights towards social responsibility. More interesting are attempts to instrumentalize rights directly for regulatory purposes. Subject to certain modifications, these can exercise some degree of regulatory control. The relationship between innovation and imitation, for example, has been influenced by the way in which the rights of patent-holders have developed, particularly with regard to the duration of the right of exclusive use. The debate on copyright in the areas of computer software and genetic engineering amply demonstrates that powerful economic interests are using the law to their own ends. But it shows at the same time how the definition of rights creates opportunities for both political and legal regulation.

In my view, one can go a little further in both these areas — contracts and rights — by linking observation and interference. Law can increase its regulatory interference by developing an ‘option policy’ based on the knowledge of the regulated subsystem in its capacity as an outside observer.

Unlike ‘command-and-control’ regulation, in the cases of both contracts and rights, the law can only make certain options available. One may choose to exercise the option or not. If, however, the option is exercised, then one is bound by its conditions. These conditions are subject to variation, but only to a limited extent, after which the costs of the conditions exceed the benefits of the option. It is at this point that the law can learn from economics. Jurists should not hesitate in accepting what is offered by the economic analysis of law and exploiting it for their own regulatory purposes. One can reject the imperialist claims of the criterion of ‘efficiency’ and at the same time use economic knowledge in order to understand what happens when the logic of legal structures and that of economic structures impinge upon each other. In particular, it can help us learn something about how and to what extent contracts and rights are open to political and legal regulation. Allan Schmid’s work provides one example of how economic effects are used in the formulation of legal norms aimed at the exercise of political control.

If this is extended beyond contracts and rights, then it is possible to expand the concept of reflexive law further by implementing an

---

109 Cf. e.g. Schanze, 1986.
Social Regulation through Reflexive Law

'options policy'. This in effect would mean diminishing the power of the law in certain domains and making it abandon its claims to comprehensive regulation. Instead, it would merely produce optional regulation, which those concerned could use or not, as they saw fit.\textsuperscript{112} What are the consequences of this flexible legal policy that can be adapted to a variety of situations? The law is used only when it meets social needs, otherwise not. However, to stop taking legal rules seriously as authoritative behavioural expectations has serious consequences for our understanding of law. The validity of legal rules is at the discretion of those who are subject to the law. This kind of interpretation appears frequently in legal economics, where legal rules are seen merely as a cost factor. Compliance occurs only in cases in which what is to be gained is outweighed by the costs of the sanctions imposed on forbidden conduct. Indeed, this is not only what happens; it is also regarded as entirely correct (for example, efficient breach of contract, see section VI above). This calls into question the authority of law itself, and to that extent undermines the role of the law in securing expectations. We can thus no longer proceed on the assumption that the rule or the proposed regulation is used to stabilize expectations. Law has to be seen as contingent from the outset, not only as to its observance, but even as to its validity. In addition, optional law is of no use in the case of conflict regulation. Optional law thus fulfils law's classical functions only as far as regulating behaviour is concerned. However, it loses law's role to secure expectations and regulate conflict.

On the other hand, the advantages of optional regulation must not be overlooked. If the law — in some domains at least — abandons its claim to regulate and contents itself with offering options, then it is counting on evolution in the regulated system. If the optional regulation is attractive to other systems, it is taken up; if not, it will remain a dead letter. The obvious objection, that the law is merely preserving the status quo or enabling those who are already powerful to become more so, is offset by the fact that optional regulation may in turn be conditioned by other mechanisms of intervention. We have shown this in our example of contracts and rights. One possibility is to offer various regulatory options, but at the same time to stipulate that one of these options must be chosen.\textsuperscript{113} A second possibility is to link the options with attractive entitlements.

\textsuperscript{112} Luhmann, 1992c.
\textsuperscript{113} As in the proposed EEC directive on joint decision-making models in Europe; cf. Abeltshauser, 1990.
One could couple the granting of privileges to associations with the regulation of their internal order;\textsuperscript{114} for instance, one could introduce limited liability, but only in cases where particular social forms and structures are accepted. This is the option currently favoured in the law on group enterprises (Bundesgerichtshof 95, 330 - Autokran). A third possibility is to link the regulatory impulses which belong to different system logics. Thus one can link economic incentives to legal regulations by, for example, granting subventions under specific legal conditions and obligations.

IX

Let me recapitulate what has been said so far. We started from the impossibility of direct legal intervention occasioned by the twofold autopoiesis of law and society. We tried to get round this problem by looking first to the mutual observation of systems. This process ultimately led to the ‘blind’ co-evolution of law and society. This could be reflexively strengthened by deliberately influencing the internal variation mechanisms of law – access to justice. Our second strategy was to produce communicative contact via interference. The drawback, however, is a marked shortfall in information and motivation. A legal ‘options policy’ provided us with the opportunity to extend this strategy into the domain of reflexive law. In conclusion, we shall briefly turn our attention to a third way of getting round the problem: coupling through organization.

We have already seen (section VII above) the roundabout way in which channels of influence can be created between functional subsystems. The major subsystems of society – politics, law, economy, science – are not, as such, capable of collective action. In order to communicate, they need formal organizations with capacity for collective action. However, these organizations cannot hope to be representative. They lack the capacity to bind politics, the economy, or the law. They compensate for this through mechanisms of formal organization, which give them some power over their members, and through political rhetoric. Formal organizations can, as collective actors, communicate with each other across the boundaries of functional subsystems.\textsuperscript{115} In this process a system of inter-system

\textsuperscript{115} Hutter, 1992.
relationships emerges, which in turn becomes autonomous. This includes discussion groups, collective bargaining, interrogation procedures, and concerted action. This interlocking structure multiplies – as we have already said – the operatively closed relationships of mutual observation.

Here, too, the whole thing is based on mechanisms of interference which operate in principle in the same way as those between functional subsystem and general societal communications. Formal organizations also use communications as elements, in the form of organizational decisions. Organizations can be coupled with law if organizational decisions coincide, through one and the same act, with legal communications. The same is also true of economic communications. Admittedly, here, too, there is a considerable loss of information and motivation, which has to do with the different system contexts.

What makes this roundabout way of looking at it an attractive solution, by contrast with ‘command-and-control’ regulation, is that it opens up access – albeit indirect access – to the central mechanisms of self-regulation. Politics gains access to the central control mechanisms of firms, trade unions, and interest groups. The advantages and disadvantages of regulation through negotiation have been described in detail in the literature on neo-corporatism. The interpretations and evaluations are numerous and controversial.116 One interpretation regards neo-corporatist negotiations as the mutual adjustment of the constructs of the outside world held by the governing bodies of different subsystems. This view rightly emphasizes the self-limitation on the potentialities of anyone system on account of the working of other systems.117

The role of law in such processes of adjustment is rather limited. It is described as ‘procedural regulation’ in the literature on neo-corporatism.118 As explained in more detail elsewhere,119 it is limited to providing forms of organization, procedures, and competences for relationships within and between organizations. Here, too, one can, to a certain extent, think in terms of reflexive law, when legal norms are specifically enlisted to further the presuppositions of these systems of negotiation.120 Thus the law on collective bargaining and

119 Teubner, 1987d.
120 e.g. Baudenbacher, 1985, pp. 69 ff.; 1986.
co-determination has rightly been viewed as a way of promoting systems of negotiation through the law.\textsuperscript{121}

In my view, the institutionalist analyses of neo-corporatism\textsuperscript{122} could lead most fruitfully to further research into the development of this type of ‘reflexive’ legislative policy. According to Maus, the goal of such policy would be ‘to guarantee social autonomy in the area of substantive rule-making by granting negotiating positions through the law, by a very indirect form of state regulation which is simultaneously subject to democratic control and to public attention’\textsuperscript{123} This would be the new ‘magic formula’ of modern law: ‘Find a form of law which leaves the autonomy of social discourses undisturbed but which simultaneously encourages them reciprocally to take heed of the basic assumptions upon which each is based.’\textsuperscript{124}

X

To sum up, information and interference are the two mechanisms which ensure that operationally closed social systems remain cognitively open. The law produces internal models of the external world, against which it orients its operations, through information produced internally and not brought in from outside. This information consists essentially of the operative facts of legal rules and doctrinal theories. Interferences of law and its social environment are responsible for the relationship of ‘structural coupling’ between them. It is the combination of the two which makes social regulation through law possible – even if, as has been shown in this chapter, this takes place in an extremely indirect and rather uncertain way. If law becomes ‘reflexive’ in the sense that it orients its norms and procedures to a theory of social autonomy and structural coupling, it can increase its regulatory potential to a certain extent. However, despite all ‘reflexivity’, law is still a closed autopoietic system operating in a world of closed autopoietic systems. It is impossible to break down the barriers which result from this double closure.

This line of thought has been criticized by Renate Mayntz. She puts forward the opposing view:

\textsuperscript{121} e.g. Ronge, 1983; Kettler, 1987.
\textsuperscript{123} Maus, 1987, p. 404.
\textsuperscript{124} Blanke, 1988, p. 200.
The indisputable fact that systems are hard to regulate has less to do with the essentially autopoietic character of social subsystems than (1) with the particular dynamics of complex societies and (2) with the capacity of well-organised fields of regulation to resist. However, it is precisely the organised capacity of social actors under certain presuppositions which can promote political regulation, as well as provide a solution to the very real problems which arise out of the fact that society is so complex.125

What appears here as the 'reversal of the thesis of the greater degree of resistance to political regulation of highly-organised fields of regulation'126 turns out, on closer examination, to complement, rather than oppose, my view. For Mayntz does not maintain that there is a positive correlation (under certain presuppositions) between the autopoietic closure of a subsystem and the extent to which it can be regulated politically. This would be the opposite of the view presented above. She claims, rather, that there is a relationship between the 'organised capacity of social actors' and the capacity to be regulated politically. However, this corresponds precisely to our third way round the problem of regulation, communication through formal organization (see section IX above). In fact, formal organization provides political regulation through law with an ideal 'opportunity structure'. This point, taken up in detail by Selznick,127 plays an important role in the concept of 'reflexive law'. Mayntz prudently and rightly does not extend this particular 'legal affinity' which characterizes formal organizations to all (second-order) autopoietically closed social systems.

I have no quarrel with Mayntz in so far as she attributes some problems of regulation to complex networks and to phenomena of organized power. My only disagreement is in respect of the autopoietic closure of subsystems as such and their 'medial incompatibility'. Do they represent additional problems for political regulation? Mayntz does not think so; and, in my opinion, unjustly so. Autopoietic closure is essentially circular, and it is this circularity which poses the additional problem for political regulation. One cannot see it as mere unintended consequences or impenetrable causal processes. Rather, the problem is how to regulate processes of circular causality, a problem described above as one of how to exert an external influence on 'non-trivial machines'. If it is true that

125 Mayntz, 1987, p. 106; emphasis original.
126 Ibid., p. 105.
they are synthetically determined, but not analytically determinable, dependent upon the past, but unpredictable, how are these types of machines to be directed towards a particular goal? Mayntz still owes us an answer to this question. ‘Medial incompatibility’ – that is, the impossibility of translating the specific code of one system into another – should not, according to Mayntz, be a problem for regulation, because ‘people speak the “languages” of various subsystems’. In fact, Mayntz has touched upon one of the most important mechanisms of interference described above (under VII). Role-interference makes inter-system communication possible despite operative self-closure. But what does this mean for regulation? Mayntz herself attaches great importance to understanding regulation as ‘structural change’ as opposed to mere ‘ad hoc interventions’. However, the mechanism of role-interference which Mayntz describes is incapable of bringing about any structural change. It can trigger individual events, but not structural change. For this reason, interference through multiple membership is a rather weak form of system-interference. Certainly it is regarded by some as the ‘stroke of genius of modern social orders’, and is frequently used in ‘interlocking directorships’ and in other forms of internalization of external interests (supervisory councils, co-determination, works director). However, it allows no structural solutions, and therefore necessitates, as Mayntz rightly claims, the analysis of the ‘presuppositions and limitations of state action which reside in the systemic peculiarity of a regulatory field’.

130 Lutter, 1982, p. 567.
Intersystemic Law of Conflict

How relevant is all this for legal doctrine? Can doctrine become ‘reflexive’ in the strict sense of the word, by constructing law as an autopoietic system in a world of autopoietic systems? Not by rushing headlong into an attempt to ‘sociologize’ law. The self-referential character of legal doctrine would prevent the unmediated reception of sociological knowledge. However, by continually redefining its perception of problems, its mode of argumentation, and its style of justification and by assimilating them to a new social situation, legal doctrine takes on a reflexive character. This situation is best seen as a perpetual conflict between the unique internal logic of social subsystems. What is at issue here is the way in which legal doctrine deals with indeterminacy. I shall argue in this chapter that legal indeterminacy is related to conflicts between autonomous social subsystems. Legal doctrine seems to respond by developing a new ‘law of conflict’. Examples will be drawn from the general clauses of private law.

I

Legal indeterminacy is as old as the law itself. God has always laughed at the fundamental legal paradox that flows into legal indeterminacy. However, some types of legal indeterminacy have little to do with that paradox or with the mere difference between structure and event. Typical modern phenomena in law such as

the balancing of interests, the increased use of general clauses, the spread of sociological jurisprudence, legal economics, and other developments aimed at making law more ‘scientific’\(^2\) are examples. They are creating a new, disturbing form of legal indeterminacy.\(^3\) Here we must look to authors like Franz Neumann and Max Weber and, in the narrower domain of legal doctrine, to Justus Wilhelm Hedemann and Franz Wieacker.\(^4\) For Neumann, this new legal indeterminacy which manifested itself in the proliferation of general clauses, was the result of the development of capitalism into monopoly capitalism.\(^5\) A calculable formal legal order, as in the days of early capitalism, was no longer required: discretionary state interventions were now needed to support the self-created order of the economy. Max Weber had already identified the economic and social interests which were likely to imbue the formal rationality of the law with utilitarian, ethical, and political elements.\(^6\) Legal scholars like Hedemann were alarmed by ‘the flight into general clauses’, considering them a ‘softening of the bones of the law’.\(^7\) Wieacker attempted a theoretical definition of the indeterminacy of general clauses by appealing to the tradition of judge-made law.\(^8\) This has not so much solved the problem of legal indeterminacy as moved it to another level.

Nowadays attempts are being made to get away from the backward-looking approach of a ‘logic of decadence’. Instead, the goal is to interpret this disturbing new indeterminacy as the beginnings of a possible new legal rationality. Here we need mention only Wiethölter’s thesis of a new ‘proceduralization’ of law,\(^9\) Ladeur’s idea of ‘ecological’ law,\(^10\) Boaventura de Sousa Santos’s vision of a new legal pluralism,\(^11\) and Preuss’s view of the law as the ‘institution of societal self-mediation’.\(^12\)

Ladeur has ascribed the new indeterminacy of law to the transformation from a society based on individuals to one based on

\(^5\) Neumann, 1957.
\(^7\) Hedemann, 1933.
\(^8\) Wieacker, 1956.
\(^12\) Preuss, 1989.
organizations, which entails the replacement of universalistic law by a ‘strategic’ law. For him, the theoretical models of ‘order through fluctuation’ and ‘dissipative structures’\textsuperscript{13} seem appropriate tools for grasping this notion of law. I would shift the emphasis somewhat, and see the contemporary dominance of formal organization as only one aspect of a more general phenomenon. This would be the closure of social spheres, including formal organizations, into self-referentially operating autopoietic systems. This closure gives rise to a new conflict – and an insoluble one at that – between information and interference. In this conflict, the systems’ own constructions of the reality of the surrounding systems collide with their operative reality. The original systems can actually experience this operative reality, but not reproduce it within their own operations. The result of this conflict is either the disintegration of the system’s unique construction of its world or else a high level of operative indeterminacy.

The whole thing is primarily a question of second-order autopoiesis.\textsuperscript{14} The new indeterminacy only arises when, on the basis of general social communication (first-order autopoiesis), some subspheres, like formal organizations, politics, law, economy, and education, become autonomous. As we saw in chapter 3, in the course of social evolution these subspheres self-referentially constitute their own components – elements, structures, processes, relationships with their environment – which differ from those of general social communication. A relative end-point is reached when these components are in turn hypercyclically linked, elements producing structures, and vice versa. The effect of this hypercyclical closure is that systems become exceptionally adept at dealing with their environments. As we saw in chapter 5, despite their lack of direct contact with the environment, they construct for themselves their own unique environment. This means that their cognitive openness to the environment is based on their operative closure. This increases the potential of the system, but also makes increasing demands on it, especially in respect of precision, formalization, internal consistency, and operational determinacy.

The economy, for example, constructs its ‘society’ through the language of prices. Law features in economic calculations not as a binding guide to conduct, but as a cost factor (the severity of the sanction involved and the likelihood of its being applied). Politics

\textsuperscript{13} Prigogine, 1976.
\textsuperscript{14} Jessop, 1992.
constructs its ‘public’ through the language of power, law its ‘legal reality’ through the distinction between legal and illegal, and so on.

The disturbing feature of this apparently harmonious interplay of diverse discourses is what we called in chapter 5 ‘interference’. Inevitably, external influence contradicts internal information. Social spheres cannot be seen as isolated islands lying alongside each other. Interaction in the form of interference can occur because communications simultaneously take part in several autopoietic cycles and people can act in a variety of social contexts. A third, as yet unclarified area of interference - namely, the ‘overlapping’ of subsystem and society (see chapter 5) - can provisionally be termed structure- or system-interference. The consequence of such interference is not - as Frankenberg assumes - that an invisible hand guides the harmonious relationship between the inner and outer worlds. Rather, there are very real conflicts between information and interference. External description of the surrounding systems necessarily conflict with the way in which a system actually operates. This is no mere ‘academic’ point. We are not dealing with the conflict between descriptions coming from outside and inside a system. It is not, for example, a question of whether the law’s image of the economy corresponds to the economy’s self-image. We are concerned with the more acute conflict between the law’s image of the economy and actual economic processes - or, to put it more generally, with the way in which the system constructs its own environment and the way in which the surrounding systems actually operate.

Due to the operative closure of a single system, the real operations of the surrounding systems are not accessible to it. It produces internally, rather than receiving externally, information about the environment. It regulates this information with its own codes and programmes. At the same time, however, the system is exposed to the operations of the surrounding systems by reason of the interference between them. These other systems also function according to their own code, and make their presence felt by producing disturbance, interference, and noise. The concept of ‘order from noise’ is of no help to us here. For since order can be produced only from within the system, it always reacts in the same way to noise. This serves only to increase the disturbance generated, creating a resonance which amplifies the problems still further.

