

ARTICLES : SPECIAL ISSUE
LAW AND EVOLUTIONARY THEORY

Global (Non-)Law: The Perspective of Evolutionary Jurisprudence

By Marc Amstutz*

A.

Globalization and the rules it generates confront legal scholarship with a number of intricate issues.¹ One of these lies at the core of a hypothesis which has been

* Prof. Dr. Marc Amstutz, LL.M. (Harv.), Lehrstuhl für Handels- und Wirtschaftsrecht sowie Rechtstheorie, Universität Freiburg i.Ue., Switzerland, email: marc.amstutz@unifr.ch.

¹ For an overview, see Paul-Schiff Berman, *Global Legal Pluralism*, 80 SOUTHERN CALIFORNIA REVIEW 1155 (2007); *Id.*, *International Law to Law and Globalization*, 43 COLUMBIA JOURNAL OF TRANSNATIONAL LAW 485 (2005); *Id.*, *The Globalization of Jurisdiction*, 151 UNIVERSITY OF PENNSYLVANIA LAW REVIEW, 311 (2002); Marc Amstutz/Vaios Karavas, *Rechtsmutation: Zu Genese und Evolution des Rechts im transnationalen Raum*, 8 RECHTSGESCHICHTE 14 (2006); Felix Hanschmann, *Theorie transnationaler Rechtsprozesse*, in NEUE THEORIEN DES RECHTS, 347-369 (S. Buckel et al. eds., 2006); Duncan Kennedy, *Three Globalizations of Law and Legal Thought*, in: THE NEW LAW AND ECONOMIC DEVELOPMENT: A CRITICAL APPRAISAL, 19 (D. Trubek et al. eds., 2006); Hauke Brunkhorst, *Demokratie in der globalen Rechtsgenossenschaft: Einige Überlegungen zur poststaatlichen Verfassung der Weltgesellschaft*, in: WELTGESELLSCHAFT: THEORETISCHE ZUGÄNGE UND EMPIRISCHE PROBLEMLAGEN, 330 (B. Heintz et al., 2005); Thomas Vesting, *Die Staatslehre und die Veränderung ihres Gegenstandes: Konsequenzen von Europäisierung und Internationalisierung*, 63 VERÖFFENTLICHUNGEN DER VEREINIGUNG DER DEUTSCHEN STAATSRECHTSLEHRER 41 (2004); Sonja Buckel, *Empire oder Rechtspluralismus? Recht im Globalisierungsdiskurs*, 36 KRITISCHE JUSTIZ 177 (2003); Karl-Heinz Ladeur, *Globalisation and the Conversion of Democracy to Polycentric Networks: Can Democracy Survive the End of the Nation-State?*, EUJ Working Paper LAW No. 2003/4; Gunther Teubner, *Globale Zivilverfassungen: Alternativen zur staatszentrierten Verfassungstheorie*, *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* 1 (2003); *Id.*, *Privatregimes: Neo-Spontanes Recht und duale Sozialverfassungen in der Weltgesellschaft*, in ZUR AUTONOMIE DES INDIVIDUUMS: LIBER AMICORUM SPIROS SIMITIS, 437 (D. Simon et al. eds., 2000); *Id.*, *Des Königs viele Leiber: Die Selbstdekonstruktion der Hierarchie des Rechts*, 22 SOZIALE SYSTEME 229 (1996); *Id.* (ed.), *GLOBAL LAW WITHOUT A STATE* (1996); *Id.*, *Globale Bukowina: Zur Emergenz eines transnationalen Rechtspluralismus*, 15 RECHTSHISTORISCHES JOURNAL 255 (1996); Graf-Peter Calliess, *Reflexive Transnational Law: The Privatisation of Civil Law and the Civilisation of Private Law*, 23 ZEITSCHRIFT FÜR RECHTSOZIOLOGIE 185 (2002); Klaus Günther/Shalini Randeira, *RECHT, KULTUR UND GESELLSCHAFT IM PROZESS DER GLOBALISIERUNG* (2001); Christoph Möllers, *Globalisierte Jurisprudenz: Einflüsse relativierter Nationalstaatlichkeit auf das Konzept des Rechts und die Funktion seiner Theorie*, in: GLOBALISIERUNG ALS PROBLEM VON GERECHTIGKEIT UND STEUERUNGSFÄHIGKEIT DES RECHTS, 41 (M. Anderheiden et al. eds., 2001); Peer Zumbansen, *Spiegelungen von Staat und Gesellschaft: Governance-Erfahrungen in der Globalisierungsdebatte*, in: GLOBALISIERUNG ALS PROBLEM VON GERECHTIGKEIT UND STEUERUNGSFÄHIGKEIT DES RECHTS, 13 (M. Anderheiden et al. eds., 2001); Klaus

