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Law, Economics, and Evolutionary Theory: State of the Art and Interdisciplinary Perspectives

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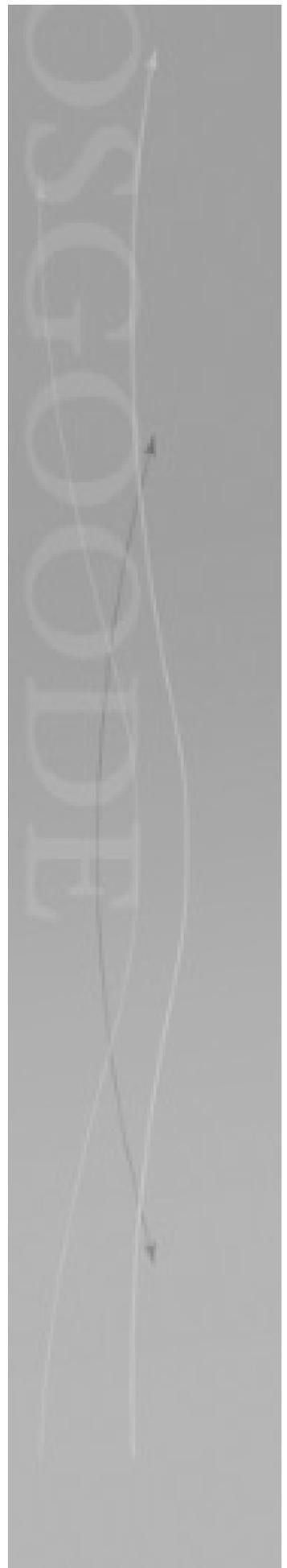
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Peer Zumbansen and Graft-Peter Calliess

Law, Economics, and Evolutionary Theory: State of the Art and Interdisciplinary Perspectives

Abstract: This paper is the introduction essay to an edited collection entitled “Law, Economics, and Evolutionary Theory”, forthcoming with Edward Elgar. The volume brings together work by legal scholars, economists, historians and sociologists and aims at a critical investigation of the parallel and often competing theoretical architectures of legal and economic governance from an evolutionary perspective. By reconstructing discussions in law over the relationship between legal realism, law & society, and law & economics, and in economics over the merits and prospects of institutional and neo-institutional economics from an evolutionary perspective, the introduction argues that a theory of governance must today build on and incorporate the developments in both of these regulatory disciplines. Contributions from evolutionary theory and sociology, in particular in the important field of economic sociology, provide a fresh perspective on the particular dynamics of disciplinary development. Authors to the volume include Marc Amstutz, Amitai Aviram, Bruce Benson, Graft-Peter Calliess, Fabio Carvalho, Paul David, Simon Deakin, Bart Du Laing, Martina Eckardt, Thráinn Eggertsson, Jörg Freiling, Wolfgang Kerber, Richard McAdams, Joel Mokyr, Eric Posner, Moritz Renner, Erich Schanze, Jan Smits and Mauro Zamboni.

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LAW, ECONOMICS, AND EVOLUTIONARY THEORY: STATE OF THE ART AND INTERDISCIPLINARY PERSPECTIVES⁺

Peer Zumbansen and Graf-Peter Calliess*

“THE POWER OF LAW TO SURVIVE THROUGH CENTURIES IS EQUALLY APPARENT.

As a consequence a great deal, if not most, of law operates in a territory for which it was not originally designed, or in a society which is radically different from that which created the law.”¹

I. BEFORE THE EVOLUTIONARY CHALLENGE: ECONOMICS AND LAW DISCOVER INSTITUTIONS AND ‘SOCIAL NORMS’

In 1859 Charles Darwin published his most acclaimed work, *On the Origin of Species*, and after that nothing was the same in the history of human knowledge.² Darwin’s work did not only radically change our perception of the origin and development of nature. His ideas on the mechanisms of evolution were soon transferred to the social sciences, though often in misconceived forms such as ‘social Darwinism’³ or caught up in highly charged, polemical

⁺ This is the introduction essay to *Law, Economics and Evolutionary Theory* (Peer Zumbansen & Graf-Peter Calliess eds., Edward Elgar 2010), *forthcoming*. We are grateful to Mauro Zamboni for helpful research and comments on an earlier version of this paper.