16 Frankenberg, 1989, p. 337.
There is only one way in which the system can avoid this catastrophic positive feedback. It can attempt to vary its own frequencies. It can do this by, for example, reconstructing its description of the surrounding system, using that system’s own self-description. However, this leads to another, equally serious problem. Taken to its logical conclusion, the adoption of an alien code for operations which are unique to a particular system means the ‘distintegration’ of that system. It signals the end of the operations based on its own specific code. For this reason the only possible solution takes the form of the rather unsatisfactory compromise of leaving the system’s own code untouched but adapting the programme to the self-descriptions of the other system, as far as possible within the limits of the code. This presupposes that there is a clear distinction between code and programme. But there is a price to this solution. The programme becomes highly indeterminate. It must try to meet the actual demands of the social environment, yet remain compatible with its own code. All that remains is to adapt to particular situations in an ad hoc way which makes universalization impossible.

Applying this theoretical model to law, one very quickly comes up against the economic and political instrumentalization of modern formal law which is the underlying source of the new legal indeterminacy. Max Weber is on the legal side of this dichotomy. In contemporary terms, Weber’s formal legal rationality is the expression of the hypercyclical self-referentiality of law. As discussed in chapters 3 and 4, it is distinguished not only by self-constituted legal transactions, ‘secondary norms’, reflexively regulated legal procedures, and an internally constructed ‘legal reality’, but by the hypercyclical linking of these components through the reciprocal production of elements and structures, identity and processes. This creates pressure for internal consistency, for the thorough conceptualization of doctrine, and for legal certainty. And, ironically, formal legal rationality only provokes the critique of legal indeterminacy.

Franz Neumann is to be found on the legal-environment side of the dichotomy. The closed, self-referentially produced versions of reality constructed by formal law come into conflict with the actual operations of its surrounding institutions. The developments from early capitalism to monopoly capitalism, which Neumann discusses, can be seen as but one of the environmental changes which bring

\[17\] Cf. Luhmann, 1992a.
about legal indeterminacy. The contemporary way out of the problems of indeterminacy is to incorporate political and economic self-descriptions in the law, to introduce political expediency and economic utility. If the legal/illegal code is indeed being replaced by political expediency or economic utility, then this implies a form of ‘khadi justice’. Legal conflicts are decided in a fashion which is arbitrary from the law’s viewpoint, according to criteria drawn from outside the legal system. ‘Efficient breach of contract’\(^\text{18}\) and the criterion of ‘optimal regulation’ developed by Easterbrook and Fischel\(^\text{19}\) are good examples of how the legal code can be directly replaced by another code. The same would have to be said of a thoroughgoing application of ‘policy’ arguments not only to rules, but to individual cases.

However, the solution generally adopted in legal practice is of a different order. The legal code remains intact, but the programme is altered. The programme is thus made to adapt, as far as possible, to the self-descriptions of the surrounding systems. Policy considerations and consequentialist arguments do not in practice make themselves felt directly on the level of individual cases. The validity of a decision, once taken, is not dependent on the consequences of or the success of the policy in that particular case.\(^\text{20}\) Instead, a separation of levels occurs, as in rule- and act-utilitarianism. The programme is determined partly by a general balancing of the consequences, policy considerations, and criteria of efficiency. It is then subjected to the legal code as a legal norm, treated as valid law, and converted into a decision by use of the legal/illegal distinction. The result of this precarious compromise is a dramatic increase in the indeterminacy of law. But that price must be paid if the law is to be remotely successful in dealing with conflicts between autonomous social spheres.

Thus, the most painful sacrifice that formal law has to make at the altar of responsiveness\(^\text{21}\) is the diminution of internal consistency. Modern responsive law develops legal categories in dealing \textit{ad hoc} with the various social subspheres. And these, of their nature, can no longer claim universal legal consistency. They vary from context to context. The internal differentiation of law, running parallel to the functional differentiation of society, has long since moved beyond the traditional broad distinctions between public

\(^{19}\) Easterbrook and Fischel, 1982, p. 1177.
\(^{20}\) Cf. Luhmann, 1987e, p. 25.
law, private law, and criminal law. The fragmentation of private law into a multitude of special fields has even destroyed the conceptual dogmatic unity of private law. With some justification, Zöllner criticizes these lines of development under the following headings: (1) chiselling away of doctrine, (2) growth of casuistry, (3) increased specialization, (4) the gradual drifting apart of fields of private law, (5) increasing restrictions placed on freedom of action, particularly for professionals, and increasing restrictions on individual autonomy. However, against the background of social differentiation, the repeated calls for reintegration appear hopelessly out of step with reality. For it is the prevailing conditions in the social domain concerned which entail the specific differentiation of private law and lead to the fragmentation of the private law doctrine and legislation.

Even key areas within private law, such as tort law, can no longer be integrated by means of unified normative principles. The compartmentalization of the classic "general" law of delict into a law of specialized delicts is an irreversible state of affairs, to which the law can only react by providing differentiated 'solutions for specific interests and social fields'. Ambitious doctrinal systematization used to go in for the conceptual refinement of the operative fact in legal norms. Nowadays, however, the work is in terms of theories of tort for differentiated social fields, and this is no accident. Extrapolating from these findings, it appears as if the practice of the courts is organizing 'Law's Empire' anew. The courts destroy the unity of law guaranteed by doctrine, and replace it by a multiplicity of fragmented legal territories.

II

Does this not faintly recall Pascal's lament: 'Plaisante justice qu'une rivière borne! Vérité au delà des Pyrénées, erreur au delà'? Could it not be said that law today is just as much dependent upon arbitrary lines of demarcation? Instead of rivers and mountains
marking the boundaries of the system, symbolic media, codes, and programmes do so. Not only is the problem similar, but the way in which such problems were dealt with in the past can inform our own approach. The law has a long history of dealing with specific types of conflict between systems. This includes conflicts of jurisdiction between territorially differentiated legal orders. Highly sophisticated mechanisms for resolving these conflicts have been devised by international private law. Is it possible to learn from these experiences? Can one extrapolate from conflict between territorial subsystems to conflicts between social subsystems? Does it make sense to develop principles and norms of an ‘intersystemic’ law, a law of conflict between different discourses in society?

Indeed, one can see that world-wide, autonomous social fields such as science, technology, the economy, public communication, and travel have gradually increased their interaction. The boundaries between them thus become more important than the boundaries between territorial systems. Does this not mean that law must focus on other areas of conflict? Should it not concentrate on resolving conflicts between systems rather than between nations? Historically and sociologically, it is perfectly plausible to speak of a universal shift in emphasis from territorial, political, and national conflicts to conflicts between global functional subsystems. Indeed, the most recent developments in legal doctrine in Germany have spurred interdisciplinary-oriented observers into developing a new conceptual framework. We might even call this a new conflict of laws.

Those more concerned with cultural analysis, such as Boaventura de Sousa Santos, see things in a similar way. He describes ‘interlegality’ as the dominant feature of post-modern law:

Legal pluralism is the key concept in a post-modern view of law. Not the legal pluralism of traditional legal anthropology in which the different legal orders are conceived as separate entities coexisting in the same political space, but rather the conception of different legal spaces superposed [sic], interpenetrated and mixed in our minds as much as in our actions, in occasions of qualitative leaps or sweeping crises in our life trajectories as well as in the dull routine of eventless everyday life. We live in a time of porous legality or of

29 Cf. e.g. Kegel, 1987, pp. 98 ff.
legal porosity of multiple networks of legal orders forcing us to constant transitions and trespassings. Our legal life is constituted by an intersection of different legal orders, that is by interlegality. Interlegality is the phenomenological counterpart of legal pluralism and that is why it is the second key concept of a post-modern conception of law. Interlegality is a highly dynamic process because the different legal spaces are non-synchronic and thus result in uneven and unstable mixings of legal codes.32

To return to more doctrinal authors: here, because of the strong link with the conflict of laws, Wiethölter is the first person to spring to mind. His concept of proceduralization is very closely linked with the development of ‘collision rules’. Wiethölter ‘supports... a view of proceduralization which sees it as a problem of how to justify “rational” practical actions under the conditions which prevail in the “system” (= the justification of rules of conflict by exercising judicial competence)’. He draws on the full conceptual armoury of the classical conflict of laws to work out the new dimensions of the problem:

In the higher-order legal principle of proportionality I have attempted to determine the most influential mechanisms of transformation for the osmosis, for the translations, for covariances of law and society, as the supreme and most general principle of production of an admittedly tacit and ineluctable justification of rules of conflict for resolving conflicting rights, interests and needs. Legal relations are in fact (and have been in Germany since the days of Savigny!) neither pure objects of evaluations nor pure evaluations of objects. They are always premeditated general decisions about the way facts are assigned to a particular law in the process of being introduced as a qualification of the legal response to social questions.33

But he remains remarkably vague: which units clash? Judging from Wiethölter’s texts alone, one could think that he was referring to conflicts of political interests, ideological camps, socio-legal models, general principles of law, legal subsystems, programme structures, social subsystems, subrationalities, or political strategies.34 If one asks the man himself, his reply is often cryptic. So why not try systems theory and its approach to conflict? It would be interesting

33 Wiethölter, 1986b, p. 66.
to combine it with the refinement of conflict of law doctrine as it emerged after the crisis induced by the American Revolution ('governmental interest approach').

Cryptic answers are all too understandable when one considers the major analytical difficulties that systems theory gives itself here. This needs, as Joerges rightly sees, a 'system-theoretical reconstruction of the manifold links between politics and the economy and the effects of this upon the legal system'. And work of this type has scarcely begun. Even identifying the colliding units between which conflicts are to be regulated is not easy — to say nothing of providing a solution. I would tentatively suggest differentiating between the following areas of conflict: (1) those between social subsystems, (2) those between state law and social quasi-legal orders, and (3) those between legal sub-orders within state law.

(1) What is the role of law in conflicts between various social subsystems, be they functional subsystems (politics, economy, family, religion, science, culture), formal organizations, or specific forms of interaction? Here the major problem is whether a translation of the conflict into the legal code is desirable at all. We do not always see this as a problem because of the ban on the denial of justice. But recent experiences with the phenomenon of juridification should have alerted us to the difficulties. Should not conflict rules be developed in order to counter the homing instinct of lawyers, their natural inclination towards their own legal order? Nonet and Selznick's proposal that civil disobedience be dealt with according to the 'political paradigm' belongs here. They urge that it be treated as the object of political negotiations rather than according to formal legal criteria: 'Forgiveness for rule breaking is readily negotiated in the interest of reconstituting a framework within which co-operation can go forward.' Simitis and Zenz and Habermas likewise set great store by the paradoxical capacity of the law to keep certain domestic and educational spheres of life free from juridification.

The question, then, is this: When faced with the conflicting rationalities of social systems, can the law develop conflict rules which counteract juridification through the process of juridification?

39 Simitis and Zenz (eds), 1975, p. 51; Habermas, 1984, ch. 8, sect. 3.
Intersystemic Law of Conflict

itself? Can it defer to ways of resolving conflicts in other social contexts? Can it develop rules regarding the application or non-application of its own code?  

There is a further problem here. Can the law content itself with ‘formal’ norms which refer the disputes to the rationality of one or other of the conflicting systems? Or does the ‘transsystemic’ nature of the conflict mean that it has to develop ‘substantive norms’ of its own? Ladeur’s ideas seem to point in the first direction: the model of legal regulation should concentrate rather on making self-regulation possible, on preventing dominant values from reinforcing their own positions and providing a buffer against the consequences of social relations and networks becoming increasingly flexible.  

My ideas on general clauses (‘good faith’ and ‘public policy’ clauses) tend more in the direction of developing substantive norms. In this way they can reconcile the rationalities of different social subsystems. However, this does not mean that socially autonomous orders are overtly politicized. Quite the contrary: what takes place here is a reciprocal process of reconciliation between more than one autonomous discourse. The aim of this is, among other things, to safeguard the civilizing achievements of that discourse’s relative autonomy.

Finally, we have also to consider intersystemic agreements. Resemblances to international agreements concerning conflict of laws are not merely superficial. Here, as in the above case, conflicts of expectations are resolved through negotiation rather than a referral to either side via formal collision rules or a substantive legal institution. The oft-quoted ‘neo-corporatist’ negotiating institutions are the most spectacular example to date of how inter-system conflicts are dealt with by ad hoc specialized formal organizations, with no recourse to legal rules. Formal organizations specifically designed for the purpose are involved instead. Yet this technique does not truly ‘bypass’ law; instead, co-existing alongside it, law comes in with a ‘secondary wave of juridification’ involving these self-regulatory processes. It latches on to their organizational and procedural premisses rather than to their substantive results. From a policy point of view, ways have to be found of using the law to

40 Luhmann, 1992a.
44 Ronge, 1980.
endow social self-regulation with an organizationally and procedurally appropriate learning capability. 46

It is an open question whether the law should limit itself to the attempt to reconcile conflicts between systems. Can it go further and introduce a universal interest into the process of mediation? This is what Preuss considers

the structural singularity of the law as the institution of societal self-mediation which embodies its 'rationale': not just to make compatible heterogeneous social subsystems in order to organize their mutual exchange of performances, but to integrate them into body politic, a commonwealth. This is clearly a normative quest; but the demoralization of the modern law indicates that it is to be realized by institutional arrangements and not by some sort of 'value community'. 47

(2) The conflict between state law and various social quasi-legal orders, or conflict among the latter, is another area of concern for the new law of conflict. Legal sociologists and anthropologists have recently highlighted phenomena of an 'indigenous law' in modern societies, indicating lines of conflict among them. 48 These are different from the conflicts discussed under (1) above, in which functional subsystems come into conflict with their different codes, programmes, and rationalities. Here conflicts arise within the legal system itself, albeit the legal system in the 'pluralist' sense of the term. Conflict resolution in enterprises, associations, and cultural organizations takes on a genuine legal character if conflicts of interests are defined in terms of clashing expectations and are decided by distinguishing binding expectations (see chapter 3, section IV above). To that extent the State, with its 'official' legal order, has no monopoly on law: rather, 'Societies contain a multitude of partially self-regulating spheres or sectors, organised along spatial, transactional or ethnic-familial lines ranging from primary groups in which relations are direct, immediate and diffuse to settings (e.g. business networks) in which relations are indirect, mediated and specialized. 49

47 Preuss, 1989.
With the emergence of multinationals and the increasing internationalization of economic activity, the conflict between state and societal law has taken on yet further, more dramatic dimensions. International arbitration and the ‘codes of conduct’ of international organizations represent the first tentative steps towards resolving the conflict between the international *lex mercatoria* and the law of individual nation states.\(^{50}\)

On the other hand, there is an established tradition of legal solutions. When mediating between these sectors, courts have reviewed standardized terms of trade, articles of association, and corporate by-laws. Modern judicial review has long since moved beyond the purely formal. This had struggled to set the ‘limits of acceptance’ of a particular legal sub-order. It was characterized by efforts to formulate clear norms which precisely delineated the respective spheres of validity for state law and for the legal sub-order. Review consisted in formally referring a decision to the appropriate order. Later, as courts recognized the asymmetric nature of these agreements, judicial practice showed a more substantive form of review. It recognized these sub-orders as ‘private legislation subject to discretionary review’, considering and changing the contents of standardized agreements. It thus attempted to work out substantive rules of its own, rather than merely deciding which is the appropriate sphere of validity. The question is only what the criteria are to be. Can an ‘intersystemic law of conflict’ offer something which extends beyond mere notions of ‘appropriateness’, ‘fairness’, something more than *ad hoc* considerations of equity?

The answer lies in a shift in the ‘balancing of interests’, which is the inevitable consequence of substantive judicial review, from individuals to social spheres. The interests to be balanced should not be seen from the point of view of the individual or the collective actor. Rather, they should be seen from the point of view of social systems as communicative networks. What would be the implications of a switch from balancing individual and group interests towards the ‘network’ approach? In the former, interests are balanced by extrapolating from the legislation which is seen as having within it an appropriate balance. But justice is done not by uncritical application of the law but by a ‘critical obedience’ to it. The latter would involve the courts in a substantive review of quasi-legal orders. The point here would be to bring out into the open the intrinsic logic, functional requirements, and guiding principles of the conflicting social fields and to balance them.

\(^{50}\) e.g. cf. Wallace, 1982; Schanze, 1986.
This seems to be the direction in which Joerges is heading. His analyses focus on how private autonomous orders (general terms of trade, long-term contracts) are controlled by the law. He seeks to counteract the one-dimensional view, either market orientation or consumer orientation. Joerges insists on a conflict-law viewpoint, which can be mastered only by balancing competition policies, state planning, and consumerist policies. I have certain reservations with the orientation to state policy. Does the control of private orders have to do only with the conflict between the State’s policies on competition and on consumer protection? Is this not of secondary importance compared to the original conflict between the institutional requirements of the market, economic organization, and the demands of private life? But these are mere quibbles. The most important thing is to realize that conflicts apparently between individuals are in fact conflicts between systems.

A similarly institutional approach is also to be preferred when the matter is not one of ex post facto substantive review, but rather of legal control over the constitutive conditions of quasi-legal orders. In the cases of safety-standard committees, codes of practice for advertising, competition rules, or disciplinary practices in firms and associations, legal controls should aim at securing procedures and organizations for ensuring that external interests are sufficiently represented within the system.

(3) Finally, a law of conflict would have to deal with conflicts within the law. As explained above, the internal differentiation of the legal system is merely a reflection of functional differentiation within society. The legislature and the courts have attempted, in a reactive and ad hoc manner, to establish a precarious compromise between various external social demands, the requirements of political regulation, and the need for consistency within the law. This has resulted in a variety of specialized and highly separate legal fields and a correspondingly specialized cohort of experts. The latter indentify with their particular field, rather than with the legal profession as a whole. Conceptual conflicts and conflicts of value between such legal fields are the order of the day, and create considerable problems of legitimacy. Policy conflicts are unavoidable: ‘Free trade favours the consumers but endangers labour interests; full comparability of prices favours market transparency, but endangers trading through small businesses etc.’

53 Ibid., p. 64.
contradictions between the concepts of contract in civil law and competition law can be tolerated by the experts concerned. The general public, however, finds it hard to accept that tax law can be indifferent to criminal law, that income from prostitution, bribes, and payments to extortionists should be tax-deductible. Despite such anomalies, the demands for the restoration of the ‘unity of the legal order’ are, of course, merely rhetorical in character, or are used tactically when the occasion arises. Attempts to establish a conceptual or axiological unity through legal dogmatics are doomed to failure. This is as true for areas within the law such as private law as it is for the law in general.