debated for some time in the literature. According to this hypothesis, the legal vacuum left by nation states in the institutional organization of cross-border commerce has been filled by a variety of private governance mechanisms, with the result that regulatory responsibility has been taken over by private or hybrid actors.² Testing this proposition requires analytical tools capable of discriminating between private ordering and public law-making.³ The private, or hybrid, governance regimes that would seem to be the hallmark of what is slowly emerging as global law are a Byzantine mixture of legal and social norms.⁴ Because of this, the foremost problem to be solved is that of deciding where to draw the line between legal and non-legal norms. Only if there are unequivocal criteria for distinguishing between law and non-law does it become possible to comprehend how hybrid regimes arise and evolve within the globalization process and, thus, to determine whether private actors have in fact assumed regulatory responsibility.

Röhl/Stefan Magen, *Die Rolle des Rechts im Prozess der Globalisierung*, 17 ZEITSCHRIFT FÜR RECHTSOZIOLOGIE 1 (1996); BOAVENTURA DE SOUSA SANTOS, TOWARD A NEW COMMON SENSE: LAW, SCIENCE AND POLITICS IN THE PARADIGMATIC TRANSITION (1995).

²See GRAF-PETER CALLIESS, GRENZÜBERSCHREITENDE VERBRAUCHERVERTRÄGE: RECHTSSICHERHEIT UND GERECHTIGKEIT AUF DEM ELEKTRONISCHEN WELTMARKTPLATZ (2006); CLAIRE CUTLER, PRIVATE POWER AND GLOBAL AUTHORITY: TRANSNATIONAL MERCHANT LAW IN THE GLOBAL POLITICAL ECONOMY (2003); Peer Zumbansen, *Lex mercatoria: Zum Geltungsanspruch transnationalen Rechts*, 67 RABELS ZEITSCHRIFT 637 (2003); Gunther Teubner, *Die unmögliche Wirklichkeit der Lex Mercatoria: Eine systemtheoretische Kritik der théorie ludique du droit*, in: FESTSCHRIFT FÜR WOLFGANG ZÖLLNER, 565 (M. Lieb et al. eds., 1998); YVES DEZALAY/BRYANT G. GARTH, DEALING IN VIRTUE: INTERNATIONAL COMMERCIAL ARBITRATION AND THE CONSTRUCTION OF A TRANSNATIONAL LEGAL ORDER (1996).

³For an overview of the literature on private ordering, see Amitai Aviram, *The Paradox of Spontaneous Formation of Private Legal Systems*, 22 YALE LAW & POLICY REVIEW 1 (2004); *Id.*, *A Network-Effect Analysis of Private Ordering*, Berkeley Program of Law & Economics Working Papers No. 2003/80; Lisa Bernstein, *Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms, and Institutions*, 99 MICHIGAN LAW REVIEW 1724 (2001); *Id.*, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms*, 144 U. PENNSYLVANIA LAW REVIEW 1765 (1996); *Id.*, *Social Norms and Default Rules Analysis*, 3 SOUTHERN CALIFORNIA INTERDISCIPLINARY LAW JOURNAL 59 (1993); *Id.*, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 JOURNAL OF LEGAL STUDIES 115 (1992); Robert Cooter, *Law from Order: Economic Development and the Jurisprudence of Social Norms*, John M. Olin Working Papers in Law, Economics and Institutions 1996/97-4; *Id.*, *Decentralised Law for a Complex Economy: The Structural Approach for Adjudicating the New Law Merchant*, 144 UNIVERSITY OF PENNSYLVANIA LAW REVIEW 1643 (1996); ROBERT C. ELLICKSON, *ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES* (1991).