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¹ A. Watson, ‘Legal Change: Sources of Law and Legal Culture’, (1982) 131 *University of Pennsylvania Law Review* 1121-1157, 1125

² See C. Darwin, *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life* (1st ed.) 1859); see further the general overview as to both the roots of and the debate Darwin’s ideas created in P. J. Bowler, *Evolution: The History of an Idea* (3rd ed.) (University of California Press, 2003).

³ See D. P. Johnson, ‘The Historical Background of Social Darwinism’, (2008) in: *Johnson, Contemporary Sociological Theory: An Integrated Multi-Level Approach* 492-494; H. Haferkamp/N. J. Smelser, ‘Introduction’, in H. Haferkamp and N. J. Smelser (eds), *Social Change and Modernity* (University of California Press, 1992), 4-6; for a particular (post WW I) observation on German scientists’ embrace of Darwinism, see A. G. Keller, ‘Law in

debates surrounding school curricula and the collision of religion and evolution.⁴ As Kurt Dopfer recently noted, “[t]he publication of *On the Origin of Species* by Charles Darwin in 1859 set off a paradigmatic earthquake in the sciences, and to some degree in society at large.”⁵ Since then, evolutionary concepts have been successfully applied, refined and drawn upon to explain long-term developments and change in human relations, societies, culture, and civilization. In jurisprudence, authors like Henry Sumner Maine⁶ and Oliver Wendell Holmes⁷ have relied on evolutionary ideas for explaining the structures of change in the common law. Despite differences in opinion regarding the analogies between biological and legal evolution, legal scholars writing after Holmes generally acknowledged a degree of purpose in legal interpretation and statutory legislation: “A novel statute or precedent suggests [...] variation (purposeful, perhaps, but still variation) in a general flow of things in which there is a continuing response to the call of circumstance – adjustment to environment. The nature of the process is apt to be observed by that lack of perspective which prevents us from seeing the old and the new in their true relation. The legislator is not, as he may imagine himself, a Columbus. Not infrequently, he is merely making explicit what was really implicit in pre-existing law.”⁸ Besides this distinct disrespect of the Legal Realists for the contention that judges were merely engaged in ‘finding’ the law’, legal scholars quickly began to ascertain the relevance not only of comparative⁹ but also of historical, detailed studies of different legal cultures, if one wanted to make any more generalizable assertions regarding legal change.¹⁰

Meanwhile, in economic theory, Schumpeter’s¹¹ emphasis on economic growth as the key to economic analysis helped prepare the ground for evolutionary theory, himself harkening back

Evolution’, (1918) 28 *Yale Law Journal* 769-783, 777; see the response of Keller’s discussion of social and legal evolution by W. J. Brown, ‘Law and Evolution’, (1919) 29 *Yale Law Journal* 394-400, in particular 397, 398: “I think the term ‘legal evolution’ a useful and suggestive way of expressing some of the most fundamental characteristics of the long process involved in the history of law.”

⁴ See, e.g., G. Frazzetto, ‘Who’s Afraid of Darwin?’ (2004) 5 *European Molecular Biology Organization* 662-665; see also: *The Social and Legal Dimensions of the Evolution Debate in the United States*, Pew Forum on Religion and Public Life, 4 February 2009, available at: <http://pewforum.org/docs/?DocID=396>.

⁵ K. Dopfer, ‘Evolutionary economics: a theoretical framework’, in K. Dopfer (ed) *The Evolutionary Foundation of Economics* (Cambridge University Press, 2005), 3-55, 12.

⁶ HENRY SUMNER MAINE, *ANCIENT LAW* (1861), chapter 2.

⁷ OLIVER W. HOLMES, *THE COMMON LAW* (1881), chapters 1 and 2; O. W. Holmes, ‘Law in Science and Science in Law’, (1899) 12 *Harvard Law Review* 443-463

⁸ W. J. Brown, ‘Law and Evolution’, (1919) 29 *Yale Law Journal* 394-400, 398, 399

⁹ See, for example, J. P. Dawson, *The Oracles of the Law* (The University of Michigan Law School, 1968).

¹⁰ A. Watson, ‘Legal Change: Sources of Law and Legal Culture’, (1982) 131 *University of Pennsylvania Law Review* 1121-1157, 1122, 1124-25: “To understand the nature of legal change and the relationship between legal rules and society, I believe it is necessary to look at a number of legal systems and at the changes in them over a long period of time.” The article is of particular interest for Watson’s response to critics from within the ‘law & society’ movement contesting his claim of a ‘divergence of law & society’.