The opposing strategy, which supports the empirical tendency towards increasing specialization within the law, deserves to be taken more seriously. It insists that the principles of specialized legal fields should remain pure, uncontaminated by external influences. We can see this in the refusal of competition lawyers, when dealing with general clauses in competition law, to take account of recognized legal principles from other areas of the law. These tendencies to autarchy fail to prevent the occurrence of conflicts within the legal system. Instead. The handling of these is left to chance: individual cases address contradictions as they crop up, with no meaningful basis in a doctrine of conflicts.

By contrast, Walz’s idea of the ‘relative autonomy of legal fields’ seems to be both realistic and normatively acceptable. Although this principle was originally developed in relation to tax law, it can be generalized. Walz explicitly borrows concepts developed in international private law. His starting principle is that specialized legal fields are essentially independent, and are subject to limitations in situations only where ‘ordre public’ happens to be relevant. Each legal field will develop its doctrinal structures according to the demands of the social segment involved, but in cases where problems of ‘ordre public’ arise, the particular legal field must respect the fundamental principles and policies of the other legal fields. It must incorporate them into its own autonomous doctrine as a limitation on its activities. This seems to me to be the only realistic way of reformulating the old idea of the unity of the legal order. In a legal system characterized by a high degree of differentiation, integration through concepts or values is no longer possible. We need instead to achieve a measure of compatibility between the

54 e.g. Wolf, 1982; Jakobs, 1983.
doctrines of autonomous legal fields and the mutual reflexive adoption of their fundamental principles.

III

We can view the general clauses of private law as a paradigm example of collision rules in action. Indeed, their high degree of indeterminacy makes them all the more likely to assume that role. The way in which the role of general clauses has earned such a reputation is a prime example of the 'materialization of private law'. This change, whereby the 'observance of statute and contract' is exchanged for 'regulatory, controlling and ultimately browbeating judicial power' is described by Esser as 'judicial interventionism run riot'. But this is too narrow an understanding, and tends to hide the role of general clauses in collisions between systems. It would also be too narrow to see materialization as describing state interventionist compensation for any market failures. Rather, we have here an attempt to use the resources of the law to deal with problems arising from a high degree of functional differentiation within society. In effect this means balancing and co-ordinating the contradictory social demands which are made on the contractual relation from within contract law itself. Materialization in this sense means making visible the dependence of contractual expectations on a variety of non-contractual social expectations, including state interventionist ones, and their co-ordination within the contract. Here, then, the law is applied not 'formally', in the sense that it determines which of the social subsystems should be used to solve the problem, but 'materially', in the sense that substantive legal norms are developed to deal with collision between functional subsystems.

This requires a reformulation of our understanding of contract from the point of view of autopoietic theory. The simple consensus model found in the classic theory of contract must be modified. The traditional view of the contact as emerging from 'the meeting of minds' must be jettisoned in favour of contract as the legal form of a social relationship. Classical conceptions of the system as a totality

57 Assman et al., 1980.
58 Esser, 1956b, p. 556.
consisting of elements and relationships have laid the groundwork for this reappraisal. Thus ‘institutional’ definitions of contract have drawn attention to the connection between legal norms and social structures. ‘Organicist’ conceptions have contributed by describing contract as a living whole, composed of the meaningful interaction of its elements. Understanding contractual obligation as ‘structure and process’ highlights two central aspects of the contract as a system. Finally, focus on the purposive organization of contract emphasizes its ‘programmatic’ character. It thus requires to be ‘executed in a more complex way’ than a more simple process of exchange would be.

Theories of ‘relational contract’ point in a similar direction. As against the simple consensus model, the idea of a ‘relational contract’ focuses on ‘interaction and co-operation among the participants, on the resulting values and needs, on contract as process, on the marginality of formal contract law in relation to actual behaviour, on the ambivalence of “juridification” of contract via numerous state interventions’. According to Köndgen, the ‘relational’ theory in contract law argues for ‘distancing oneself from the dogma of the final quasi-codificatory validity of contractual consensus’. This includes not only a ‘“microscopic” analysis of the particular expectations and ideas of reciprocity of the parties involved, but also a “macroscopic” analysis of grand scale expectations in the modern social state’.

Such ideas, which evoke the flexibility peculiar to ‘the contractual relation in dealing with social reality’ have been developed further into a concept of contract as a social action system open to the environment. Seen in this way, contract achieves the goal of consensus between parties, but still has certain additional problems to solve. It solves them by responding to demands from its environment, while maintaining its own integrity. The contractual relation is defined as a normatively ordered complex of meaningful actions whose internal structures can be explained not only by the norm-
creating effect of the consensus between the parties involved but just as much by the external demands of quite different social subspheres.\(^69\) This prefigures the problem of conflict when the contractual relation is placed under contradictory structural requirements.

J. Schmidt also sees contract as a system in the sense understood by sociological systems theory. He rightly rejects an individually oriented concept of system, in which creditor and debtor appear as elements. Instead, he puts forward the following definition: ‘The system no longer comprises (empirical) people or role segments from the set of roles of empirical people, but social interactions, that is to say rationally-ordered complexes of action.’\(^70\) This move highlights the relationship of system to environment, and shows how contractual relationships evolve as a particular response in relation to politics, economics, and the law. This does not take us beyond the theory of open systems, however; neither does a ‘contingency theory of contract’.\(^71\)

The way in which contracts develop is thus dependent upon the way in which the system functions in the environment.

In moving beyond open systems theory, an autopoietic reformulation would have to modify this model along constructivist lines\(^72\) and build in additional levels of observation.\(^73\) On this view, the contractual relationship would be a self-reproducing system of communicative interaction between contractual partners. It develops its structures by interacting with the ‘contractual environment’, which, however, it constructs itself. This would be the system-subjective form of contingency theory which Deggau rightly calls for. Thus, external regulatory impulses cannot have an unbroken influence on contract. They manifest themselves in the conflict between information generated from within the contract itself and external interference. As we saw in section II above, this leads to a high degree of indeterminacy. The good faith formula is then applied to diminish the degree of indeterminacy, by reconstructing the external demands within the contract itself and weighing them against each other.

The ‘non-contractual elements of contract’\(^74\) are thus nothing

\(^{69}\) Cf. Teubner, 1979, pp. 729 ff.; 1980, p. 44.
\(^{70}\) J. Schmidt, 1985, pp. 184 ff.
\(^{71}\) This is based loosely on the ‘contingency theory of organisation’: Lawrence and Lorsch, 1967a,b, 1969.
\(^{73}\) von Förster 1981.
\(^{74}\) Durkheim, 1933, pp. 206 ff.
more than the internal contractual reconstruction of the social demands of the environment on the specific contract. They surface as expectations in the ‘contractual system’ on three different levels: (1) the level of personal relationships between the contractual partners (the interaction level); (2) the level of market and organization, which extends beyond the individual contract (the institutional level); and (3) the interplay of ‘politics’, ‘the economy’, and ‘the law’, which encompasses the whole of society (the societal level). These levels do not interrelate hierarchically; rather, they are fundamentally distinct modes of system development which become increasingly independent of one another.75 Nevertheless, contract, because it is interwoven with all three, is an action system that is common to them all. Returning to our original quest for an internal mechanism for resolving intersystemic conflicts, the general clause can now be understood as a collision rule which refers to these three levels of system formation as a way of balancing their contradictory demands.

The current debate on the ‘materialization’ of general clauses centres on precisely this issue: how to reconcile contradictory social demands with the actual contractual relation. It is in this sense that we can talk of the ‘socialization’ of law in general clauses and the intrusion of ‘social facts’ into contract law.76 The contemporary task of the general clause is that of ad hoc intervention to resolve conflicts between systems which, from the point of view of contract law, appear to be ‘contingent’ and thus not subject to formal and general rules.

By distinguishing between the three levels which each make their own demands upon the contract, we are now able to reformulate the problem of legal indeterminacy which we addressed above. If we identify the levels at which the ‘non-contractual elements of contract’ operate, we can develop criteria for different types of indeterminacy. These will, of course, vary according to the level with which we are dealing. Expectations come to be integrated at a level of abstraction which has always to be determined according to how the requirements of the contractual relationship evolve. This can come about from the concrete interaction of the partners (persons and situations), the division of labour in market or organization (roles and norms), or from guidelines of a general social or particularly political kind which have to be incorporated into the individual contract (purposes

75 Cf. Luhmann 1982a, pp. 76 ff.
76 Struck, 1982, p. 259.
and values). In the temporal dimension, the variable balance between normative consolidation and cognitive flexibility appropriate to that particular level has to be more precisely determined. In the social dimension, we must ask ourselves what degree of institutionalization can be presupposed for each of the levels. For each of the levels it must be determined whether self-regulatory social mechanisms ('standards') are working or whether a 'failure' of self-regulation makes it necessary to come up with some rule which compensates for the failure ('directives'). The extent to which, if indeed at all, self-regulation functions on any particular level will determine whether the social norms which are referred to in the 'standards' should be taken as given or whether legal requirements, taking their place, should be drawn up.

At the level of interaction, the general clauses refer to informal expectations about conduct; but in the case of 'interactional failure', the 'objective' purposes of the contract are defined by judges. Similarly, at the institutional level, when there is a 'market failure', the assumption of the 'ethics of commerce' and 'trade usages' is replaced by the formulation of duties of disclosure and professional standards. Finally, on the societal level, the general clause refers to the legal policies made binding in legal norms. In the case of a 'breakdown' of the political mechanisms, it is left to the judges to decide how 'public policy' is to be defined.

IV

Let us look at the implications of this in more detail.

(1) At the 'level of interaction' we are dealing with the conflict between the contractual consensus as legally defined and the norms which stem from the informal expectations of the parties. The latter evolve from the personal interaction of the contractual parties. How do we legally interpret these norms of a specific 'contractual morality'? To what degree should they be legalized? How do we deal with the conflict between them? To be sure, the contractual norms formalized in the explicit act of legal agreement need to be complemented by a set of informal expectations. Certainly, these are

not derivable from the explicit declaration of wills. At the same time, they cannot simply be derived from the contract law of the state, \textit{ex lege}. \textit{Ex lege} does indeed point to the derivation of these norms from factors which are diametrically opposed to the explicit declaration of wills. At the same time, it also rightly points to how contract law develops through judicial precedents.\footnote{Canaris, 1971, p. 432.} However, it gives the erroneous impression that it is possible to consolidate such particularistic norms of conduct into a series of general rules, while masking the actual grounds of validity: the judicial sanctioning of social norms.\footnote{Köndgen, 1981, pp. 167 ff.}

Legal sociology has provided some subtle analyses of the genesis of social norms in dyadic contractual relationships. The reciprocal co-ordination of behaviour and its stabilization over time leads to the development of fixed patterns of expectations. These determine the behaviour of the parties to no less an extent than do the formalized agreements.\footnote{Cf. Weber, 1967, p. 80; Geiger, 1964, pp. 46 ff.; Luhmann, 1985c, ch. 2, sect. 4; Köndgen, 1981, pp. 167 ff.} Complementarity and reciprocity of expectations and the demand for consistency in behaviour are essential mechanisms for the formation of norms which influence the legal definition of contractual obligations.\footnote{Cf. Köndgen, 1981, pp. 233 ff.}

(2) At the ‘institutional level’ we are dealing with the conflict between contract and social institutions like market and organization. Contracts are embedded in a broader institutional context. This gives rise to structural constraints which contract law also has to take into account. By imposing additional contractual obligations or by limiting contractual rights, the general clause figures as a collision rule for the ‘external relation’ of the contracts which cannot be handled by classical contract and tort law. The indeterminacy of general clauses is narrowed in the following ways. In the social dimension, the reference to social standards of commercial morality is replaced by the formulation of legal directives. When the judiciary diagnoses a market failure, it follows that merely commercial standards, which function to complement the market, are no longer accepted. Legal instances, not commercial interests, now determine the consensus requirements. In the material dimension, this brings about a change in level of generalization. Universal norms are no longer used as the basis for the determination. Rather,
one adjusts to particular role expectations. New dogmatic concepts, such as contractual purpose, role, and organization are employed to achieve this. These regulate how requirements of conduct are substantively defined. In the temporal dimension, the general clause becomes more flexible, and takes on a more cognitive hue: role requirements can be redefined according to the situation. At the same time, however, they can be counterfactually established even against the parties’ own consensus.

(3) Conflicts between the contract and other social spheres appear on the ‘societal level’. By ‘other social spheres’ is meant functional social systems such as politics, the economy, the family, culture, and religion. The individual ‘private’ contract is interwoven into these in a complex way. As their function becomes increasingly differentiated, so they become increasingly autonomous. At the same time, however, they become increasingly interdependent. The more they regulate themselves, the more they are riven by tensions, contradictions, and conflicts. This obviously has an impact on contractual systems. Contracts, by normatively defining what the risks will be for the future, stabilize the tensions caused by this interdependence. They act as islands of stability in troubled waters. However, beyond a certain point, disturbances in the environment cease to be acceptable, and mechanisms of adjustment are necessary in order to resolve conflicts between contractual orders and their social environments. The unbounded priority of the individual consensus between parties cannot be insisted upon, whether one is dealing with matters of individual conscience, strict religious prohibitions, political regulation, or economic controls. The general clause is particularly suited to reconciling unstable social environments with constantly shifting and conflicting requirements, because of its high degree of indeterminacy.83

V

Such attempts to mediate in cases of conflict between social systems constitute a real challenge to the reflective capacity of legal doctrine. Is doctrine able to combine the legal discourse’s own need for consistency with the material demands of autonomous social subsystems?

This question builds on Luhmann’s reformulation of the concept of justice. He refers to the ‘twofold contingency of social requirements for law to exert a stabilizing influence in life on the one hand and the level of expectation within the legal system on the other’. The open question, however, is whether law, as Luhmann clearly supposes, can take account of ‘social requirements’ only in an ad hoc way, evolving blindly from one political scandal to another? Or is the legal discourse in a position systematically and ‘reflexively’ to develop legal criteria for the requirements of the autopoietic social systems that surround it?

Would this be the contemporary vision of *iustitia mediatrix*? Justice would no longer mediate ‘vertically’ between *ratio* and *aequitas*, between divine and positive law, as it did in stratified, hierarchical societies. Instead, in response to functional differentiation, it would have to establish a ‘horizontal’ balance, precariously weighing the requirements of consistency imposed by positivized law and the demands of a multiplicity of autopoietically closed social systems.

---

84 Luhmann, 1973a; 1974, p. 49.
85 Placentius, 1192, p. 53.
We saw in the last chapter that self-reference and autopoiesis are not only issues for legal theory, but have an impact on legal doctrine as well. Doctrine is faced with a new agenda in having to respond to the enduring conflicts between the particular logics of autonomous social systems. It thus needs to adjust its pattern of principles and its mode of argumentation to the new social situation. But does the theory of autopoiesis also have an impact on the way lawyers go about their daily business? Does it inform the construction of legal concepts? Does it contribute something to the discussion of doctrinal questions and to the decisions of the courts? According to Heldrich, the addition of a bit of autopoiesis has thrown legal dogmatics into a ferment: ‘But whether what comes out of it will illuminate the senses or dim them further, we are not yet in a position to judge.’

The forays of legal dogmatics into this domain to date can be summed up briefly. Luhmann discusses questions of the legal concept of action and also of the political right of disobedience to law from the point of view of autopoiesis. He remains sceptical, however, when it comes to sociological jurisprudence as a whole. Deggau reformulates issues in contract law, such as mistake and frustration, and takes a generally optimistic view of what autopoiesis can bring to legal doctrine. Breuning and Nocke, as well as Graber dealing with constitutional issues of the freedom of art, develop a legal concept of the autonomy of art on the basis of

1 Heldrich, 1986, p. 105.
2 Luhmann, 1984c.
4 Deggau, 1987b.
autopoiesis. Kargl redefines fundamental doctrinal concepts in penal law. Schluep reviews issues of economic regulation from the perspective of self-reference. It is Ladeur who has ventured furthest into the territory of legal dogmatics. With the conceptual apparatus of self-organization theories, he tackles a variety of issues in public law, ranging from regulation of nuclear power to medical-legal matters, law and the media, and environmental questions. In this context, he has developed a strategy of law’s ‘dealing with uncertainty by using the (self-)organised capacity to learn’. For my part, I have the impression that a kind of ‘middle-range’ dogmatics can benefit substantially from the theory of autopoiesis when it comes to constructing legal realities in a different way. By reformulating doctrinal theories on ‘contract’, ‘organization’, ‘legal person’, and ‘responsibility’, we have a chance, it seems to me, of countering the adhocracy of ‘case-law positivism’, or, as Zöllner puts it, somewhat more polemically, the ‘cult of precedent’, which is already something of a spent force. My previous attempts at this have concerned the general clause ‘good faith’, contractual duties of information, issues of contractual frustration, the legal concept of the corporation, the social substratum of the legal person, the interest of the corporation as a whole, questions of corporate governance, the social responsibility of companies, and civil liability of franchising networks. To test this approach further, I would like to continue this review of private law concepts from the point of view of systems theory. More specifically, I will try to develop the legal concept of the corporate group as an autopoietic system. What implications does this have for group regulation, particularly for issues of corporate governance, including questions of worker participation in complex organizations?

What does autopoietic theory suggest vis-à-vis the potential role of theories of the firm in group organization and corporate governance? Despite widespread expectations of comprehensive technocratic solutions, translatable into legal instruments, autopoiesis starts off with a double disclaimer. It is sceptical in respect of both law and theory. This is related to the reorientation of the theory of self-referential systems discussed in chapter 2, a reorien-

5 Breuning and Nocke, 1988; Gráber, 1991.
7 Schluep, 1990.
tation from planning to evolution, from regulation to autonomy.\(^\text{11}\) Autopoietic theory suggests that law plays a modest role in the dynamics of the processes of evolution of industrial organization. And, given the internal dynamics of legal practice in corporate groups, the possibilities of guidance from theory are also rather limited.

One can regard the recent history of industrial organization as a process of ‘blind’ evolution: that is, as the uncoordinated interplay of the mechanisms of variation, selection, and stabilization.\(^\text{12}\) Accepting this view, it appears that, in the decisive phases, law has only rarely been the driving, innovatory force which has advanced the course of evolution. The process of variation and selection was regularly carried out by non-legal elements. The great legal innovation of the nineteenth century, the organization and liberation of the business corporation as a legal person,\(^\text{13}\) was initially nothing but the legal form given to newly emerging industrial action centres. This in turn accelerated the dynamics of capital concentration by, for example, making possible the formation of corporate groups. Indeed, one of the features of the great legal reforms of the twentieth century, the increasing separation and autonomy of executive and supervisory boards, was merely the ultimate expression of the process of separation of ownership and control which had been under way for some time. Co-determination in corporate governance as well, hailed as a legal policy innovation, should more realistically be regarded as being merely a reflection of the changed relations between capital and labour, between business concerns and unions, and, within the enterprise itself, between traditional hierarchy and functional democratization.\(^\text{14}\) This does not mean, however, that one should underestimate the repercussions of legally formalized power relations on the fluctuating situation in the market and on the forces within organizations.\(^\text{15}\) As a consequence, gauging the controlling capacity of corporate law depends in great part on which evolutionary model is used to interpret events.