⁴For this distinction, see Robert Cooter, *Three Effects of Social Norms on Law: Expression, Deterrence, Internatization*, 79 OREGON LAW REVIEW 1 (2000); *Id.*, *Symbols, Signals, and Social Norms in Politics and the Law*, 27 JOURNAL OF LEGAL STUDIES 765 (1998); *Id.*, *The Regulation of Groups: The Influence of Legal and Nonlegal Sanctions on Collective Action*, 63 UNIVERSITY OF CHICAGO LAW REVIEW 133 (1996); Ronald Coase, *The Problem of Social Cost*, 3 JOURNAL OF LAW AND ECONOMICS 1 (1960).

The explanations of global governance regimes most widely accepted today were worked out by institutionalist scholars.⁵ Institutionalism, however, does not discriminate between legal and non-legal norms. While it aptly explains how behavior regulation can work in the absence of state law, it does not draw any distinction between the mechanisms that generate law and those that engender social norms.⁶ This places the issue at hand beyond the explanatory reach of institutionalism. This is not to say, however, that institutionalism is irrelevant to the issue. A closer look at the analytical tools it has developed may perhaps provide useful guidance in unraveling the law/non-law conundrum.

Of all the branches of New Institutionalism, rational choice institutionalism is the one that has placed the problem of norm genesis and evolution most prominently on its research agenda.⁷ By defining institutions as rules of the social game, it conceives of the individual player or actor as being external to the institutions. The consequence of this methodological choice is that there is a clear role assigned to the individual actor: it is he, and he alone, who creates and changes the rules of the social game. This assumption is consistent with methodological individualism and conforms also, in that sense, with mainstream economic analysis. Seen in this way, the genesis and evolution of global governance regimes become exclusively a matter of individual action: “[...] North, Williamson, and their followers embraced methodological individualism – the idea that micro-level individual actions give rise to institutions. ... Institutions, they argued, are built to advance actors’ self-interests. By self-interests they meant an actor’s concern with improving his or her well-being ...”⁸

Given the fundamental implications of this premise, the following question becomes inescapable: to what extent is it reasonable to address the issue of norms (and especially that of legal norms) based on the assumption that they represent

⁵ For an overview, see JOHN L. CAMPBELL, *INSTITUTIONAL CHANGE AND GLOBALIZATION* (2004).

⁶ For an overview, see Jack Knight/Jean Ensminger, *Conflict Over Changing Social Norms: Bargaining, Ideology, and Enforcement*, in: *THE NEW INSTITUTIONALISM IN SOCIOLOGY*, 105 (M. C. Brinton et al. eds., 2001); Marc B. Suchman/Lawren B. Edelman, *Review: Legal Rational Myths: The New Institutionalism and the Law and Society Tradition*, 21 *LAW & SOCIAL INQUIRY* 903 (1996).

⁷ See in general Barry Weingast, *Rational Choice Institutionalism*, in: *POLITICAL SCIENCE: THE STATE OF THE DISCIPLINE*, 660 (I. Katznelson et al. eds., 2002); Oliver Williamson, *The New Institutional Economics: Taking Stock, Looking Ahead*, 38 *JOURNAL OF ECONOMIC LITERATURE* 595 (2000); DOUGLASS NORTH, *INSTITUTIONS, INSTITUTIONAL CHANGE, AND ECONOMIC PERFORMANCE*, CAMBRIDGE (1999); *Id.*, *Institutions and Their Consequences for Economic Performance*, in: *THE LIMITS OF RATIONALITY*, 383 (K. Cook et al. eds., 1990).

⁸ CAMPBELL, *supra* note 5, 14.