¹¹ J. Schumpeter, *Capitalism, Socialism and Democracy* (1942), with a new introduction by Thomas McCraw (Harper Perennial Modern Thought, 2008)

onto Smith's inquiry into circumstances contributing to the particular dynamics of economic change in his time.¹² Subsequently, in particular Hayek's 1945 knowledge-based account of market processes¹³ and Alchian's 1950 essay on 'Uncertainty, Evolution, and Economic Theory'¹⁴ were among the first to pave the way for a promising promotion of evolutionary concepts in economics¹⁵, with important parallel developments in the natural sciences.¹⁶ As we will discuss below, evolutionary thinking has continued to play a particularly important role in the development of more recent economic theorizing about economic growth and social change, in particular in its challenging the neo-classical economists, again, with Schumpeter sounding the bells of attack early on.¹⁷ It was above all the focus on the dynamics of economic change in contrast to the neoclassicals' focus on mechanics and to a model analysis of economic equilibria that would eventually open doors to the wealth of institutional and interdisciplinary economic thinking that characterizes the work by scholars such as Douglass C. North, Sidney G. Winter and Richard R. Nelson, Oliver E. Williamson and Elinor Ostrom. This economic analysis is importantly complemented and embedded in the historical-economic work by scholars such as Joel Mokyr and Paul David¹⁸ and the sociological work by scholars such

¹² R. R. Nelson, 'Understanding economic growth as the central task of economic analysis', in F. Malerba and S. Brusoni (eds), *Perspectives on innovation* (Cambridge University Press, 2007), 27-41.

¹³ F. Hayek, 'The Use of Knowledge in Society', (1945) 35 *American Economic Review* 519-530; F. A. Hayek, 'Competition as a Discovery Procedure (orig. German 1968; Marcellus S. Snow transl.)', (2002) 5 *Quarterly Journal of Austrian Economics* 9-23; see also F. A. v. Hayek, *Individualism and Economic Order* (Routledge and Kegan Paul, 1949).

¹⁴ A. A. Alchian, 'Uncertainty, Evolution, and Economic Theory', (1950) 58 *Journal of Political Economy* 211-221

¹⁵ For an account of the parallel emergence of evolutionary thinking in social and natural sciences, see D. L. Hull, *Science as a Process. An Evolutionary Account of the Social and Conceptual Development of Science* (University of Chicago Press, 1988). See also D. L. Hull, 'Die Rezeption von Darwins Evolutionstheorie bei britischen Wissenschaftsphilosophen des 19. Jahrhunderts', in E.-M. Engels (ed) *Die Rezeption von Evolutionstheorien im 19. Jahrhundert* (Suhrkamp, 1995), 67-104, and H. Haken, 'Synergetics: from physics to economics', in K. Dopfer (ed) *The Evolutionary Foundation of Economics* (Cambridge University Press, 2005), 70-85.

¹⁶ See previous note. Compare also Prigogine's observation that "[L]aws of nature no longer express certitudes, but 'possibilities'", cited in K. Dopfer, 'Evolutionary economics: a theoretical framework', in K. Dopfer (ed) *The Evolutionary Foundation of Economics* (Cambridge University Press, 2005), 3-55, 11.

¹⁷ J. A. Schumpeter, *The Theory of Economic Development (1934). With a New Introduction by John E. Elliott* (Transaction Publishers, 1983); Schumpeter, *Capitalism, Socialism and Democracy* (1942).

¹⁸ See J. Mokyr, *The Gifts of Athena. Historical Origins of the Knowledge Economy* (Princeton University Press, 2002), Ch. 7, and J. Mokyr, 'The Knowledge Society: Theoretical and Historical Underpinnings', (2005) faculty.wcas.northwestern.edu/~jmokyr/Unitednations.PDF ; J. Mokyr, 'Is there a theory of economic history?' in K. Dopfer (ed) *The Evolutionary Foundation of Economics* (Cambridge University Press, 2005), 195-218; Mokyr, in this volume. P. A. David, 'Path dependence in economic processes: implications for policy analysis in dynamical systems contexts', in K. Dopfer (ed) *The Evolutionary Foundations of Economics* (Cambridge University Press, 2008), 151-194; David, in this volume.

as Nico Stehr and Volker Meja.¹⁹ The 2009 award of the Nobel Prize in Economics to Williamson and Ostrom constitutes an important milestone in the evolution of economic and institutional thought and invites us to cast a light back onto this theoretical trajectory over the preceding decades, opening up an ample view of the manifold overlappings and reciprocal enrichments that have been occurring between economic and legal theorizing. Such attempts at mutual understanding and enrichment are certain to encounter numerous roadblocks and impasses, not least due to the co-evolutionary nature of the respective fields and their rationalities.²⁰ While the breathtaking ascendance of 'law and economics'²¹ has irreversibly transformed both practice and theory of law, the economist's depiction of this alleged cross-disciplinary dialogue is as legendary²² as the potential interdisciplinary dialogue between law *and* economics has often been confined.