The law of corporate governance has, on the whole, always acted as a stabilization mechanism on organizational forms which have


\(^{12}\) See e.g. the evolutionary approaches adopted by Alchian, 1950; Nelson and Winter, 1982; Witt, 1987; Hutter, 1989b.

\(^{13}\) e.g. Ott, 1977, pp. 43 ff.


\(^{15}\) Cf. Wilpert and Rayley, 1983, p. 95.
evolved through other mechanisms of variation and selection. However, the role of stabilizing mechanisms should not be underestimated. Stabilization always has repercussions on the dynamics of the economy, since a level of development stabilized by legal norms in turn opens up previously unforeseen possibilities of development. At the same time, however, this makes it possible for the law to exert some influence and control on the ongoing process of evolution. Perhaps the clearest example of this is the effect of the current legislation on co-determination. As a consequence of this, gauging the regulatory capacity of corporate law depends in large part on which evolutionary model is used to interpret events.

This is the point at which theory should start. Nevertheless, theoretical reflection which accompanies such developments is also subject to clear restrictions. For all Savigny's and Gierke's grandiose schemes for the autonomy and reality of the legal person, for all the novelty value of the 'enterprise per se', separation of property and control and 'private government', theory has always had to leave the 'invention' of regulatory patterns to legal practice. The real business of theory is not to come up with specific proposals for regulation, but to construct legal reality in another way. The challenge which confronts theory, and which also imposes its limitations on it, is to develop a new perspective on what constitutes a corporation. Theory can also cast light on the internal problems which beset organizations. And if practice accepts what theory has to offer, then there is the possibility that these new insights will lead to the development of a different and perhaps better law of corporate governance.

Against the background of these two restrictions, law and theory have the opportunity to choose a perspective on organizational evolution that offers law the possibility of stabilizing efficient forms of industrial organization. It also allows law to have some impact on the process of industrial organization itself. A brief glance at competing theories shows that what we have here is indeed a choice of models of evolution. There is a bewildering range of possible ways of constructing the reality of the corporation. With regard to the problem of corporate governance in group enterprises, the theory of autopoiesis offers quite a different view of the organization from, say, economic theories of the firm or political theories of private government. Economic theories tend to see the corpor-

ation in terms of a contractual nexus of resource-holders and make participation in corporate governance dependent upon transaction-cost considerations. Political theories focus on power relations in economic organizations, and pose the question of legitimation. Autopoiesis, on the other hand, locates problems of corporate governance at the point of intersection of two evolutionary processes. One is the gradual shift within neo-corporatism from macro-corporatist to micro-corporatist arrangements. The other is the development of the corporate group as a hybrid form of industrial organization. The latter is characterized by a mixture of market and organizational structures which is subject to strategic planning. If corporate governance resides at the intersection of the decentralization of corporatism and the centralization of industrial organization, then the law of corporate governance is concerned with the legal stabilization of micro-corporatist arrangements so as to take account of the hybrid nature of the group enterprise as an ‘organized market’. The emphasis is not on the protection of subsidiaries or the regulation of the corporate group hierarchy. Rather, it is on the governance of the ‘poly-corporatist network’ itself, the flexible network or semi-autonomous administrative centres. Thus the question facing legal policy is as follows: Is the legal governance of a coalition of producers within the network of the *unitas multiplex* possible?

II

Before we go on to examine the poly-corporate network thesis in more detail, it is worth taking a brief look at some other theories. What vision of reality does the economic theory of the firm offer, which could serve as a basis for legal corporate governance?17 Within economic theory Oliver Williamson has produced the most ambitious scheme to date.18 His starting-point is the dissolution of the organization into a nexus of exchange relationships among resource-holders. This makes it possible to view the corporation as one end of the spectrum of various types of contractual relationships. These can range from the spot market transaction to the

multinational group. They are distinguished only by the fact that they exhibit ‘governance structures’ of varying quality and intensity. The choice among the various contractual arrangements is determined by the criterion of efficiency: ‘minimize transaction costs’. There are three factors which are decisive for the choice of governance structures: uncertainty, opportunism, and ‘asset specificity’. Of these it is the last which is most important in differentiating between forms of organization.

This theory is relevant for the law of corporate groups, because it helps to overcome the reservations of company and antitrust law towards these hybrid forms of organization. If Williamson can show that particular forms of group organization, especially the decentralized form of multi-divisional organization, serve to minimize transaction costs and hence increase efficiency, he would challenge the traditional legal view. More precisely, he would challenge the legal assumption that the formation of a corporate group is either to the detriment of a dependent company in the interest of the dominating one or is a clear expression of a tendency towards concentration and monopolization.

Of similar relevance are the consequences of the transaction-cost approach to corporate governance in the narrower sense. Williamson asks whether resource-holders should be allowed to participate in internal decision-making processes. For him this depends on ‘asset specificity’. With low ‘asset specificity’, the combination of contract and market controls is appropriate; with high ‘asset specificity’, additional governance structures are necessary in order to control the opportunistic exploitation of temporary advantages (‘opportunism with guile’). For an economic theory, this has the somewhat surprising effect of putting the employees’ relationship with the firm on more than a mere contractual basis. Indeed, Williamson demands the integration of particular groups of employees into the governance structure of the firm – not perhaps in supervisory boards but rather in grievance procedures and similar, more resource-specific, organizational mechanisms.

Both the strength and the weakness of transaction-cost theory lie in its contractualistic approach. The dissolution of economic organizations into a complex contractual nexus makes sense only in respect of members’ recruitment and the utilization of individual motivation for organizational purposes. However, as soon as the contractual mechanism is universalized, as soon as the whole of the organization is reduced to exchange relationships between resource-holders, it is doomed. The corporative and collective elements of
organization are thus systematically underexposed, if not totally eclipsed.

Sociological theory suggests that contractualism amounts to an unjustified privileging of certain basic forms of social action over others. A theory which starts from the initial condition of double contingency\(^1\) juxtaposes three types of social action which are in principle equally valid: exchange, competition, and co-operation.\(^2\)

But the contractualist approach proceeds on the assumption that exchange and competition are the normal conditions of social action. Co-operation appears only as a compensation for market failure: that is, exchange failure and competition failure. Accordingly, Williamson conceives of governance structures only as compensatory mechanisms which intervene when high asset specificity makes it impossible for contractual mechanisms and market controls to function normally. In a remarkable narrowing of perspectives, governance is seen merely as a means of securing transaction-specific investments against unfair advantage (‘opportunism with guile’). He thus portrays governance structures as a way of overcoming unfair advantage. But does this not mean drastically underestimating the preconditions and consequences of co-operation as a basic form of action?

Williamson’s approach systematically fails to take into account many aspects of formal organization: decisions as elementary operations of organization, governed by internal organizational structures; goal-orientation of members towards the purpose of the organization; adjustment of resource-holders’ contracts towards the goal of the organization and its internalization in contractual relationships; subjection of the actors to the norms of the organization; membership as a combination of belonging and subjection to rules; the boundaries between organization and market and between the members of the organization and market partners, which are determined by the specific features of the organization; power as a medium of communication of the organization and corresponding forms of the co-ordination of action; informal relationships within the organization.\(^3\)

To be sure, the contractualist viewpoint allows the ‘transaction’ to be viewed as the basic unit which is common to both contract and organization. However, this masks certain fundamental dif-

---

1. Parsons and Shils (eds), 1951, p. 16; Luhmann, 1992b, ch. 3.
2. Luhmann, 1992b, ch. 9, sect. 6.
ferences not taken into account by the theory. The basic unit of the market is the (financial) transaction, whereas that of the organization is the decision. Action in the market is primarily oriented towards prices, whereas action in organization is oriented towards expectations generated within the organization itself. Finally, the calculation of action in the market depends on the self-interest of the individual; whereas within the organization the calculation depends primarily on organizational interest.22

This brings us to the second fundamental criticism. A contractualist approach systematically underestimates the role of the ‘corporate actor’. Certainly Williamson describes in some depth the differences between contract and organization against the background of a ‘fundamental transformation’. Although market controls are effective before a contract has been concluded, after conclusion, in the case of contracts with high asset specificity, a bilateral monopoly emerges. Unless some corporate governance precautions are built in, the fate of the contractual relationship is entirely at the mercy of the contractual partners. However, these analyses fail to take into account a second ‘fundamental transformation’ which occurs when the contractual nexus becomes an autonomous collective actor. Lawyers speak of corporate elements and the legal person, sociologists of the corporate actor and the collective.23 And it is indeed true that some economists see the firm as a unity which can be compared to an individual actor. However, economists who adopt a contractualist approach have, up to now, at least, been blind to the phenomenon of the social imputation of action to collective actors. Williamson’s economic organization is nothing but a multiplicity of long-term contractual relationships between natural persons. However, those theorists who are committed to methodological individualism cannot evade entirely the logic of the collective.24 Accordingly, even in Williamson, collective units make an appearance, albeit in a rudimentary fashion. Witness, for example, references to ‘unified corporate governance’, ‘common profit-seeking’, and the firm as a partner in resource contracts. However, they are introduced only on an ad hoc basis in a theory that remains individualistic and contractualist.

Here we shall merely list briefly what gets lost in the process: the ‘corporate actor’, as opposed to the individual contractual partners, as a new, different point of attribution for maximizing profit and

22 Luhmann, 1988a.
23 For further references, see Teubner, 1988a.
24 For a recent study of this with a detailed bibliography, see Galeotti, 1988.
minimizing transaction costs; the criterion of ‘corporate interest’ as an independent criterion for resolving conflict between resource-holders – that is, something which amounts to more than a mere balancing of interests against a background of real or fictitious market mechanisms; the corporate actor as a new contractual party for pooling resources; the collective binding effect of the corporate actor on the actions of the corporate agents; and the effect of the corporate actor on the outside world, which makes possible a new type of relationship between the firm and its environment.\textsuperscript{25}

As far as corporate governance in groups is concerned, there are two consequences of the contractualists’ disregard for the corporate actor which are particularly important. First, the tension between unity and diversity in group enterprises\textsuperscript{26} cannot be grasped adequately by looking at it only in terms of decentralization and the incorporation of market elements into the organization, as Williamson does. What is missing is the multiplication of corporate actors in an organized network – and this is something that cannot be reconstructed by theorists of contract (see section VII below). Secondly, the principles of corporate governance are looked at one-sidedly from the point of view of the resource-holders as contractual partners. They are seen as a protection against unfair advantage on either side. There is, of course, something to be gained from looking at things in this way. However, certain decisive elements of corporate governance are overlooked. For it can be seen as oriented towards the collective interests of the corporate actor, to the advantage, in terms of efficiency, of the organization as a whole and its universal social functions and performances.\textsuperscript{27}

In sum, the price of the transaction-cost approach to analysing the choice among organizational forms is a myopic view of the corporate and collective aspects of the company. This severely limits the value of this theory for a doctrine of corporation law.

III

No less deficient is the tunnel vision of those political theories which tend to treat industrial organizations as ‘private government’.\textsuperscript{28}

\textsuperscript{25} For more on this, see Teubner, 1988a, pp. 143 ff.
\textsuperscript{26} Raiser, 1964; Bälz, 1974, 1985; Assmann, 1990.
Their lasting merit lies in having discovered private economic organizations as para-political systems\(^{29}\) which build up organizational power in order to produce collectively binding decisions throughout the organization. This puts the phenomenon of power in the forefront of the analysis. Theories of private government highlight the phenomenon of political power in economic organizations which are allegedly geared only towards market efficiency. They thus enrich that analysis by drawing parallels with larger political systems. A whole range of political phenomena in the economic firm is thereby opened up to analysis: hierarchy, bureaucracy, accumulation of power, division of powers, group competition, political coalitions, negotiating systems, and log-rolling, to mention only a few.

Group enterprises, too, are essentially interpreted as a phenomenon of economic power.\(^{30}\) From the inside they appear to use company law to construct mega-hierarchies in industrial empires. From the outside they appear to build up power in the market and in the political arena.\(^{31}\) Correspondingly, legal policy is concerned with the critique and dismantling of economic power, or at least with attempting to limit it by subjecting it to the rule of law.

The problem is the abhorrence associated with power, especially when it is seen as absolute. In the political sphere, legitimized power is accepted as the mode through which regulation operates. It is evaluated by its ability to bring about positive social change.\(^{32}\) In economic organization, however, power is looked upon in an overwhelmingly critical light. A sociological approach to power, which defines it as a medium of communication like money and law, is less likely to adopt an overtly moralistic approach. It is more likely to take a detached view of power in the economic sphere, without necessarily dismissing it as harmless or defending it as ‘functional’. Even more problematic is the tendency to see power as the only driving force in the dynamics of economic organization. This has the effect of making hybrid forms of economic organization – such as the phenomenon of the corporate group – appear solely as instruments of economic power, as forms of organization which are suited to drawing economic activity away from governmental and social controls. This approach fails to take account of both the

\(^{29}\) Easton, 1965, p. 51.


positive social effects of such forms and the gains in efficiency they engender.

Even the company constitution itself, the core of the legitimation of ‘private government’, is pushed slightly to one side by this view. The emphasis in this theory is on workers’ participation, the legitimation of power in the firm through the participation of those directly involved. However, this means that the aspects of economic organization which affect society as a whole are lost. Corporate governance, then, is no longer orientated towards the primary aspect of any organization: namely, the social function of the corporation and what it does in relation to social subsystems. It is more concerned with a secondary aspect, the general welfare of the members of the organization.33

IV

In section II we saw how the economic transaction-cost approach regards industrial organization as merely a network of contractual relations, albeit a complex one. In section III we saw how the political theory of ‘private government’ regards industrial organizations as quasi-political power structures. The theory of autopoietic systems, on the other hand, sees the emergence of organization as an internal process through which the economic system differentiates itself into an organized and a ‘spontaneous’ domain.34 Autopoiesis does not see the opposition between contract and organization in the corporation as one of degree, distinguished only by differing governance structures. Rather, it insists on the fundamental difference between contract and organization.35

According to this view, contracts serve to formalize the processes of exchange which organize the autopoietic reproduction of the economic system – that is, the reproduction of acts of payment by acts of payment. They build upon a basic form of social action: namely, exchange against a background of competition.36 Organizations, on the other hand, formalize co-operation as a third basic form of social action. Contrary to the view of Grossman and Hart,37

34 Luhmann, 1981b, p. 393.
organizations are not to be seen merely as contracts, strengthened by governance structures or decision rights over non-contractables, whereby payments continue to flow as before. Rather, they represent a fundamentally different form of system formation within the economy. They, too, are autopoietic systems, the elements of which comprise not payments but decisions. Organizations are systems which comprise decisions and which themselves produce the decisions which comprise them. At the same time, they use their self-organized structures in order to specify expectations which guarantee that within the system every action can be treated as a decision.

This is not to underestimate contracts between resource-holders or simply to reinterpret them in toto in terms of organizational structures. It is, however, to relegate them to the environment of the organization. Resource-holders – that is, owners of capital—workers and management, as well as suppliers and customers, are not part of the organization; rather, they constitute its environment. Contracts between them or with them are thus ways of regulating the environmental relationships of the organization. Lawyers are quite familiar with this distinction between contract and organization, even if the legal construction varies according to the various resource-holders concerned. In the case of workers, for example, German law makes a distinction between their labour contract and their integration into the organization; in the case of management, between the employment relationship and the agency relationship.

The distinction is less clear in the case of shareholders. Their contractual relations with the firm and their individual rights of membership can, however, be separated from their actions as organs of the company.

Autopoiesis treats organization and contract in terms of system and environment. The contractual network of the resource-holders governs the external relationship between the environment of the organization and its members. The organization itself constitutes an independent, autonomous system of action, reproducing itself not through contractual transactions, but through the recursive linkage of organizational decisions. The logic of the contractual network is profoundly different from that of the decisional network. Admittedly, Williamson attempts to grasp one aspect of this distinction.

---

40 See e.g. K. Schmidt, 1986, pp. 312 ff.
with the help of the distinction between high-powered and low-powered incentives. But the conceptual apparatus used is not complex enough to take into account the different dynamics of self-reproduction. The contractual network is concerned with motivation; it is through the contract that the motivation for resource-holders to make effective contributions is generated. The decisional network, on the other hand, is oriented towards organizational rationality. This means primarily towards autopoietic reproduction and secondarily towards the rationalization strategies adopted – that is, toward the goals of the organization, the relationship between end and means, hierarchic instructions, informal expectations, and so forth. To subsume both in the concept of a comprehensive contractual nexus would make motivational and purposive structures coincide. It would mean revoking the distinction between motive and purpose which is characteristic of modern, flexible organizations. To put it polemically, it would effectively downgrade industrial organization to a private club.

Contrary to the view of economists, with the exception perhaps of Nelson and Winter, the boundary between the economy’s spontaneous and organized spheres, between ‘market and hierarchy’, is not constituted by rational choice but by evolution. Faced with the choice between contract and organization, economists tend grossly to overestimate the role of rational actors in evaluating decisions for their consequences on the basis of their order of preference. The various ‘chaos theories’ of organization (Simon, March, Olsen) which have been on the go for years have thus had little impact on economic theories of industrial organization. In addition to the time-honoured ‘bounded rationality’, the key concepts of chaos theories include ‘loose coupling, disorderliness, non-decisions, problematic attentions, learning, and garbage-can decision processes’. Certainly, Williamson’s emphasis on decision making under conditions of uncertainty and on ‘bounded rationality’ is a forcible example of this. However, there is a certain reluctance to draw the logical conclusion from this and acknowledge ‘that the semantics of rationality is practised as if it were singing and whistling in the dark in order to drive out uncertainty and fear.’

45 March and Shapira, 1982, p. 94.
46 Luhmann, 1984b, p. 602.
radical consequence of this is a shift from rational action towards blind evolution.\(^\text{47}\) It is the uncoordinated interaction of mechanisms of variation and selection that in fact determines the choice of market and hierarchy. Put more precisely, what we have here is the interplay of the trial-and-error strategies of economic actors and the interaction of competition and power processes on the market, together with stabilization mechanisms — that is, the institutionalization of organizational arrangements. That the decisions of actors claiming to be rational play some role, particularly in the case of variation, is not disputed.