“the design of some thinking mind”?⁹ As Niklas Luhmann has pointed out, the nature of this problem is less theoretical than it is empirical: “[The] problem ... is that, empirically, people exist only as individuals and that general statements about humankind, consciousness, and person are difficult to test.”¹⁰

This same point has been made recently in Evolutionary Theory. To explain the evolution of complexity, Per Bak developed the concept of self-organized criticality.¹¹ The essence of the concept can be illustrated by the following example: A child at the beach lets sand trickle down to form a pile. The pile starts out being flat and, at first, the individual grains stay close to where they land. Their motion results from their own physical properties. As the process goes on, the pile grows and its slope becomes increasingly steep. From time to time, small sand-slides will occur. Gradually, the volume of the sand-slides becomes larger and larger. Eventually, one of these sand-slides will embrace the whole or most of the pile. What happens then is what Bak calls an avalanche. The question is: why do such events occur? Bak’s experiments have shown that avalanches can no longer be explained in terms of the behavior of the individual grains of sand. There is another dynamic at work: the sandpile, as a system, is reacting to forces clearly distinct from the dynamics of the individual grains. In Bak’s view, these forces must be understood as a kind of collective dynamics. Bak calls this phenomenon “self-organized criticality,”¹² which is – to put it concisely – a particular state of the sandpile evolving in accordance with laws different from those that govern the behavior of the individual grains.

Perhaps it was an insight of this kind that motivated Friedrich A. Hayek to replace his customary methodological individualism with a group theory approach, as he attempted to shed some light on the evolution of systems of rules of conduct. Hayek’s fundamental statement on the question reads as follows: “[T]he ... transmission of rules of conduct takes place from individual to individual, while what may be called the natural selection of rules will operate on the basis of the greater or lesser efficiency of the resulting order of the group.”¹³ Hayek here draws

⁹ FRIEDRICH A. HAYEK, *LAW, LEGISLATION AND LIBERTY: A NEW STATEMENT OF THE LIBERAL PRINCIPLES OF JUSTICE AND POLITICAL ECONOMY*, VOL. 1: RULES AND ORDER (1973).

¹⁰ NIKLAS LUHMANN, *LAW AS A SOCIAL SYSTEM*, 142 (2004).

¹¹ PER BAK, *HOW NATURE WORKS: THE SCIENCE OF SELF-ORGANIZED CRITICALITY* (1996).

¹² *Id.*, 31.

¹³ Friedrich A Hayek, *Notes on the Evolution of Systems of Rules of Conduct*, in: *STUDIES IN PHILOSOPHY, POLITICS AND ECONOMICS*, 67 (F.A. Hayek, ed., 1967). For further development of this argument, see KARL-HEINZ LADEUR, *NEGATIVE FREIHEITSRECHTE UND GESELLSCHAFTLICHE SELBSTORGANISATION*, 77 (2000).

a clear line between the transmission of rules, on the one hand, and the selection or evolution of rules, on the other. He suggests that there are different dynamics at work in each of the two processes and argues his point with a logic reminiscent of that of Bak's self-organized criticality. The evolutionary selection of rules of individual conduct is, in Hayek's view, a process that operates not through individual action but "through the viability of the [group] order it will produce ..."¹⁴ This clearly implies that the relationship between the parts that form a group, and which are therefore essential to the existence of the group as whole, cannot be fully explained by the mere interaction between the parts. For Hayek, "[t]hese considerations are mainly intended to bring out that systems of rules of conduct will develop as wholes, or that the selection process of evolution will operate on the order as a whole."¹⁵

What, however, is the theoretical basis for this evolutionary mechanism, for which Hayek sometimes uses the term "group selection"? On this question, Hayek remains rather elusive.¹⁶ At one point, he suggests that a combination of unplanned innovations by one group member, subsequent imitations by the other group members, and an ensuing increase in the group's competitive power is at the heart of the mechanism.¹⁷ A more precise theory of group selection was never provided by Hayek.

In summing up what has been said thus far, there are two points to be stressed:

1. First, for purposes of legal theory, rational choice institutionalism is inadequate for explaining the genesis and evolution of legal norms, since, as a discipline, it is concerned essentially with institutions, as a concept that encompasses both legal and non-legal norms indistinguishably. The distinction between such norms is, however, indispensable to a legal theory explaining global governance regimes.
2. Second, several authors from various schools of social theory have demonstrated conclusively that the issue of rules and order cannot be explained on the basis of methodological individualism. Methodological individualism misses the collective logic behind the genesis and evolution of systems of legal norms.

¹⁴ Hayek, *Id.*, 68.