The project pursued in the present volume hopes to go beyond the 'law and economics' perspective that has been so immensely influential in legal practice and academia by focusing on the dimension of evolution within each of the two disciplines in order to carve out, from that perspective, the possible future possibilities and directions of cross-disciplinary pollination between legal and economic thinking. With both disciplines inherently aspiring to conceptualize models, principles and systems of social order, the discovery of a dynamic dimension in the development of the respective apparatus could not come as a surprise: evidently, in both disciplines, law and economics, different ideas of evolution have long inspired a host of varying usages and assessments.²³

Our suggested task of identifying instantiations of a meaningful reciprocal engagement between legal and economic thought is likely to bring to the fore particular moments of debate

¹⁹ N. Stehr, *Knowledge and economic conduct: the social foundations of the modern economy* (University of Toronto, 2002); N. Stehr, 'Knowledge Societies', in N. Stehr and V. Meja (eds), *Society & Knowledge. Contemporary Perspectives in the Sociology of Knowledge and Science* (Transaction Publishers, 2005), 299-322; N. Stehr/V. Meja (eds), *Society & Knowledge. Contemporary Perspectives in the Sociology of Knowledge & Science* (Transaction Publishers, 2005).

²⁰ K. Dopfer, 'Evolutionary economics: a theoretical framework', in K. Dopfer (ed) *The Evolutionary Foundation of Economics* (Cambridge University Press, 2005), 3-55, 18: "A young discipline, such as evolutionary economics, suffers from a *language deficit*." Compare with Amstutz, in this volume and with G. Teubner, 'Idiosyncratic Production Regimes: Co-evolution of Economic and Legal Institutions in the Varieties of Capitalism', in J. Ziman (ed) *The Evolution of Cultural Entities: Proceedings of the British Academy* (Oxford University Press, 2002), 161-182.

²¹ D. M. Branson, 'A Corporate Paleontologist's Look at Law and Economics in the Seventh Circuit', (1989) 65 *Chicago-Kent Law Review* 745, 745, likened its proliferation in academic corporate law to a 'prairie fire'. See also, B. R. Cheffins, 'The Trajectory of (Corporate) Law Scholarship', (2004) 63 *Cambridge Law Journal* 456-506.

²² See only the debate between Coase and Simpson: A. W. B. Simpson, "'Coase v. Pigou" Reexamined', (1996) 25 *Journal of Legal Studies* 53-97; A. W. B. Simpson, 'An Addendum: [A Response to Law and Economics and A. W. Brian Simpson by R. H. Coase]', (1996) 25 *Journal of Legal Studies* 99-101, and R. H. Coase, 'Law and Economics and A. W. Brian Simpson', (1996) 25 *Journal of Legal Studies* 103-119. See also the recent revisiting of this dispute by H. Hovenkamp, 'The Coase Theorem and Arthur Cecil Pigou', (2009) 51 *Arizona Law Review* 633-649.

²³ For an excellent assessment, see E. D. Elliott, 'The Evolutionary Tradition in Jurisprudence', (1985) 85 *Columbia Law Review* 38-94.

or outstanding publications that had a decisive impact on the development of this disciplinary co-existence. Clearly, Coase's 1960 article on 'The Problem of Social Cost', said to have 'had more policy influence than any other economic text'²⁴, marks without doubt one such historical moment. The research and teaching agenda, it projected for lawyers in the decades to come, were immense, despite Coase's own perhaps tongue-in-cheek assertion that his interest in fact had never been to give rise to any such thing as 'law and economics'.²⁵ Aptly identified by Coase then and later, was the complexity of adequately bridging the two disciplines in order to make meaningful assertions across the fence. And yet, today, there can be no doubt that in spite of such challenges, lawyers have anything but grown tired to apply economic thinking to the development of legal frameworks, across a wide range of legal fields. Meanwhile, economists have been persistent in assessing the role and increasingly the 'nature' of legal regulation in relation to alternative forms of social ordering, something that has been both informing and shaping the evolution of theoretical work done on property rights²⁶ on the basis of which emerged comprehensive concepts of economic governance²⁷, the economics of institutions²⁸, institutional diversity²⁹, and social norms.³⁰ This work has altogether contributed to the development of fairly robust assessments of the 'environment' of economic development drawing on a host of different disciplinary depictions of formal and informal institutions.³¹ As powerfully illustrated by the recently again increased interest in 'informal rules' or, social norms, there appears to be a shared perception among economists and lawyers of how customs, social practices, indigenous norms challenge can fit into the description of legal enforcement mechanisms embedding an otherwise far-reaching system of social self-