The sole criteria of success are the survival advantages of the specific institutional arrangements. We have the more recent economic theories of the firm to thank for pointing out that among these institutional arrangements transaction costs certainly play a significant role. However, there is some doubt as to whether it is possible to do complete justice to the relevant differences between market and hierarchy using this category. Systems theory, for example, works with the distinction between redundancy and variety, which can be allied to the dichotomy between hierarchy and market.\(^\text{48}\) ‘Redundancy’ means the structural limitation of decision-making contexts, which results in concentrated power for the organization, albeit at the expense of other, better, decision possibilities. ‘Variety’, on the other hand, means increasing the range of options open and being able to adopt a flexible response to turbulent environments. This is far more likely to be achieved through decentralized contractual co-ordination than through hierarchical organization. Other criteria for successful evolution have to do with economies of scale, the advantages of co-ordinated behaviour, the synergetic effects of joint venturing, differences in motivation, and the effects of bureaucracy. These work partly for and partly against formal organization. This bipolar effect is at the same time the explanation of the unlikelihood of the economy as a whole developing into a huge formal organization. The interplay of redundancy and variety prevents the merger of market and hierarchy.

\(^\text{V}\)

So far, I have briefly sketched how the relationship between firm and market has been reinterpreted in the light of autopoiesis. This has


\(^{48}\) Luhmann, 1987c, 1988a.
been necessary to prepare the way for a new approach to corporate governance in group enterprises. Once the evolution of markets and firms had stabilized the differentiation of the economy into a spontaneous and an organized sphere, the further development of the economy was characterized by a variety of attempts to seek evolutionary advantage by engaging in a process of trial and error. The way this was to be achieved was by combining (not fusing) the two forms of institutional arrangement. In the history of industrial organization, many experiments with hybrid forms have taken place, experiments with the organization of markets and the marketing of organizations. There is no need to enumerate the various movements towards market concentration and the attempts at decentralization in large organizations. In the present context we are primarily interested in two lines of development within which relatively stable institutions have formed: neo-corporatist arrangements, on the one hand, and the decentralization of large corporate hierarchies, on the other. The problem of corporate governance in group enterprises is to be located at the point of intersection of these two developments.

Of the many attempts at the organizational penetration of markets in recent years, it has been neo-corporatist arrangements which have attracted most attention. This new 'voluntary' symbiosis of capital, labour, and state seemed to offer certain advantages over previous corporatist experiments, as well as other forms of socialization, collective economy, and state planning. It could build upon the historically evolved hierarchies of employers' associations, the trade unions, and the state bureaucracy, and use them to the full in order to formulate and implement policy. Neo-corporatism thereby acquired a procedural flexibility which made it more compatible with the structures of the economic system than other political arrangements of political interest mediation.

It is worth noting that corporate arrangements developed on three levels. Certainly, the main focus was macro-corporatist institutions (social and economic councils, Konzertierte Aktion, Social Contract, Paritätische Kommision, patto sociale) which show varying degrees of formal organization and juridification. The aim of these was to reach an accord on a national level between corporate policies, trade union strategies, and state economic policies. At the same time, however, such meso-corporatist arrangements as the co-ordination

50 Streeck and Schmitter, 1985.
of collective agents at branch and regional level gained increasingly in importance.\textsuperscript{52} Finally, micro-corporatist arrangements at the level of industrial organizations were also part of the corporatist syndrome. This includes not only models of co-determination as in Germany, the Netherlands, and Sweden, but also \textit{cogestion à la française} and more informal workers' participation rights which have developed out of collective bargaining, as in Italy.\textsuperscript{53}

In the mid-1970s, the high point of the 'new corporatism', its two main proponents, Philip Schmitter and John Winkler were not concerned merely with establishing this concept in the academy. They were also concerned with its definition and prospects of success in the world outside. Schmitter described it as a new-style 'mode of political interest mediation', and saw it as a way of overcoming the governability crisis.\textsuperscript{54} Winkler, on the other hand, viewed 'neo-corporatism' as the successful new form of political regulation of the economy, as an 'economic system of private ownership and state control'.\textsuperscript{55} Despite their various differences, both authors put the main emphasis on macro-corporatist structures. Others saw the future of corporatism in an interweaving of the various levels. Wassenberg predicted that corporatism would develop in the following way:

Corporatism seems to be developing increasingly towards an inter-organisational strategy for seeking out groups which are capable of adapting to each other's needs while at the same time remaining highly dependent upon each other. The strategy adopted by these groups is to transpose conflicts of identity or interest that cannot be resolved on the meso-level either on to the micro-level of individual firms or the macro-level of parliamentary debate.\textsuperscript{56}

Today we know better. The development of the corporatist experiments proved none of the three authors right, but resulted in a shift in emphasis: an involution from macro-corporatism towards micro-corporatism.\textsuperscript{57}

\textsuperscript{52} e.g. Esser and Fach, 1981; Wassenberg, 1978.
\textsuperscript{54} Schmitter, 1974, 1977.
\textsuperscript{55} Winkler, 1976, p. 109.
\textsuperscript{56} Wassenberg, 1978, p. 8.
\textsuperscript{57} Cf. Sciarra, 1990.
After the economic crisis and the thorough restructuring of industrial organizations and regulatory systems in Western Europe, things have become rather quiet as far as macro-corporatist arrangements are concerned. These have to some extent been caught up in the wake of deregulation and de-institutionalization. Although they continue to exist in a formal sense, their real importance has diminished. In any case, they have been removed from the economic policy agenda for the time being. However, this does not mean that corporatism has disappeared: it has merely undergone a shift in emphasis. Unlike macro- and meso-structures, micro-corporatist arrangements have survived a period of crisis and reorganization. They have emerged as stable coalitions of producers, at the level of large corporations, and as state-backed units oriented towards efficiency and success, on the world market. Micro-corporatist arrangements at the level of the firm have emerged as an interesting alternative strategy for increasing industrial flexibility.

Macro-corporatist strategies are no longer in vogue. On the contrary, they appear rigid, centralist, and inflexible in a period of rapid market change, heightened competitive pressure, and weakening or failing governmental regulatory regimes. Decentralization and increasing flexibility through contractual arrangements is the new motto. And this applies equally to methods of financing, technologies, the product range, customer relations, and labour relations. The goal of the new industrial policy is flexibility as an end in itself: ‘a general capacity of enterprises to reorganize in close response to fluctuations in their environment’.

While flexibility through contract is generally what is called for nowadays, micro-corporatist arrangements can offer an alternative in the heated debate on ‘Americanization’ or ‘Japanization’. We may call this ‘flexibility through organization’. Flexibility cannot only be established through contractual arrangements; it can also be established through decentralization of the micro-corporately governed organization. In addition, a policy based on organization can make use of the advantages for productivity of a ‘coalition of producers’ (capital, management, labour, state framework), which

58 Cf. Sugarman and Teubner (eds), 1990.
are increasingly required under the conditions of the new industrial divide.

This industrial policy position comes very close to the ideas developed here. In fact, the attempt to use contractual arrangements to gain flexibility by favouring one group of resource-holders, whether shareholders, labour, or management, would not be in the best interests of the organization. Certainly, the advantage of contractual arrangements lies in the way they are able to respond quickly and at short notice to the fluctuating demands of the environment. They do this by building up and dismantling systems of action. Their disadvantage, however, lies in the fact that contractual solutions cannot exploit ‘organizational surplus value’ to the full.\(^{65}\) ‘Organizational surplus value’ arises from three sources: (1) long-term relationships of co-operation which would continually be destroyed by contractual flexibility; (2) ‘commitments’ in the organization, which, by contrast with rigid, narrowly circumscribed contractual obligations, make the situation far more flexible; and (3) the orientation of the actors towards the interests of the organization, which has more pulling power than a purposive view of the contract.

This suggests a legal conception of corporate governance based upon a micro-corporatist coalition of producers. According to this view, none of the resource-holders – neither capital, labour, management, nor even the State – has a natural claim to ‘sovereignty within the group’. In principle, the connection between resource holding and controlling rights is broken, and all controlling rights over all resources are assigned to the ‘corporate actor’.

The idea of ‘organizationally bound property rights’\(^{66}\) is diametrically opposed to the idea that the firm constitutes a mere ‘contractual nexus’. The distribution of control rights within the firm is not governed by the priority of one resource interest or by the logic of exchange in the contractual nexus. Rather, it is governed by considerations of efficiency oriented towards the interests of the ‘corporate actor’, which do not coincide with the interests of any participants.

Even if one recognizes the integrative and motivational effects of micro-corporatist arrangements, the external disadvantages of producers’ coalitions require examination. Chief among them is that the coalitions reach their agreements at the expense of third parties.


\(^{66}\) Krause, 1986, pp. 219 ff., 225.
and the public interest. From the point of view of legal policy, this is the weakness of corporatism within the firm in the sense of a simple coalition of producers. However, it is the emergence of the corporate actor, whose social existence flies in the face of all methodological individualism, that shows the way for legal policy. The way ahead lies in reinforcing the institutional position of the corporate actor in order to make an impersonal context of action autonomous. It is this which imposes effective constraints on the range of action of individual participants in the interests of the organization, defined in broad social terms.

VI

Above, we have discussed the tendencies towards the involution of neo-corporatism from the macro-level of co-ordinated economic policy to the micro-level of the coalition of producers in the large corporation. If these tendencies have been described accurately, then we may presume that the corporatist triangle has chanced upon its ideal field of application at the level of company organization. In the hierarchy of company organization, it has found the highest possible point at which strategic planning in the economic system still appears effective. Here it can employ its mechanisms of interest aggregation and of policy implementation to good effect.

We are left wondering, however, whether it has not in fact started one level too far down in the hierarchy, whether it has not made use of developments which have long since shifted the strategic planning centre of industrial organization to a higher level. This brings us to a second trend of interest in the combination of market and organization: the development of group enterprises as ‘organized markets’. Here, micro-corporatist negotiating practices already play an important part effectively, but the law of corporate governance has been unable to track them adequately.

The interesting thing about corporate groups is not so much that they are part of a general movement towards economic concentration, which makes it possible to build huge business empires by using the instruments of private law, such as membership and

---

67 Cf. the discussion of empirical material in Hopt, 1984; Streeck, 1984; Krause, 1985.
contract, but rather that there is competition between institutional arrangements. This competition among institutions is a feature of the history of group enterprises, the gradual evolution of which can be described through the following ideal types:

Historically, from the prevalence of the 'patrimonial group' we have passed to that of the 'financial group', then to the 'industrial group' and, finally, to the 'managerial' and 'network' group. It is the latter group which is functional in the context of present-day competition.69

The group enterprises with which economic practice experimented can be subdivided into three broad categories: the H-form ('holding form') as a loosely organized form of the pure administration of assets, the U-form ('unitary form') as the strictly controlled hierarchical form of the unitary group, and the M-form ('multi-divisional form') as the largely decentralized form of group enterprise, in which the sub-units appear as autonomous 'profit centres' on the market. The M-form has proved the most efficient form of organization, and one which combines considerable concentration with a high degree of decentralization.70

From the point of view of systems theory, there are three things here which are worthy of note.

(1) **Contextual regulation of autonomous systems**

The M-form is a clear demonstration of the fact that once organized social systems reach a particular size, direct hierarchical regulation runs into difficulties. This issue has been discussed in detail in systems theory under the heading of the regulation of autopoietic systems.71 In such situations, direct hierarchical control must be replaced by 'contextual regulation'.72 The only way of regulating complex organizations from the outside is to grant them a high degree of autonomy and to lay down only general structural guidelines to regulate the context of action.73

---

71 Cf. e.g. Probst and Scheuss, 1984; Knyphausen, 1988, pp. 317 ff.
overall policy of the group enterprise, co-ordination by determining management and personnel policy, and indirect profit regulation, which are the forms of regulation frequently used in the M-form, mirror this postulate precisely.\textsuperscript{74}

(2) Re-entry of the market

Decentralization is frequently seen as the decisive element of the M-form.\textsuperscript{75} The fact that the M-form, within the limits of the group enterprise itself, replicates the internal differentiation of the economy into a formally organized sphere and a spontaneous one is even more important, however. This amounts to the ‘re-entry’ of the distinction between system and environment into the system itself.\textsuperscript{76} The distinction between market and organization is repeated once again within the organization. The ‘market principle’ penetrates the ‘organizational area’.\textsuperscript{77} The group enterprise uses the interplay of redundancy and variety to its own ends. This means that ‘the more large incorporated organisations determine the course of events in politics and the economy, the more important it is for them to repeat this interplay of variety and redundancy within their own structures and not to commit themselves too heavily to redundancy’.\textsuperscript{78} Markets are organized within the organization. Attempts are made to simulate a kind of capital market in the relationship between the parent company and its subsidiaries. This is paralleled by the development of labour markets, manager markets, and resource and product markets within the group enterprise itself.

The proportions in this blend of market and organization in the group is not fixed for all time, but can be altered for strategic reasons.\textsuperscript{79} The enterprises within the group can either act autonomously or engage in co-ordinated action as they see fit. This is a feature of the group enterprise as a multi-stable system.\textsuperscript{80} As Kirchner puts it: ‘Market and hierarchy are available to the company organised as a group enterprise as complements or as

\textsuperscript{75} Cf. e.g. Hommelhoff, 1982, pp. 231 ff.
\textsuperscript{76} Spencer-Brown, 1972.
\textsuperscript{77} Imai and Itami, 1984, p. 285.
\textsuperscript{78} Luhmann, 1987c, p. 48.
\textsuperscript{80} Pausenberger, 1975, p. 2243.
Unitas multiplex: Corporate Governance

alternatives to one another. The choice between market and hierarchy does not follow blind selection as the economy develops. Rather, it is the object of planned decision making. More important still, these decisions are subject to constant change. As Vardaro puts it:

The same group can adopt both the hierarchical model and the contractual model, not only according to the changing internal and external conditions, but also according to the degree of its functional diversification. With regards to some aspects, it can appear as a hierarchy, totally conditioned by the decisional power of the holding, while with regard to others it can appear as a network of equal companies. The relationship between contract and organisation, as well as that between centralisation and decentralisation, is therefore flexible.

Group organization thus corresponds to the general insight that as far as redundancy and variety are concerned, there is no general preference for one or the other and no ‘optimal mix’ of the two. The proportions have to be constantly adjusted to match the ever-shifting relation between the system and its environment.

Depending upon what kind of noise is being experienced in the system, what irritation perceived and what changes have taken place, one or other pole will take the lead. If the system is to maintain its rationality (if we can call it that), it is of crucial importance that it retain the ability to switch the lead between redundancy and variety. The system ought with a fair amount of certainty to be able to see a high degree of redundancy as one way of ensuring that it has more variety. Conversely, it should be able to perceive tendencies towards ad hoc and situational dependent decision making as a reason for tightening up decision-making procedures – whether by strategic planning, exploiting the potential of the network or via personnel policy.

In the decentralized group enterprise, a ‘navigational rule’ becomes a principle which is built into the hybrid organizational form. The chameleon-like quality of an organization which is constantly changing its form is the main distinguishing feature of corporate

81 Kirchner, 1985, p. 226.
82 Vardaro, 1990, p. 239.
83 Luhmann, 1988a, p. 181.
governance. Choosing a colour which blends in with the environment is one of the main tasks of group management.

(3) Internal dynamics of a self-observing process

The third feature has to do with the autonomy of the sub-units vis-à-vis the apex of the hierarchic group. It is this autonomy that provides the group enterprise with an internal dynamic which guarantees it certain evolutionary advantages over purely hierarchic or market-type co-ordination. This internal dynamic means that the process becomes self-referential; that is, it observes itself, and on that basis regulates itself. Defined in this way, the internal dynamic of pure hierarchy is limited in that the observational centre of the process is located at the apex. Inasmuch as other observational centres develop within the hierarchical organization, they are, in a certain sense, dysfunctional, because they develop their criteria of observation and regulation only to a sub-optimal level as against the organization as a whole. The situation is different in group enterprises which are decentralized through profit centres. These are characterized by the multiplication of observational centres whose criteria of observation and regulation are oriented towards the success of the organization as a whole.

VII

What legal consequences emerge from this view of the group? Which of the various ‘legal images’ of the group that underlie legal regulations appears most suitable for our reconstruction in the framework of autopoietic theory? What follows from our reconstruction for the group’s regulatory problems, in particular for the tasks of future corporate governance in group enterprises?

I would argue that the legal debate up till now has been based on a false opposition between two legal images: namely, the ‘dependent company’ on the one hand and the ‘hierarchical unity of the group enterprise’ on the other. Possibilities of other types of corporate governance...
governance would open up if we were to opt for a third image, that of a 'poly-corporate network'.

'The dependent legal person', the title of Kronstein’s famous work, gives a clear image of how the group enterprise appears in law. It has had a decisive influence both on the way in which group problems have been perceived and on the instruments for regulating group enterprises. Its starting-point was the historical liberation of the legal person and the emergence of the joint-stock company as the typical large-scale organization; in other words, it was concerned with the autonomy of the corporation vis-à-vis its environment and its shareholders. This was diametrically opposed to the new tendencies towards group formation. These reduce the autonomy of the legal person to a mere semblance of autonomy, transfer the sovereignty of the association from the corporate agents to a third party, and destroy the internal balance of power of corporate governance.86

The legal image of the ‘dependent company’ furnishes a viewpoint based on a comparison between the legal constitution of an autonomous business enterprise and the position of a subsidiary which has become dependent through the process of group formation. If this comparison shows that the subsidiary’s loss of autonomy has detrimental effects, then, it is argued, the law has either to effect a return to the status quo or to provide for compensation for any disadvantage incurred.