¹⁵ Hayek, *Id.*, 71.

¹⁶ MARC AMSTUTZ, *EVOLUTORISCHES WIRTSCHAFTSRECHT: VORSTUDIEN ÜBER DAS RECHT UND SEINE METHODE IN DEN DISKURSKOLLISIONEN DER MARKTGESELLSCHAFT*, 247 (2001).

¹⁷ *Id.*, 249.

This being the case, the question naturally arises as to what methodology can be used in order to grasp the enigma such systems present.

My proposal is to test the analytical usefulness of systems theory and modern evolution theory as a means of resolving the issue.

B.

In recent years, a number of systems theory studies on global law have been presented by various authors.¹⁸ The main focus of this research has been on the evolution of the relationship between social systems in the wake of globalization. The issue of institutional change in the context of globalization, however, has not succeeded in attracting much attention. One of the rare exceptions is the system theoretical study by Calliess and Renner.¹⁹ The main body of their paper is an analysis of the role of law, with a view to developing a means for effectively distinguishing between legal and non-legal forms of regulation. For this purpose, Calliess and Renner suggest a shift in focus from law as a regulator of the behavior of social actors to law as a social system of communication. In this light, the function of law is “the stabilization of normative expectations,”²⁰ that is, of those expectations that are upheld even in case of disappointment. Since law cannot encompass the entirety of norms that emerge in a society, this raises the question as to how a legal system selects those normative expectations that are to be considered worthy of legal protection. According to Calliess and Renner, this selection process is necessarily recursive, since law is a self-reflexive system. This recursivity, in turn, presupposes law’s capacity for second-order observation:²¹ in order to qualify its own operations as legal, law needs to ascertain what it has done so far. Proceeding from here, Calliess and Renner conclude that law fulfills its function where a legal system establishes selective mechanisms for the temporal stabilization of normative expectations by observing its own acts. From this axiom, they derive two “enabling conditions” for the evolution of a legal system:

¹⁸ For an overview, see, Hanschmann, *supra* note 1, 352.

¹⁹ Galf-Peter Calliess/Moritz Renner, *From Soft Law to Hard Code: The Juridification of Global Governance*, available at: <http://ssrn.com/abstract=1030526>.

²⁰ LUHMANN, *supra* note 10, 93.

²¹ *Id.*, 70.

1. Firstly, because second-order observation of the legal system is possible only if conflicts can be verbalized, any governance regime that is to be deemed legal must include a procedure for the resolution of third-party disputes;²²
2. Secondly, because second-order observation is possible only where there are points of reference for the cross-referencing of legal communications, any governance regime that is to be deemed legal must publish past communications, primarily in the form of judicial decisions, but also in the form of textualized norms.²³

While Calliess' and Renner's concept stands out due to both the tightness of the theoretical argument and the pragmatic simplicity of the means the authors develop for distinguishing non-legal from legal norms, on closer examination, however, one is seized with doubts about whether the architectural theory underlying this beautiful edifice is entirely sound. Actually, there is a flaw in the construction. If we consider the test developed by Calliess and Renner from an evolutionary perspective, we may note first that their basic idea seems plausible: taking the selection of normative expectations as the distinctive act of a legal system, i.e. the act that makes it possible to distinguish between law and non-law, is a conceivable theoretical starting point. The practical conclusions deduced therefrom are, however, contestable. The ability of a legal system to ascertain "what it has done so far," the central criterion for Calliess and Renner, does not, in fact, indicate that that system also engages in norm selection. Rather, what it suggests, in terms of evolutionary theory, is that the system engages in the retention or stabilization of already selected norms. To put it differently: whenever a legal system makes reference to prior judicial decisions or textualized norms, it has already accepted those texts as norms. The reference to existing legal texts presupposes that the act of selection has already taken place. This is why reference to prior decisions cannot be interpreted as a healthy indication that a group of norms has assumed the function of stabilizing normative expectations, as Calliess and Renner contend. We simply do not know what the selection criteria for legal norms are; and, because of that, we are also unable to say what precisely is the difference between law and non-law. The mere fact that there is a referencing to prior decisions and/or norms is not specific to law and to its function of stabilizing normative expectations; every rule system is reliant on this kind of reference operation. We could even say: that is what norms of any sort are made of.