The paradigmatic example here is ‘piercing the corporate veil’. The normal case is one of the separateness and autonomy of the legal person. In exceptional cases, particularly in instances in which the parent company exerts tight control over the subsidiary, direct action can be taken against the parent company in accordance with the ‘reality of life’. Thinking in terms of ‘agency’ is another example of this, because it dictates that the group enterprise be viewed as a unity only if the subsidiary has acted as a ‘quasi-agent’ of the parent company.87 In Europe, the image of the ‘dependent firm’ is even more influential. The French law on group enterprise thinks exclusively in terms of the entreprise dependente.88 The situation is similar in other European countries: for example, Italy, Portugal, and the Netherlands.89 Even the German law on group enterprise of

89 On the situation in Italy, see Alessi, 1988; for Portugal, Antunes, 1990; for the Netherlands, Franken, 1976, p. 22; de Knijff, 1989.
1965, which is often praised as very advanced, remains dominated to a large extent by the legal image of the ‘dependent company’, at least as far as the *de facto* group is concerned.\(^\text{90}\) Compensation for loss, which is provided when the parent company issues the subsidiary with disadvantageous directions, is oriented towards the image of a company acting autonomously in the market.\(^\text{91}\)

The inappropriateness of this legal image does not need to be demonstrated here. It is self-evident from what has been said to date about the new type of organizational unity which characterizes the group enterprise.\(^\text{92}\) What is astonishing is the fact that it still forms the basis of so much legal regulation and is allowed to dictate problems and solutions. Only gradually has an opposing view made headway where the group enterprise has been viewed from ‘top down’ rather than vice versa. Here one sees the group enterprise as a legal unit from the point of view of the parent company. Early attempts to arrive at such a unity theory of the group, like that of Isay,\(^\text{93}\) have been unsuccessful. Today, by contrast, this unitary approach is prevailing across the board. In the forefront of this movement in Germany are Marcus Lutter\(^\text{94}\) and his school.\(^\text{95}\) French labour law, which, unlike French company law, takes the unitary approach seriously, is particularly advanced in this area.\(^\text{96}\) In the Netherlands, *de Stuctuuregeling*, which introduces compulsory supervisory boards into large corporations, was based on the legislators’ view ‘that the group of companies had to be seen as a unity’, and thus exempts subsidiaries from this requirement.\(^\text{97}\) In the USA it is particularly Blumberg who criticizes the ‘piercing of the corporate veil’ and advocates a unitary view of the corporate group.\(^\text{98}\) And, of course, the new solutions adopted by the law of worker participation in France, the Netherlands, and Germany tend to view the group as a unitary enterprise, irrespective of whether they focus on co-determination via works’ councils or supervisory boards.\(^\text{99}\)

---

\(^\text{91}\) Rehbinder, 1986, p. 87.
\(^\text{92}\) For a critique see Assmann, 1990.
\(^\text{93}\) Isay, 1910.
\(^\text{95}\) e.g. Timm, 1980; Schneider, 1981; Hommelhoff, 1982.
aim is to locate models of co-determination at the level of the parent company as the decision-making centre of the group. However appropriate the unitary view may be, its concept of the group enterprise as a uniform hierarchy and its corresponding focus on the parent company as the centre of action and accountability does pose some problems. The works of the Lutter school provide the most clear examples of this. Here, too, a comparison is regularly drawn, but this time between the parent company and a ‘classic’ corporation. The main question is what kind of distorting effect does group formation have on the corporate governance of the parent company? What disturbances, what asymmetries arise in the internal balance of power of the organs of the corporation? What compensatory regulations are needed to counterbalance these disturbances? This refers to the general meeting of the parent company, and means that its powers in relation to the group enterprise has to be redefined. In the famous Holzmüller case (Bundesgerichtshof 83, 122), this ‘top-down’ thinking was expressed by the federal court when it increased the powers of the general meeting of the parent company.

The same criticism may be levelled against the unitary view of the group enterprise which prevails in labour law. Attempts are regularly made to identify the power centre of the group enterprise, the point at which the really important decisions are made. Time and time again, real power is seen to reside at the apex of the hierarchy. Kahn-Freund has already made clear how wrong it is to identify power and hierarchy in this way: ‘The state of power may be at the centre or at the periphery, or may be divided.’ Analyses of decision-making processes in group organizations should in fact have done away with such naïve notions of hierarchy a long time ago.

Despite undeniable progress, the unitary view fails to grasp the three characteristics of the group enterprise which we picked out as essential from the point of view of systems theory. First, thinking in terms of hierarchy in situations in which the power of the organization is seen to lie with the parent company fails to take due account of the need to decentralize power – a need which arises because a hierarchical regulation of complex systems makes sense only if it is restricted to exerting indirect control over areas such as the budget and the appointment of key personnel. Secondly, it fails

to take account of the fact that because market structures have become internalized within the organization, the group enterprise is to be understood as an ‘organized market’ rather than simply a hierarchy. Thirdly, it fails to do justice to the internal dynamics of the group enterprise by not focusing on the dynamic interplay of a multitude of autonomous centres of activity which the parent company has some difficulty in co-ordinating. Instead, it views the parent company as the symbolic centre of the activity of the group enterprise.

Accordingly, it is not hierarchy which should determine the legal image of the group enterprise, but the network; not the control power at the top, but the co-ordination of autonomous centres of activity. Nor can the concept of enterprise simply be transferred to the group as a whole, as, for example, Blumberg suggests. On the other hand, it is not enough to react to tendencies towards decentralization by coming forward with the notion of Unternehmensgruppe. Instead, the point is the co-ordination of a multiplicity of companies through one higher-order organization, the group enterprise. The group enterprise as a ‘corporate actor’, or even better as a poly-corporative network, is the catch-phrase which perhaps best describes the qualities of the group enterprise as a new phase in the development of industrial organization. The hierarchical structure of the group enterprise is certainly compatible with the concept of network. A ‘hierarchically organized network of semi-autonomous companies’ might be the best way of describing the situation.

The group enterprise network will thus have to be described as a legal subject, but one of a particular type which is significantly different from the traditional legal subjects, the natural and the legal person. The group enterprise as a network overcomes the traditional anthropomorphic concepts of the legal person and the corporate actor in two respects: (1) unitary imputation yields to multiple imputation; (2) personification yields to autonomization. These transformations are the only way to do justice to the unitary nature of the group.

Unitary imputation has been one of the strongest constraints of anthropomorphic thinking in the context of corporate personality. The social fiction of a corporate actor, as well as the legal con-

103 Wiedemann, 1988, pp. 6 ff.
105 Cf. ibid.
struction of legal person, allow for one and only one centre of action and will: the ‘person’ that has to be conceived as the point of attribution for actions, rights, duties, and liabilities. Either the subsidiary is responsible or, by piercing the corporate veil, the parent company. *Tertium non datur.* If, however, the group enterprise is to be understood as a network of autonomous centres of activity, then we can free ourselves from this pressure towards unitary imputation and start from the simultaneous multiple imputation of actions and legal positions. The unitary imputation, always present in the case of the legal person must, in the case of the group enterprise, be distributed over three levels: the particular member of the group, the parent company, and the group enterprise network itself. A distinction has to be made between three different forms of imputation; the cumulative, in which the imputation is added; the alternative, in which the imputation is applied only on one level of the group enterprise; and the complementary, in which partial imputations at various group levels combine only when the things is looked at as a whole.

The technique of legal imputation itself needs to be chameleon-like. It needs to adapt itself to the flexible practice of corporate groups, which is *ad hoc* and opportunistic in its choice of both the suitable blend between market and organization and the necessary degree of centralization. The legal imputation of actions, rights, duties, and liabilities must, if it wishes to react at all to the chopping and changing of the group, be detached from ideas of tying down accountability once and for all. The legal imputation of accountability must itself proceed *ad hoc* and opportunistically. One proved available model is of course the case method. This makes the question of which group level to assign a particular action or legal position to dependent on the circumstances of the individual case. This means that it must have a large selection of criteria of imputation at its disposal.

The fact that operative and flexible decisions can be arrived at in this way is illustrated by Blumberg’s checklist of unity and diversity in the group.\(^{106}\)

**Formalities of the Subsidiary’s Operations**

1. Separate book of accounts;
2. Separate bank accounts;
3. Separate meetings of the board of directors;
4. Separate meetings of the shareholders.

Unitas multiplex: Corporate Governance

Physical Separation between Parent and Subsidiary
(5) Separate directors;
(6) Separate officers;
(7) Separate employees;
(8) Separate offices;
(9) Separate telephone numbers;
(10) Separate address;
(11) Separate letterhead.

Integration of the Business Activities of the Subsidiary and the Group
(12) Percentage of the total sales represented by sales to the parent and affiliates or sales of products of the parent and affiliates;
(13) Percentage of total purchases represented by purchases of the parent and affiliates;
(14) Performance of services for the parent or affiliates that they would otherwise have to perform directly;
(15) Coverage of warranties by the parent or affiliates for customers of the subsidiary.

Integration of the Internal Operation of the Subsidiary and the Group
(16) Loans, guarantees, or other financial assistance from the parent or affiliates;
(17) Inclusion of the subsidiary in the insurance coverage of the parent or affiliates;
(18) Participation in group employee retirement, profit-sharing, insurance, or other benefit plans;
(19) Participation in group employee training programs;
(20) Exchange and rotation of personnel among the parent, subsidiary, or affiliates;
(21) Exchange of information and reporting;
(22) Group visitation and inspection programs;
(23) Group auditing controls;
(24) Consolidated tax returns;
(25) Subsidiary’s reliance on constituents of the group for essential administrative supporting services, including:
   (a) general administration,
   (b) accounting,
   (c) financial,
   (d) budgeting,
   (e) personnel,
   (f) advertising,
   (g) credit,
   (h) purchasing.
152 Unitas multiplex: Corporate Governance

Integration of the External Operations of the Subsidiary and the Group

(26) Common corporate names;
(27) Common logo;
(28) Common trademarks;
(29) Common national advertising campaigns;
(30) Consolidated annual reports;
(31) Representations to the public that the constituent companies are offices, branches, divisions, or integral parts of the group.

Extent of Participation by the Parent in the Decisionmaking of the Group

(32) General policies;
(33) Capital and operating budgets;
(34) Prices;
(35) Commitments;
(36) Salaries of officers;
(37) Self-dealing transactions involving officers and directors of the subsidiary;
(38) Other more intrusive participation in decisionmaking.

Other

(39) Independent existence of the subsidiary before acquisition by the parent;
(40) Different nature of the businesses of the subsidiary and affiliates within a conglomerate group.

Depending on its regulatory goals, legal policy should apply criteria of imputation in a flexible way, and not embark upon ‘la vaine recherche d’une définition du groupe’,107 which would be applicable in company law as well as labour law, in tax law as well as environmental law, in the law of contract as in the law of tort.108 In response to the network character of the group, the law should develop a ‘network of legal guarantees’.109 Requirements of legal certainty can, to a certain extent, be met by introducing a minimal set of facts establishing a group formation for all areas of law. This would focus on ‘unitary control’ or, better, on unitary network co-ordination. Building on this initial condition, the criteria of imputation should remain flexible. The choice and combination of the levels of group enterprise as objects of imputation need to be guided by the regulatory context. There are two ways of preventing

this from resulting in arbitrary khadi justice: namely, (1) the maintenance of the efficiency advantages of decentralization and (2) the effectiveness of regulation as the implementation of norm policy.\textsuperscript{110}

The principal difference between the network and the legal person is the shift from unitary imputation to simultaneous multiple imputation. A second major difference results from the distinction between the identity of a network and that of a collective. The flexible, mobile character of a network requires legal autonomization but not complete personification. Indeed, complete personification would be counterproductive, since it would interfere with the three characteristics of the group that have been picked out. These are contextual regulation, the re-entry of the market, and the internal dynamics of the group. The following elements of a legal subjectivity of the network can probably be regarded as sufficient: (1) legal recognition of the collective identity of the group as a network of inter-organizational relations; (2) legal recognition of a unified group interest as the interest of the network, identical with neither the company interest of the group parent nor the sum of company interests of group members; (3) use of the consolidated annual reports of the group as a tool of accountability of the network; (4) recognition of the capacity of act for the network, mediated through the action of the group parent and/or of group members; (5) attribution of rights and obligations to the network; (6) liability of the network as a situationally variable liability of the parent company, the subsidiary, and the group enterprise as a whole.

VIII

To define the tasks of the law of corporate governance in this area, a comparison must be drawn between the \textit{de facto} position of the group and the legal constitution of a unitary enterprise. However, it is the network itself or, more precisely, the system of inter-organizational relations within the group enterprise that should form the basis of the comparison, not the parent company or its various subsidiaries. It is thus a question of developing guide-lines for the legal organization of the network itself.

In Europe, the internal constitution of multinational corporate groups is on the political agenda again. After early initiatives in the

\textsuperscript{110} Blumberg, 1983.
1970s, the issue of special structures for European companies has gained new prominence in the European integration process. In June 1987 the European Council requested ‘swift progress with regard to the company law adjustments required for the creation of a European company’. In July 1988 the Commission of the European Communities responded with a new initiative for a European company statute in its memorandum to Parliament, the Council, industry, and labour. After deliberations with the European and national institutions concerned, the Commission in August 1989 proposed a statute for a European company. Thus, the question re-emerges as to whether corporate groups have to be treated as ‘corporations sui generis’ that require constitutional rules of their own.

The counter-argument, which has already achieved the status of a dogma, is that the creation of company bodies specifically for the group enterprise is a mistake. According to this view, the group enterprise acts through the company bodies of its members. Against this counter-argument one can say that network bodies have long since developed de facto and that they are prevented from assuming a legal form by this very objection. This is an issue to which we will return later. However, the counter-argument is right in the following respect: the group as a whole ought not to be compared with the classical, hierarchically structured corporation acting through its central bodies. The result of such a comparison would be the bureaucratic rigidification of corporate governance into a hierarchical organization. We must, rather, take the legal image of the ‘poly-corporatist network’ seriously. If the extremely flexible nature of network organization is to be maintained, or furthered, by the law, the three characteristics of the group enterprise outlined above must be systematically taken into consideration; these are contextual regulation, the re-entry of the market, and the internal dynamics of a large number of centres of activity. This means that the classic organizational principles of the large corporation – division of powers and differentiation of functions – must be modified considerably if they are to be valid for the governance of the network.

If we turn our attention to the de facto constitution of the network, it becomes clear that independent corporate institutions for the network have in fact developed – contrary to the argument

about the absurdity of the formation of independent bodies within
the group enterprise.\textsuperscript{113} The parent company’s ‘right to instruct’ its
subsidiary is simply the embodiment of this type of network in-
stitution, which, according to classic company law, should really be
illegitimate. At the same time it becomes clear that asymmetries have
arisen in the \textit{de facto} group constitution. Correcting these would be
a task for a future group enterprise law.

If we analyse the group enterprise from the point of view of the
resource-holders concerned, there is clearly a marked increase in the
power which management is able to wield over shareholders and
workers.\textsuperscript{114} The loss of power of minority shareholders in sub-
sidiaries is a theme to which the law on group enterprises returns
again and again. However, it is only relatively recently that attention
has focused on the extent to which shareholders in the parent
company have had to surrender power and influence to the group
management.\textsuperscript{115} Mediation of the workers’ influence, whether
through staff representation or organized trade unions, has been
amply documented in the literature on co-determination within the
group enterprise. According to the idea of a ‘coalition of producers’,
a notion which was developed in the debate on co-determination
(see section V above), those who have a stake in the company
transfer their property rights to the corporate actor. These rights
are in turn distributed among the members of the organization
as ‘organisationally bound property rights’ in accordance with
efficiency criteria.\textsuperscript{116} If one accepts this version of things, then the
task facing corporate governance is to transfer property rights to the
group enterprise network.

If we analyse how the functions of operation, control, and
legitimation are actually balanced in the governance of group
enterprises, it becomes clear that operation clearly prevails at the
expense of control and legitimation. In fact, it is only the operative
function which has created independent institutions for the group
network. These are embodied in the rights of the dominant company
to instruct, in its control over the general meeting of subsidiaries, in
filling supervisory and managerial posts in subsidiaries, in group
contractual structures, and in interlocking directorships.\textsuperscript{117} By
contrast, the supervisory and legitimation functions have not

\textsuperscript{113} Cf. Schneider, 1981; Lutter, 1985; Kuhn, 1987; Theisen, 1988, p. 280.
\textsuperscript{114} Trescher, 1989, p. 64.
\textsuperscript{116} Krause, 1986, pp. 229 ff.
\textsuperscript{117} Lutter, 1985.
been able to have much of an influence in the network. The corresponding control and legitimation institutions in the network are practically non-existent, or are at a rudimentary stage. In the affiliated companies, previously existing control and legitimation have ceased to have any real function because of group formation. Even in the parent company their effect is mediated by the fact that access to the network and to the subsidiaries is primarily through the executive of the parent company.

Legal policy’s response to those asymmetries in the group enterprise is to construct countervailing networks of control and legitimation within the group itself. From a policy perspective, it is a question of developing a ‘political system’ within the group as a counterweight to the fully developed operational system. This would, to a certain extent, neutralize imbalances of power between groups of resource-holders, and would restore an equilibrium between operation, control, and legitimation. We are not aiming here at institutionalizing traditional conceptions of corporate governance: that is, organs of legitimation and control for the group enterprise as a whole. The emphasis, rather, is on flexible counter-institutions fulfilling functions of legitimation and control which keep up with the chameleon-like character of the operational network.

Looking at the rudimentary beginnings of corporate constitutions from this point of view, it is the Vredeling Directive which provides information rights for workers in complex companies, that is most likely to meet the demands for flexibility in the controlling network. Against the parent company’s right to instruct, it establishes a network of information rights and duties which could serve as the basis for the development of a ‘political system’ within the group enterprise. The very flexibility of the contractual mechanism of collective bargaining is the key to its effectiveness. It provides opportunities for extending the system to the sphere of information, consultation, even negotiation, in order to be able to influence management decisions. In particular, by not bothering to fix the legal form of the group or to define the institutional competences of bureaucratic organs, it frees itself from the rigid constraints of a German-style institutionalized form of co-determination. Collective bargaining makes it in principle possible to respond flexibly to the changing forms of organization within the

---

group enterprise. At the same time this gives it a chance to be relatively immune to the circumvention strategies of the operational system.

The problem of this approach lies in the relative weakness of mere information duties as against genuine co-determination rights and – even more important – in the absence of a co-ordinating centre for the countervailing network. The very fact that it is rooted in collective bargaining reveals its weakness as a contractual strategy which lacks organizational support.\(^{120}\)

In this respect institutionalized solutions which start at the level of the parent company have a clear advantage. The French *comité d'entreprise*, like the Dutch *centrale ondernemingsrad*, the German *Konzernbetriebsrat*, and workers' participation on the supervisory board, emphasize influencing co-ordination in the network by concentrating on the parent company. What makes these solutions so interesting is the fact that although they are institutionally located in the parent company, they tend to be aimed at the network itself. They are thus inimicable to the system, but right for the network. They go against the principles of the corporate governance of a private company by representing not only the staff of the parent company but the staff of the subsidiaries as well. All the same, their network character is restricted to the functions of recruitment and representation, whereas their powers in relation to the network are underdeveloped. It is here, in their ability to control the network, particularly through the supervisory board with regard to personnel policy in the subsidiaries, that opportunities for the future lie.

To be sure, the main problem resides elsewhere: in their fixation on a company or plant body with more or less rigidly pre-defined powers. This makes them relatively rigid and inflexible. They are thus unable to react to management's attempts to escape their control by reorganization.