²² Calliess/Renner, *supra* note 19.

²³ *Id.*

What do we learn from this assessment? Presumably, that we will have to accept that the way evolutionary mechanisms operate within a system is not a conclusive criterion for distinguishing law from non-law. This might be because variation, selection and retention are evolutionary universals that do not really change from one social system to the other. That being so, our chances for discovering a criterion capable of differentiating between law and non-law might improve if we concentrate on the so-called unit of selection in legal evolution, that is the object on which evolution acts.

C.

In order to investigate this possibility, we should first try to get a better idea of how legal evolution works. Evolution is today no longer understood in the classical Darwinist sense of the so-called "adaptationist programme."²⁴ This traditional view regards it as unlikely that evolution is guided by any forces other than selection, which implies that the evolving unit's "internal" logic plays no significant role in the evolutionary process. This view is now opposed by more recent research devoted to the study of complex systems.²⁵ Work in this area is based on the hypothesis that the evolvability of systems depends on a special internal ordering of their elements: these must operate in parallel (i.e. in "networks"), and not sequentially (i.e. each element for itself).²⁶ This, in turn, presupposes a spontaneous formation of the system's internal order resulting from repetitions of the same sequence of a few states of the system (so-called "state cycles").²⁷ This type of spontaneous formation of order gives the system homeostatic stability, that is, it becomes autonomous in the sense that a sudden interruption of system activity does not lead to its paralysis.²⁸ It retains the ability, despite disruption, to restore the original "state cycles." The homeostatic stability of a system depends on a very specific, extremely flexible linkage of its elements (so-called "low connectivity"),

²⁴ Stephen J. Gould/Richard C. Lewontin, *The Spandrels of San Marco and the Panglossian paradigm: a critique of the adaptationist programme*, Proceedings of the Royal Society London (Series B) 205 (1979), 584.

²⁵ See, e.g., STEPHEN JAY GOULD, *THE STRUCTURE OF EVOLUTIONARY THEORY*, 1208 (2002),

²⁶ STUART A. KAUFFMAN, *AT HOME IN THE UNIVERSE: THE SEARCH FOR LAWS OF SELF-ORGANISATION AND COMPLEXITY*, 95 (1995).

²⁷ *Id.*, 77.

²⁸ *Id.*, 79.

which protects the system from either “freezing” or drifting into chaos.²⁹ Only if this kind of flexible order is set up in the system, can it become an object of selection. Thus, evolution flows from two sources: spontaneous self-organization on the one hand, and selection on the other.³⁰

That only systems with these properties are capable of evolution is explained by their being situated between order and chaos.³¹ What this means is that with respect to environmental influences they are endowed with a special type of dynamic: by operating within an ordered regime while bordering on chaotic regimes, they have an enhanced capacity to absorb perturbations from the environment. This high adaptability of systems at the interface of order and chaos derives from the fact that within their internal organization they possess a combination of both very loose and very tight control parameters; these ensure that the system remains responsive to outside influences while preventing the propagation of external disturbances to the system as a whole.³² It follows from all of this that selection cannot, in and of itself, set the process of evolution in motion. Only the existence of systems organized internally on the “low connectivity” pattern can initiate a durable evolutionary process. Moreover, because selection can operate only on systems that have this internal order, and remains unhelpful for other entities, this “low connectivity network” itself then functions as a kind of “unit of selection.”³³ This conclusion is generally valid for all systems and merely summarizes the highly complex way in which self-organization and selection interact in the process of evolution.

Applying this model, Evolutionary Jurisprudence aims to identify the conditions that make it possible for law to provide time-binding services to a permanently evolving society – in keeping with Luhman’s view that only when normative expectations are bound to time does a type of norm protection exist that can be termed “legal.” Application of the model here leads to the assumption that law

²⁹ See, STUART A. KAUFFMAN, *THE ORIGINS OF ORDER: SELF-ORGANISATION AND SELECTION IN EVOLUTION*, 192 (1993). See further, Marc Amstutz, *Rechtsgeschichte als Evolutionstheorie: Anmerkungen zum Theorierahmen von Marie Theres Fögens Forschungsprogramm*, 1 *RECHTSGESCHICHTE* 26 (2002); Bernard Feltz, *Auto-organisation, selection et émergence dans les théories de l'évolution*, in: *AUTO-ORGANISATION ET EMERGENCE DANS LES SCIENCES DE LA VIE*, 475 (B. Feltz et al. éd., 1999).

³⁰ See, e.g., Jeffrey C. Schank/William C. Wimsatt, *Evolvability: Adaptation and Modularity*, in: *Thinking about Evolution: Historical, Philosophical, and Political Perspectives*, 323 (R. S. Singh et al. eds., 2001).

³¹ See, among many, *supra* note 25, 1210.

³² See, *supra*, note 29, 218.

³³ See, ELLIOT SOBER, *THE NATURE OF SELECTION: EVOLUTIONARY THEORY IN PHILOSOPHICAL FOCUS*, 215 (1984).

would have to have its own particular self-organizing values in order to maintain its capacity to evolve in keeping with the evolution of society. How are these “self-organizing values” created? Through legal policy, understood here as a unifying bond between the individual elements of the legal system (i.e., positive norms, judge-made law and customary law). Or, to put it other words: as a source of “self-organizing values” in law, legal policy should be seen as a kind of regulatory network, with “regulatory” being used in the sense of serving to link the components of the legal system together into a consistent whole. Or again, to borrow Dworkin’s metaphor, legal policy connects these components – seen as chapters in a “chain novel,” contributed by imaginary authors – in such a way as to form a “coherent and aesthetic story.”³⁴

This immediately raises the question, however, as to where the openings for “society” are located within the structure of the legal system. How does selection (as an external factor of evolution) act upon the system? In short, how does the legal system adapt to its social environment, to the social discourse with which it is joined? The answer is suggested by the evolutionary model just described: the openings are provided by the plasticity of the individual elements that combine with each other to form the legal system. Unlike legal policy, which provides them with relational consistency (consistency in their “totality”), these individual elements are themselves open to social evolution. Legal policy merely marks the outside boundary of their plasticity. Correspondingly, within the legal system, the individual elements – statutory, judge-made, and customary law – all serve equally as “receptors” for perturbations from the outside world.

Self-organizing values deriving from legal policy, on the one hand, social responsiveness through the plasticity of the normative elements woven into a legal system, on the other – these, in a nutshell, are the conditions for evolvable, time-binding law.³⁵ Naturally, this model does not directly provide the criteria for distinguishing between law and non-law. Nevertheless, since it does indicate features characteristic of law, it also contains the elements from which such criteria can be deduced. From this perspective, we can say that the “self-organizing value” of the law as well as the “social plasticity” of its elements demand that a rules system possess a certain number of features:

1. In order to achieve the necessary “low connectivity” between the system’s rules (which allows the system to react to external events without freezing or

³⁴ RONALD DWORKIN, *LAW’S EMPIRE*, 28 (1986).

³⁵See, Marc Amstutz, *Widerstreitende Götter: Zu Manfred Aschkes Rekonstruktion der systemsoziologischen Evolutionstheorie und ihrer rechtstheoretischen Bedeutung*, 2 *RECHTSGESCHICHTE* 14 (2003).

collapsing), as described above, there must exist a special form of secondary rules within the system: rules on rules.³⁶ These rules on rules must not only be capable of reacting to unforeseen cases, that is, to provide guidance as to how new law is to be created; the rules on rules must also assure the finitude of the adjudication process;³⁷ in other words, they must contain a clause prohibiting a denial of justice. Only a system of rules that includes secondary rules of this sort can guarantee the possibility of settling all conflicts without reference to an external system of rules. The notion of “reference” is intended here very specifically: it means that the system of rules refers not only to a text, but also to a system of communication in which the text is embedded.