The contractual arrangements which evolve from the collective bargaining system offer far greater flexibility in this respect. For they also provide the means to adapt possibilities for control, legitimation, and co-determination to the constantly shifting needs of the organization. The flexibility afforded by collective bargaining is far more suited to the network character of the group enterprise. But of course contractual arrangements themselves are not entirely without problems. Their extreme dependence on the fluctuating state of the economy and the market makes their control capacity

\(^{120}\) Vardaro, 1990, pp. 237 ff.
look highly problematic. They do not have at their disposal the formalized power positions of institutional systems of co-determination which make the latter relatively immune to power and market fluctuations.121

The future of a countervailing network seems to lie in an intelligent combination of previous attempts at regulation. This is certainly the line taken by Vardaro, who adumbrates a carefully calculated mixture of contractual and organizational elements.122 According to Vardaro, supranational contractual strategies in multinational concerns should be supported by national organizational strategies.

I would like to end with an open question. Might not the solution for the future governance of group enterprises lie in the formation of a centre for control and legitimation that does not lay down a rigid catalogue of competencies, a centre that possesses the legal equipment to compel contractual arrangements for those tasks?

122 Vardaro, 1990.


Baudenbacher, Carl 1985: Funktionszuwachs des Staates als wirtschaftsrechtliches Problem. 57, Schweizerische Aktiengesellschaft, 57–73.


Birek, Rolf 1990: The group enterprise as a problem for German labour law.
In D. Sugarman and G. Teubner (eds), Regulating Corporate Groups in Europe, Baden-Baden: Nomos, 355–76.
Bibliography


Daintith, Terence and Teubner, Gunther 1986: Sociological jurisprudence
Bibliography


Bibliography


Förster, Heinz von 1984a: Erkenntnistheorien und Selbstorganisation. 4, Delfin, 6–19.


Frug, Gerald E. 1984: The ideology of bureaucracy in American law. 97,


Harris, Donald R. and Veljanovski, Cento G. 1986: The use of economics to elucidate legal concepts: the law of contract. In T. C. Daintith and
Hartmann, Michael 1987: Reflexives Recht am Ende? Zum Eindringen materialen Rechts in die Tarifautonomie. 16, Zeitschrift für Soziologie, 16–32.
Henry, Stuart 1987: The construction and deconstruction of social control:


Bibliography


Bibliography


Kettler, David 1987: Legal reconstitution of the welfare state; a latent social democratic legacy. 21, Law and Society Review, 9–47.


<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Publisher, Year</th>
</tr>
</thead>
</table>


Maturana, Humberto R. and Varela, Francisco J. 1988: *Tree of Knowl-
Bibliography


Nelken, David 1984: Law in action or living law? Back to the beginning in sociology of law. 4, Legal Studies, 157–74.


Pausenberger, Ehrenfried 1975: Konzerne. In E. Grochla and W. Wittmann
Bibliography


Resta, Eligio 1985: La struttura autopoietica del diritto moderno. 25, Democrazia e diritto, 59–74.


Bibliography


Schmitter, Philippe C. 1977: Modes of interest intermediation and models of societal change in Western Europe. 10, Comparative Political Studies, 7–38.


Schneider, Uwe 1981: Konzernleitung als Rechtsproblem. 36, Betriebsberater, 249–59.

Sciarra, Silvana 1990: A labour law perspective on group enterprises in Italy: networks versus hierarchies. In D. Sugarman and G. Teubner (eds),


Simon, Herbert 1978: Rationality as process and as product of thought. 68, American Economic Association Review, 1—16.


Streeck, Wolfgang and Schmitter, Philippe 1985: Community, market,


Teubner, Gunther 1986a: Der Beirat zwischen Verbandssouveränität und Mitbestimmung: Zu den Schranken der Beiratsverfassung in der GmbH.
Bibliography

Teubner, Gunther and Willke, Helmut 1984: Kontext und Autonomie:
Bibliography

Gesellschaftliche Selbststeuerung durch reflexives Recht. 5, Zeitschrift für RechtssozioLOGie, 4–35.


Treiber, Hubert 1985: Crisis in regulatory policy? Remarks on a topical theme, or reflexive rationality in the shadow of codified law. 9, Contemporary Crises, 255–80.


Bibliography


Index of Names

Abel, R. 59, n.39
Abeltshauser, Th. 94, n.113
Albert, H. 4, n.16
Alchian, A. 125, n.12; 127, n.17
Aldrich, H. 136, n.47
Alessi, R. 146, n.89
Alexy, R. 4, n.16; 8, n.37; 10, n.45; 67, n.17
Anderson, E. 143, n.73
Antunes, J. 146, n.86; n.89
Assmann, H. 115, n.57; 131, n.26; 143, n.79; 147, n.92
Baecker, D. 16, n.16; 28, n.15; 70, n.31
Ballmer, T. 15, n.10
Barath, E. 91, n.104
Barwise, J. 4, n.9
Bateson, G. 4, n.9
Baudenbacher, C. 96, n.120
Baudrillard, J. 78, n.62
Bechmann, G. 82, n.75
Beer, S. 28, n.15
Benseler, F. 16, n.16
Bercusson, B. 64, n.2; 68, n.23; 73, n.38; 131, n.28; 132, n.30, n.32
Birk, R. 147, n.99
Blanke, Th. 45, n.83; 97, n.124
Blankenburg, E. 21, n.35; 26, n.8; 47, n.2; 48, n.3; 49, n.7; 59, n.40; 66, n.14; 69, n.27; 90, n.102
Blanpain, R. 156, n.118, n.119
Blumberg, P. 146, n.87; 147, n.98; 149, n.102; 150, n.106; 153, n.110
Blute, M. 51, n.14
Bohannan, P. 36, n.55; 39, n.61
Boyle, J. 5, n.21; 6, n.25
Braten, S. 24, n.47
Breuning, 124, n.5
Breyer, S. 73, n.40
Brüggemeler, G. 47, n.1; 66, n.8; 106, n.26, n.27
Buckley, W. 13, n.2
Bulcke, D., van den 143, n.73; 148, n.101
Buxbaum, R. 93, n.110; 131, n.27
Bälz, U. 28, n.21; 131, n.26; 149, n.104, n.105; 154, n.112
Bühl, W. 35, n.48; 48, n.4, n.6; 49, n.9; 52, n.18; 54, n.26; 68, n.24
Campbell, D. 18, n.24; 32; n.39; 51, n.14; 53, n.23; 54, n.25
Canaris, C. 18, n.24; 120, n.79
Cappelletti, M. 5, n.17; 81, n.73
Chandler, A. 142, n.70
Christie, N. 58, n.38
Clune, W. 70, n.30; 73, n.38; 74, n.46; 134, n.38
Cohen, D. K. 80, n.69
Coing, H. 18, n.24
Collins, H. 152, n.108
Cooter, R. 47, n.1; 57, n.33; 81, n.72
Cotterrell, R. 38, n.57; 111, n.48

Dahl, R. 131, n.28
Daintith, T. 81, n.71; 116, n.64
Dalton, C. 6, n.26
Damm, R. 13, n.1
Dawkins, R. 52, n.17

Damm, R. 13, n.1
Dawkins, R. 52, n.17
Deggau, H.-G. 5, n.17; 39, n.64; 70, n.28; 79, n.66; 93, n.108; 115, n.59; 123, n.4
Demsetz, H. 127, n.17
Dimmel, N. 64, n.2; 68, n.23; 73, n.38
Dioguardi, G. 142, n.69
Dittrich, W. 138, n.53
Dreier, H. 41, n.71
Dumouchel, P. 16, n.16
Dupuy, J.-P. 16, n.16; 34, n.44, n.45; 70, n.29
Durkheim, E. 92, n.105; 117, n.74

Easterbrook, F. 79, n.65; 105, n.19
Easton, D. 132, n.29
Eckhoff, T. 11, n.46
Eder, K. 47, n.1; 66, n.9; 67, n.17
Eigen, M. 15, n.7; n.10; 23, n.41; 27, n.13
Eisenberg, M. 141, n.68
Erd, R. 138, n.53
Escher, M. C. 3, n.8
Esser, J. 10, n.43; 35, n.51; 41, n.72; 42, n.77; 115, n.58; 116, n.63; 119, n.78; 138, n.52
Etchemendy, J. 4, n.9
Ewald, F. 39, n.63

Fach. W. 138, n.52
Fama, E. 127, n.17
Febbrajo, A. 11, n.47; 70, n.31
Feinmann, J. 6, n.26
Feldman, H. L. 81, n.73

Fikentscher, W. 42, n.78
Fischel, D. 79, n.65; 105, n.19
Fitzpatrick, P. 111, n.48
FitzRoy, F. 129, n.21
Fletcher, G. 4, n.12; 5, n.17; 8, n.32, n.33, n.35, n.36
Flume, W. 5, n.17
Förster, H. von 2, n.3; 4, n.9; 12, n.51; 15, n.7; 19, n.26; 23, n.42; 35, n.50; 71, n.34; 74, n.47; 75, n.49; 77, n.57; 84, n.88; 99, n.128; 117, n.73
Francis, E. 52, n.16
Franken, W. K. 146, n.89
Frankenberg, G. 5, n.21; 6, n.27; 44, n.81, 66, n.7; 103, n.16
Freitag, H. 41, n.72
Frey, R. 70, n.28
Friedman, L. 13, n.1; 21, n.35; 26, n.7; 34, n.47; 47, n.2; 48, n.5
Frug, G. 6, n.26

Galanter, M. 38, n.57; n.59; 39, n.61; 111, n.48; n.49;
Galeotti, A. 130, n.24
Garth, B. 81, n.73
Gatignon, H. 143, n.73
Gehlen, A. 135, n.42
Geiger, Th. 38, n.60; 72, n.35; 90, n.101, 120, n.81
Gernhuber, J. 116, n.67
Giddens, A. 107, n.30
Glaserfeld, E. von 77, n.57; 78, n.59, n.61; 84, n.87
Gomez, P. 70, n.30; 134, n.38
Goodman, J. 47, n.1; 57, n.33; 81, n.72
Gordon, R. 5, n.22; 47, n.2; 49, n.12; 53, n.22; 72, n.37
Graber, Ch. 124, n.5
Granovetter, M. 129, n.21
Griffiths, J. 38, n.57; 111, n.48
Grossman, S. 127, n.17; 133, n.37
Grünberger, H. 44, n.79
Gutchess, J. 139, n.64
Görlitz, A. 14, n.6; 66, n.12; 71, n.32
Günther, K. 66, n.9, 67, n.17; 101, n.3

Habermas, J. 14, n.4; 47, n.1; 53, n.21; n.24; 60, n.43; 67, n.17; 74, n.45; 76, n.55; 109, n.39
Hadden, T. 132, n.30
Haferkamp, H. 16, n.16; 28, n.15
Hamilton, W. 52, n.17
Harris, D. 79, n.64; 105, n.18
Hart, D. 66, n.9
Hart, H. L. A. 8, n.32; n.34; 10, n.44; 20, n.29; 36, n.55; 39, n.61; 40, 66, 41, n.69; 66, n.9
Hart, O. 127, n.17; 133, n.37
Hartmann, M. 67, n.21
Hastedt, H. 87, n.95
Hayek, F. A. 22, n.37; 47, n.1; 49, n.11; 57, n.32
Hedemann, J. 101, n.4, n.7
Hedlund, G. 142, n.70; 143, n.73
Heijl, P. 2, n.4; 25, n.3; 28, n.15, n.16; 29, n.23, n.26; 77, n.62
Heidrich, A. 123, n.1
Heller, Th. 7, n.30; 59, n.41
Henry, S. 111, n.48
Herman, E. 141, n.68
Hirshhieler, J. 47, n.1; 57, n.33; 81, n.72
Hommelhoff, P. 143, n.75; 145, n.84; 147, n.90; 95, n.155, n.115
Honnée, H. 147, n.97
Hopt, K. 140, n.67
Houln, R. 146, n.88
Hutter, M. 4, n.9; 47, n.1; 83, n.79; 95, n.115; 125, n.12; 134, n.38; 136, n.47
Ietswaart, H. 68, n.25
Imal, K. 143, n.77
Isay, R. 147, n.93
Itami, H. 143, n.77
Jacquemin, A. 142, n.70
Jadaud, B. 152, 107
Jakobs, H. 106, n.24; 114, n.54
Jantsch, E. 15, n.7; 16, n.17; 61, n.45
Jarillo, J. C. 142, n.70
Jeanlin, M. 146, n.88
Jensen, M. 88, n.97; 103, n.15; 127, n.17
Jessop, B. 34, n.46; 102, n.14
Joerges, Ch. 5, n.21; 7, n.31; 66, n.8; 82, n.74; 101, n.3; 106, n.22; n.25; 107, n.31; 109, n.35; 36; 113, n.51, n.52, n.53; 116, n.64, n.65
Kagan, R. 91, n.104
Kahn-Freund, O. 148, n.100
Kalrys, D. 5, n.21; 6, n.26
Kantorowicz, E. 122, n.86
Kargl, W. 124, n.6
Kay, N. 129, n.21
Kegel, G. 5, n.17; 107, n.29
Kelman, M. 5, n.21
Kennedy, David 6, n.27
Kennedy, Duncan 6, n.23, n.28
Kettler, D. 97, n.121
Kerchove, M. 74, n.48
Kirschner, Ch. 144, n.81
Klug, U. 8, n.37
Kniff, D. de 146, n.89; 147, n.99
Knyphausen, D. 28, n.15; 70, n.30; n.129, n.21; 134, n.38; 142, n.71
Kornhauser, L. 47, n.1; 57, n.33; 81, n.72; 111, n.48
Krause, D. 125, n.14; 126, n.16; 140, n.66, n.67; 155, n.116
Krawietz, W. 70, n.28
Kreissl, R. 78, n.63
Krippendorff, K. 4, n.9; 5, n.18; 11, n.49
Krohn, W. 15, n.7; 16, n.16; 29, n.24; 65, n.4
Köndgen, J. 116, n.64, n.66; 120, n.80, n.81, n.82
Kübler, F. 107, n.31
Index of Names

Küppers, G. 29, n.24
Kuhn, K. 155, n.113

Ladeur, K. 41, n.73; 42, n.76; 66, n.11; 68, n.22; 101, n.10; 107, 31; 110, n.41; 124, n.8
Larenz, K. 116, n.62
Lawrence, P. 13, n.3; 73, n.41; 117, n.71
Lehmbruch, G. 137, n.51
Lempert, R. 21, n.35; 26, n.8; 34, n.47; 35, n.51
Lindblom, Ch. 80, n.69
Locher, J. 3, n.8
Lorsch, J. 13, n.3; 73, n.41; 117, n.71
Luhmann, N. 2, n.2; 4, n.1; 9; n.39; 10, n.41; 12, n.50, n.53; 17, n.18; 18, n.22; 19, n.28; 20, n.31, n.34; 23, n.39; 24, n.48; 27, n.9, n.10, n.11; 28, n.15; 29, n.27, n.29; 30, n.30, n.31; 31, n.34, n.35, n.36; 34, n.43; 36, n.53; 40, n.68; 41, n.71, n.74; 42, n.75; 45, n.82; 47, n.1; 49, n.11; 51, n.14; 54, n.27; 64, n.3; 67, n.19; 70, n.28, n.30, n.31; 71, n.33; 75, n.50; 76, n.53; 78, n.58; 80, n.67; 82, n.76; 77; 84, n.83, n.84, n.89; 85, n.90, n.91, n.92; 87, n.94; 88, n.96, n.97; 89, n.100; 94, n.112; 103, n.15; 104, n.17; 105, n.20, 107, n.30; 110, n.40; 118, n.75; 120, n.81; 122, n.84; 123, n.2, n.3; 125, n.11; 129, n.19, n.20; 130, n.22; 133, n.34, n.36; 134, n.38, n.39; 135, n.42; 46; 136, n.48; 143, n.78; 144, n.83
Lumsden, C. 52, n.17
Lutter, M. 99, n.130; 147, n.94, n.99; 154, n.111; 155, n.133, n.115, n.117
Lüddersen, K. 5, n.19

Macaulay, S. 68, n.23
MacNeil, I. 116, n.64
March, J. 135, n.44; n.45
Marin, B. 83, n.81; 96, n.117
Mason, E. 131, n.28
Maturana, H. 11, n.48; 15, n.8; 16, n.12, n.14; 17 n.18; 22, n.38; 23, n.43, n.44; 25, n.2; 27, n.14; 28, n.15, n.17, n.18, n.19, n.22; 29, n.24, n.25, n.26; 31, n.35; 56, n.30; 58, n.34, n.35; 59, n.42; 76, n.52; 77, n.57; 80, n.68; 84, n.86
Maus, I. 66, n.9; 97, n.123; 101, n.3
Mayntz, R. 20, n.30, n.33; 26, n.6; 27, n.12; 31, n.38, 66, n.10; 73, n.42; 81, n.70; 91, n.103; 96, n.118; 98, n.125, n.126; 99, n.129, n.131; 145, n.85
Mayr, E. 48, n.4
MacNeil, I. 116, n.64
Meckling, W. 127, n.17
Mertens, H.-J. 106, n.27
Meyer, P. 52, n.17
Mitnick, B. 73, n.40
Mnookin, R. 111, n.48
Moore, S. 74, n.44; 76, n.54; 111, n.48
Mossakowski, D. 28, n.20
Münch, R. 69, n.26; 83, n.78; 88, n.98; 103, n.15

Nahamowitz, P. 64, n.2; 68, n.23; 86, n.93
Nedelmann, B. 145, n.85
Nelken, D. 111, n.48
Nelson, R. 125, n.12; 135, n.43; 136, n.47
Nerhot, P. 78, n.60
Nettmann, H. 28, n.20
Neumann, F. 101, n.4, n.5
Nocke, J. 64, n.1; 65, n.4; 124, n.5
Noll, A. 64, n.2; 68, n.23; 73, n.38
Nonet, Ph. 39, n.61; 47, n.1; 73, n.39; 105, n.21; 109, n.38

Offe, C. 74, n.45
Ophuels, C. 8, n.32
Ost, F. 74, n.48
Ott, C. 73, n.39; 125, n.13; 131, n.28

Panitch, L. 138, n.53
Parijs, Ph. van 48, n.4
Parsons, T. 13, n.1; 88, n.97; 116, n.68; 129, n.19
Pascal, B. 106, n.28
Pausenberger, E. 144, n.80
Peller, G. 6, n.25
Piaget, J. 65, n.6; 77, n.57
Pierre, N. 28, n.15
Piore, M. 139,, n.62
Pipkorn, J. 156, n.118
Piacentinus 122, n.85
Podak, K. 44, n.80
Podgorecki, A. 72, n.36; 73, n.43
Popper, K. 4, n.16
Posner, R. 79, n.64; 105, n.18
Powers, W. 78, n.61
Preuss, U. 101, n.12, 107, n.31; 111, n.47
Priest, G. 47, n.1; 57, n.33; 81, n.72
Prigogine, I. 15, n.7; 102, n.13
Probst, G. 16, n.16; 28, n.15; 70, n.30; 134, n.38; 142, n.71