2. In order to possess the necessary social responsivity (which guarantees that the system remains adaptable to its social environment), law must be textual.³⁸ Only textuality can ensure that a rule is responsive for social evolution.³⁹ This might at first sound surprising, since the word textuality to many people evokes the impression of something static.⁴⁰ This impression is deceptive, however. Texts are, in fact, highly plastic; that is, they are extremely adaptable to new environments. Linguists explain this with the notion of iterability, which refers to the fact that a same text can be used

³⁶ See, H.L.A. HART, *THE CONCEPT OF LAW*, 79, (2nd ed., 2007). See further, Gunther Teubner, *Societal Constitutionalism: Alternatives to State-Centred Constitutional Theory?*, in: *TRANSNATIONAL GOVERNANCE AND CONSTITUTIONALISM*, 3 (C. Joerges et al. eds., 2004).

³⁷ See, Marie Theres Fögen, *Rechtsverweigerungsverbot: Anmerkung zu einer Selbstverständlichkeit*, in: *URTEILEN/ENTSCHEIDEN*, 37 (C. Vismann & T. Weitin eds., 2006).

³⁸ For the significance of the medium of writing for the evolution of the legal system, see, *supra* note 10, 234. For the implications of new digital media on law see Vagias Karavas, *Law ⊆ Code: Some Preliminary Thoughts on Law's Transformation under Information-Technological Conditions*, in: *LAW AFTER LUHMANN: CRITICAL REFLECTIONS ON NIKLAS LUHMANN'S CONTRIBUTION TO LEGAL DOCTRINE AND THEORY* (P. Zumbansen et al. eds., forthcoming); *Id.*, *DIGITALE GRUNDRECHTE: ELEMENTE EINER VERFASSUNG DES INFORMATIONSFLUSSES IM INTERNET* (2007); THOMAS VESTING, *RECHTSTHEORIE*, 71, 144 (2007); Cornelia Vismann/Markus Krajewski, *Computer Juridisms*, 29 *GREY ROOM 90* (2007); ETHAN M. KATSH, *LAW IN A DIGITAL WORLD* (1996); *Id.*, *THE ELECTRONIC MEDIA AND THE TRANSFORMATION OF LAW* (1987).

³⁹ Marc Amstutz, *Die Sprachlosigkeit des Gesetzes: Plädoyer für eine gesellschaftliche Rechtsmethodik*, in: *MARIE THERES FÖGEN SEXAGENARIA 10. OKTOBER 2006*, 47 (Zürich et al. eds., 2007); *Id.*, *Der Text des Gesetzes. Genealogie und Evolution von Art. 1 ZGB*, 126 *ZEITSCHRIFT FÜR SCHWEIZERISCHES* 237 (2007).

⁴⁰ David Dürr, *Art. 1 ZGB*, in: *KOMMENTAR ZUM SCHWEIZERISCHEN ZIVILGESETZBUCH, EINLEITUNG*, 1. TEILBD.: *ART. 1-7 ZGB*, N 241 (P. Gauch et al. eds., 1998); Arthur Meier-Hayoz, *Art. 1 ZGB*, in: *BERNER KOMMENTAR: KOMMENTAR ZUM SCHWEIZERISCHEN ZIVILRECHT, BD. I: EINLEITUNG UND PERSONENRECHT, TEILBD. 1: EINLEITUNG: ART. 1-10 ZGB*, N 78 (H. Becker ed., 1962).

(read, recited, delivered) in different contexts.⁴¹ Because of their iterability, texts have the decisive ability to transform their meaning. Iterability provides the text with the power to “tear itself away” from its context. One consequence of this is that the text remains fully functional even when removed from its original context. Only if this condition is met, does a rule have the characteristic of generality, which allows it to perform the unifying function that is the province of law, and thereby to embrace society as a whole.

Obviously, the gist of the concept of law hiding behind the two criteria proposed here lies in the reflexivity of a text producing new texts on and on, in a restless factory located in Society’s “globality,” or better: in a factory located nowhere. Law has lost its lieu. A simple phrase so hard to deal with.

⁴¹ See, especially Jacques Derrida, *Signature événement contexte*, in: MARGES - DE LA PHILOSOPHIE, 1 (J. Derrida, 1972); *Id.*, *Sémiologie et grammatologie : Entretien avec Julia Kristeva*, in : POSITIONS, 25 (J. Derrida, 1972) ; *Id.*, DE LA GRAMMATOLOGIE (1967).