Quine, W. 4, n.9

Raiser, L. 92, n.106; 107, n.31; 116, n.60; 131, n.26
Rayley, J. 125, n.15
Rehbinder, E. 66, n.15; 147, n.91
Reich, N. 64, n.2; 68, n.23; 73, n.38
Resta, E. 4, n.15
Richards, J. 78, n.59, n.61; 84, n.87
Rodiere, P. 147, n.96
Ronge, V. 97, n.121; 110, n.44

Rosewitz, B. 76, n.56
Ross, A. 5, n.17; 8, n.32, n.34; 10, n.44
Roth, G. 16, n.15, n.16; 17, n.21; 23, n.40; 24, n.46; 27, n.12; 30, n.32; 31, n.37; 35, n.49; 55, n.28; 56, n.30, n.31; 58, n.37; 30, n.32; 31, n.37; 77, n.57; 89, n.99
Rottleuthner, H. 13, n.1; 16, n.15; 20, n.32; 21, n.35; 26, n.4; 34, n.46; 36, n.52, n.54; 40, n.65; 47, n.2; 49, n.8, n.10; 64, n.1
Rubin, P. 47, n.1; 57, n.33; 81, n.72

Sabel, Ch. 139, n.62
Sanders, J. 34, n.47
 Sapelli, G. 132, n.31; 141, n.68; 142, n.69; 143, n.79
Savatier, J. 147, n.96
Sayag, A. 152, n.107
Schanze, E. 93, n.109
Scharpf, F. 96, n.117
Scheffler, E. 143, n.74
Scheuss, R. 142, n.71
Schimank, U. 26, n.5; 76, n.56; 83, n.80
Schluemp, W. 124, n.7
Schmid, A. 73, n.40; 93, n.111
Schmid, G. 96, n.118
 Schmid, M. 16, n.16; 28, n.15
Schmid, W. 116, n.64
Schmidt, E. 116, n.63; 119, n.78
Schmidt, J. 117, n.70
Schmidt, K. 134, n.40
Schmidt, S. 77, n.57; 117, n.72
Schmitter, Ph. 66, n.10; 96, n.118; 97, n.122; 110, n.43; 137, n.49; 50, n.51; 138, n.54
Schneider, U. 147, n.95, n.99; 155, n.113
Schuster, P. 15, n.7, n.10; 23, n.41; 27, n.13
Schwegler, H. 16, n.16
Index of Names

Sciarra, S. 138, n.53, n.57; 152, n.109
Seiznick, Ph. 39, n.61; 47, n.1; 73, n.39; 98, n.127; 105, n.21; 109, n.38; 131, n.28; 140, n.65
Shapira, Z. 135, n.45
Shils, E. 129, n.19
Siber, H. 116, n.61
Simitis, S. 71, n.32; 109, n.39; 110, n.45; 139, n.61
Simon, H. 67, n.18
Singer, J. 6, n.25; n.28
Smelser, N. 116, n.68
Spencer Brown, G. 4, n.10; 143, n.76
Stein, E. 154, n.111
Steinmann, H. 131, n.28
Steward, R. 73, n.40
Stichweh, R. 27, n.12; 29, n.28; 30, n.33; 31, n.38;
Strauss, G. 139, n.62
Streeck, W. 66, n.10; 96, n.118; 97, n.122; 110, n.43; 126, n.16; 137, n.49, n.50; 139, n.59; 60, n.63; 64; 140, n.65; 67; 158, n.121
Struck, G. 118, n.76
Suber, P. 4, n.9, n.12; 5, n.17; 8, n.34
Sugarman, D. 139, n.58
Suplot, A. 147, n.96, n.99

Teubner, G. 5, n.17; 9, n.38; 14, n.4, n.5; 16, n.16; 18, n.23; 19, n.25, n.27; 20, n.31; 23, n.41; 27, n.12; 28, n.15; 29, n.25; 30, n.30; 41, n.70; 60, n.44; 62, n.46; 66, n.13; 70, n.28; 80, n.33; 71, n.32; 76, n.51; 81, n.71; 95, n.114; 96, n.119; 100, n.1; 101, n.2; 103, n.15; 109, n.37; 110, n.42; n.45; 115, n.56; 117, n.69; 119, n.77; 121, n.83; 124, n.10; 126, n.16; 130, n.23; 131, n.25, n.27; 133, n.33, n.35; 134, n.38; 135, n.42; 138, n.53; 139, n.58; 145, n.85
Theisen, M. R. 155, n.113
Timm, W. 147, n.95; 155, n.115
Toulmin, S. 48, n.4
Traxier, F. 66, n.10; 97, n.122; 110, n.43
Treiber, H. 66, n.14
Treu, T. 156, n.118
Trescher, K. 155, n.114
Treves, R. 64, n.2
Trubek, D. 5, n.21; 6, n.24; 101, n.3
Tugendhat, E. 47, n.1; 67, n.17
Tushnet, M. 6, n.26
Tönnies, S. 26, n.8; 47, n.2; 64, n.1
Ulrich, H. 16, n.16; 28, n.15; 131, n.28
Unger, R. 6, n.23; 47, n.1
Vanberg, V. 47, n.1; 57, n.32
Vandamme, J. 156, n.118
Vardaro, G. 96, n.116; 110, n.43; 137, n.49; 144, n.82; 157, n.120; 158, n.122
Varela, F. 4, n.11; 15, n.8, n.11; 17, n.20; 24, n.45; 25, n.1, n.2; 27, n.14; 28, n.15, n.19; 33, n.42, n.56, n.30, 68, n.34, n.35; 59, n.42; 64, n.3; 84, n.82; 120, n.11
Veljanovski, C. 79, n.64; 105, n.18
Vobruba, G. 66, n.10; 97, n.122; 110, n.43
Voigt, R. 14, n.4; n.6; 66, n.12; 71, n.32; 109, n.37
Wake, D. 53, n.20; 55, n.28; 56, n.29; n.30
Wallace, C. 112, n.50
Wallerstein, J. 107, n.30
Walz, R. 93, n.107, n.31; 114, n.55
Wassenberg, A. 138, n.52; n.53, n.56
Index of Names

Watson, A. 38, n.56; 40, n.67; 47, n.1
Watzlawick, P. 77, n.57
Weber, M. 101, n.4, n.6; 120, n.81
Welck, K. 136, n.47
Weiss, M. 11, n.46; 13, n.1
Welzsäcker, E. von 15, n.10
Wesel, U. 38, n.56, n.58; 47, n.1
Whyte, L. 58, n.36
Wieacker, F. 101, n.4, n.8
Wiedemann, H. 149, n.103
Wiethölter, R. 7, n.29; 59, n.41; 66, n.9; 67, n.16; n.20; 101, n.9; 107, n.31; 108, n.33; n.34; 111, n.46
Williamson, O. 127, n.18; 129, n.21; 135, n.41; 142, n.70; 143, n.74
Willke, H. 20, n.30, n.31; 28, n.15; 58, n.37; 84, n.85; 96, n.117; 103, n.15; 107, n.30; 125, n.11; 142, n.72
Wilpert, B. 125, n.15
Wilson, E. O. 52, n.17
Winkler, J. 138, n.55
Winter, S. 125, n.12; 135, n.43; 136, n.47
Witt, U. 125, n.12
Wolf, E. 106, n.24; 114, n.54
Wolff, H. 5, n.17
Wormell, C. 4, n.9; 5, n.20
Zeleny, M. 15, n.8, n.9; 16, n.13, n.16; 23, n.41; 28, n.15; 33, n.40, n.41
Zemen, H. 47, n.1
Zenz, G. 109, n.39
Zolo, D. 10, n.40, n.42; 16, n.15; 17, n.19; 64, n.2; 65, n.5
Zöllner, W. 106, n.23; 124, n.9
Index of Subjects

action 43, 129, 133
autarchy 34, 114
auto-logic 12
autonomy
  as distinct from autopoiesis 31 ff.
evolutionary 53–4
gradual 31
legal 2, 26f., 31, 33 ff., 36, 42, 50, 57, 72
social 66, 68, 71 ff., 75 f., 97
autopoiesis
  and second order cybernetics 23
  apparent 28
  as distinct from self-reference, self-production, self-organization, reflection 16 ff.
closure 65, 70–1, 74, 84, 102
circular closure 26
concept 16, 16–18, 22–4, 27, 44, 75, 124
double, 70, 80, 95
inflexible hardness of 27, 31, 34, 76
legal 36, 39, 47, 102
of consciousness 45
partial 27
social 26, 29, 75–6
theory 15, 39, 64, 126, 133
base-superstructure 34

causality 34 f., 44, 49 f., 61, 74, 98
circular causality 18
circle 71 f.
  hermeneutic 10, 80
  of observation 80, 86
  self-referential 26, 30 ff., 39, 40, 76
  circles, vicious and virtuous 33, 43
circular causality 18
  circularity 3, 10 f., 31, 35, 65, 75 f., 86, 98
  circular closure 26
  logical 9
  taboo 8 f., 53
coevolution, cf. evolution
collision rules 5, 100, 107, 108, 113, 115
  between nations 107
  between systems 107, 121
communication 29, 39, 85, 86 ff., 95 f., 98
  between organizations 83
  between systems 83
communication systems 43, 52, 69, 78 f., 83 f., 91
constructivism 77 f., 82, 84, 88
contract 92 ff., 114, 115 ff., 129 ff.
  contractual freedom 63, 92
contractual network 127, 128 f., 134 f., 140
law of contract 6, 116, 118, 120
corporate actor 140, 149, 155
cf. also legal person
corporate governance 124, 128, 131, 133, 137, 148
corporate group
as an autopoietic system 124, 142 ff.
as a polycorporatist network 149, 154
constitution 95, 124, 126 f., 131, 142 ff., 153
law, cf. corporate governance
M-form 128, 142

corporatism, cf. neo-corporatism
coupling; cf. also interference 11, 28, 31, 53, 62, 65, 80, 86, 97
coupling 42, 60, 92, 108
circular 3, 9, 18, 32, 87 f., 98
episodic coupling 60
hypercyclical 15, 24, 27, 33, 36, 42 f., 69, 102, 104
punctual 90
recursive 134
ultra-cyclical 15
critical legal studies 5
differentiation, social 51, 69, 113-15, 121 f.
economic system 75, 79, 83, 92, 103, 117, 121, 141
differentiation 133, 137
Eigen-values 12
emergence 29 f., 52, 75, 87, 141
environmental evolution 55
environmental systems 80, 92, 102
autopoietically closed 103
episodes, interweaving of 60 f.
evolution 32 f., 48, 50, 53-4, 56 f., 64, 94, 135
and planning 64
biocultural 52
biological 52
coevolution 45, 51, 52, 57, 60, 61, 63, 80 ff., 95
concept 47 ff., 56
cultural 32, 51, 56
distinction between evolutionist and evolutionary 48
endogenous 54
evolutionary advantages 15, 32
exogenous 54
function 51, 81
hypercycle 33
legal 7, 47 ff., 51, 54, 56, 59
limits to 55
mechanisms of 51, 53 ff., 57, 60, 62, 125, 136
models 53, 56 f., 69, 81
neo-Darwinism 13
norms 60
phylogenetic 59
post-Darwinian evolutionism 53
process 53, 61, 125 ff., 136, 144
social 51-3, 57, 102
social Darwinism 51
sociobiology 52
socio-cultural 32
stasis 53 f., 55
teleology 48
teleonomy 48
theory 13, 49 f., 53, 55, 68
feedback 9
functionalism, 50 f., 53, 54
general clauses 101, 110, 114, 115, 118, 119 f., 121, 124
god 1, 2, 3, 32, 100
hypercyle 23, 25, 27, 31 f., 33, 36, 40, 44 f., 64, 69, 87 f., 104
indigenous Law 38
individual 10, 86
interaction 10, 60 ff., 81, 83, 86, 116, 118 f.
Index of Subjects

interests
  balancing of 101, 112
  collective 81
interference 65, 77, 86 f., 89 ff., 97, 102 ff., 117
  between law and life-world 90
  between law and economy 92
  event-interference 89
  mechanisms of 90, 99
  role-interference 90, 99
  structural interference 90, 103
  system-interference; cf. also coupling 88, 90 ff., 93, 95 f., 99, 103
inter-organization system 83, 153
interpenetration 45, 60
inter-system conflicts 90, 111
inter-system relationships 82, 83, 95-6, 127
intervention 14, 71, 84, 94, 120
juridification 67, 74, 109 f., 116, 119
law
  as an autopoietic system, cf. autopoiesis
  autonomy, cf. legal autonomy
  boundaries, cf. system code, cf. system
  components, cf. system
corporate law, company law
  distinction between legal/illegal 3, 11, 33, 38, 88, 103, 105
document/dogmatics 5 ff., 19, 33 f., 42, 59, 100, 107, 121, 123
element, cf. system
evolution, cf. legal evolution
  function 26, 33, 44, 59, 81, 110
identity, cf. system
indeterminacy 2, 5 ff., 123 ff.
instrumentalization 93
interference, cf. interference
  internal consistency 105 f., 114
juridification 67, 74, 115, 119
  partially autonomous 37, 38
process, cf. system
proceduralization 66 ff., 101, 108
programme, cf. system
structure, cf. system
subjective, cf. subjective law
system 25 ff., 69 ff.
  legal actions 27, 31, 33, 38, 41 ff.
  legal person 126, 130, 146, 149, 149–50
  life-world 74, 87 f., 90, 96
  linking, cf. coupling
market 129 ff., 132 f., 135, 141 f.
machiness (non-) trivial 2, 27, 35, 98
materiality continuum 85 ff.
meaning
monopoly capitalism 101
morphogenesis 11
multinational concerns 112, 128

nature 86
negotiation systems 63, 83 f., 96
nervous system 27, 29
networks 25, 29, 31, 40, 42, 64, 127, 131, 142, 146, 149 f., 153, 156 ff.
norms 9, 10, 18–20, 72, 74, 76, 79 f., 94, 97
  conformity to 72
  deviation from 72
  disobedience of 72
evolution of 60
formation processes 97, 120
legal, cf. legal norms
production of 70
  secondary rules 36
social 58 f.
observation, cf. constructivism
ontogenesis 60 ff.
organization
as an autopoietic system 133
formal 95, 98, 102, 133, 136, 141 f.
hybrid forms of 127
organizational surplus value 140
organisam 14, 24, 84
pareto-optimum 81
perturbation 35, 58, 61
paradox 4, 5 ff., 12, 33
deparadoxification 12
legal paradox 4, 8
paradox of self-reference 12
real paradox 10
phylogenesis 60
political system 102 ff., 117, 121, 132
power 38, 72–3, 75, 91, 94, 95, 98, 127, 129, 132 f., 136, 148, 158
price control norm 77
price regulation 75
property rights 57, 155
Rabbinical law 2
re-entry 9, 143
redundancy and variety 136, 144
reflexive law 67 ff., 93, 97 f., 121 f.
regulation 65, 67, 71, 82, 96 ff., 118 f., 125, 142 cf.
interference
chances 93, 126
context 142, 154
effects 93, 97
indirect 82
instances 96
intention 93
laws 140
means 71
mechanisms 83, 95, 115
mismatch 73
perversion 73
problem 98
regulatory success 80
regulatory trilemma 62
purposes 92
social 64 ff., 97
regulation of behaviour 94
reproduction, autopoietic 24, 133
revolution 4
American 109
second-order cybernetics 10, 19 f., 23
self-description 15, 24 f., 39 f., 41 f., 76, 103
self-organization 15, 19
self-reference 15 f., 18, 123, 145
legal 1, 3 ff., 7
self-reflection 20
self-regulation 80
mechanisms of
self-(re-)production 20 ff., 27, 31 ff., 41 f., 75
social sciences 49
social system, cf. systems, social
strange loop 3, 8
subjective law 41, 92 ff.
subsystems
compatibility 62
functional 30, 60, 86, 95 f., 103, 107 f., 115
social 32, 51, 61, 69 f., 80 f., 83, 86 f. 90, 100, 109, 121
territorial 107
system
allopoietic 31
autonomous 24, 72, 75, 77, 92
autopoietic 11, 15, 23, 25, 28 ff., 35, 40, 58 f., 64 ff., 69, 80, 82, 84, 102, 134, 142
biological 29
boundaries 23, 26, 31, 36, 69, 89, 107
closed 15, 53, 97
code 59, 60, 99, 103 ff.,
107 ff., 110, 111
cognitive 28
components 23, 26 f., 30 ff., 38, 42, 69, 85, 87, 102, 104
conflicts 105 f., 110, 113 f., 118, 120
coupled human beings 28 f.
coupling 28, 96
disintegration 62, 104
economic, cf. economic system
elements 23, 29, 31, 36, 69, 102, 117
first order 25, 29, 87, 102
formation 86, 118
higher order 28 f., 30, 87
identity 23, 26 f., 32, 55, 69
influencing 89 f.
input-output model; cf. also
interference 13 f., 74 f., 84, 87, 89, 103
interpenetrating 60
legal, cf. law
linking, cf. coupling
logics 73, 95
minimal condition for 22
observation 77 ff., 89 f.
open 13 ff., 26, 55 f., 84, 89, 117
operations 88
political, cf. political system
programme 103
processes 23, 26 f., 31, 36, 69, 102
psychic 45, 88
reference 79 f., 88
relation between system and
environment 53, 55, 70, 80
second order 25, 30, 70
self-constituting 342, 33, 39 f., 69
social 29 ff., 45 f., 51, 53, 76, 78, 80, 84 f.; autopoletic 69, 98
structures 23, 26, 31, 36, 39, 69, 102
symbolic system 26
system maintenance 76
theory 13, 16, 45 f., 50, 83, 108, 117, 127, 129, 142, 144
tangled hierarchy 3, 8
tautology 4, 9, 11, 33
teleology, cf. evolution
transaction costs 127 ff., 131, 133, 136
unitas multiplex 127
Gunther Teubner


Jacket design by Richard Boxall Design Associates

Printed in Great Britain
‘The sociological theory of “autopoiesis” advanced by Niklas Luhmann is one of the most important yet inaccessible recent developments in sociology of law. The most lucid and original expositor, critic and developer afresh of that theory is Gunther Teubner.’ **Professor Neil McCormick**, Centre for Criminology and the Social and Philosophical Study of Law, University of Edinburgh.