²⁴ Hovenkamp, 2009, at 649.

²⁵ R. H. Coase, 'Law and Economics and A. W. Brian Simpson', (1996) 25 *Journal of Legal Studies* 103-119, 104-105.

²⁶ H. Demsetz, 'Towards a theory of property rights', (1967) 57 *American Economic Review* 347-359; D. C. North, *Structure and Change in Economic History* (Norton, 1981), 17-19.

²⁷ O. E. Williamson, 'The New Institutional Economics: Taking Stock, Looking Ahead', (2000) 38 *Journal of Economic Literature* 595-613; O. E. Williamson, 'The Economics of Governance', (2005) 95 *American Economic Review* 1-18.

²⁸ T. Eggertsson, *Economic behavior and institutions* (Cambridge University Press, 1990); T. Eggertsson, 'A note on the economics of institutions', in L. J. Alston, T. Eggertsson and D. C. North (eds), *Empirical Studies in Institutional Change* (Cambridge University Press, 1996), 6-24, 25: "...at the frontier of research there is also a need and scope for experimental work with an alternative paradigm."

²⁹ E. Ostrom, 'Challenges and growth: the development of the interdisciplinary field of institutional analysis', (2007) 3 *Journal of Institutional Economics* 239-264.

³⁰ J. N. Drobak (ed) *Norms and the Law* (Cambridge University Press, 2006).

³¹ T. Eggertsson, 'A note on the economics of institutions', in L. J. Alston, T. Eggertsson and D. C. North (eds), *Empirical Studies in Institutional Change* (Cambridge University Press, 1996), 6-24, 11: "As the institutional framework consists of formal and informal rules and their enforcement, research at this level intrudes into the domain of political science, sociology, and anthropology, along with law and history."

regulation, precisely because the 'legal' nature of these social norms is in question. Particularly in light of the work done by sociologists and lawyers regarding the changing nature of state regulation in the context of privatization of norm-creation and the delegation of law-making authority to private and quasi-public bodies³², economic theorizing has become increasingly sensitive to the unpacked assumptions relating to the desired stability of property rights enforcement³³, with the more long-term consequences of this development and the more recent interest in the cognitive basis for individual choice-making³⁴ still to be assessed. What seems to be clear, however, is that both economists and legal scholars are hard at work at further scrutinizing the dynamics of the evolution of both formal and informal rules, the former being interested to a large degree in the challenges of informal rules to the devising of sound economic models for emerging or transforming economies³⁵, while the latter are engaged in a critique of the political nature of social norms.³⁶

II. MEANWHILE: ADVANCES IN SOCIOLOGICAL THEORY, ECONOMICS AND LAW

In many ways, these developments can be said to have their origin in theoretical advances made in sociology, economics and legal theory. As regards the first, in 1983, the German sociologist Niklas Luhmann published what would soon be regarded as a seminal work: *Social Systems*. In this book, Luhmann reconceptualized Talcott Parsons' theory of social systems on the basis of the biological concept of *autopoiesis*.³⁷ Luhmann thus aimed at developing an all-

³² A good overview is provided by O. Lobel, 'The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought', (2004) 89 *Minnesota Law Review* 342-469. See also the analysis and critique by A. Aman Jr., 'Law, Markets and Democracy: A Role for Law in the Neo-Liberal State', (2007) 51 *New York Law School Review* 802.

³³ E. Ostrom, 'Challenges and growth: the development of the interdisciplinary field of institutional analysis', (2007) 3 *Journal of Institutional Economics* 239-264; see already E. Ostrom, *Understanding Institutional Diversity* (Princeton University Press, 2005), 21-22, drawing on the legal pluralist critique on rigid rule categorizations along the lines of 'public' or 'private'.

³⁴ T. Eggertsson, 'A note on the economics of institutions', in L. J. Alston, T. Eggertsson and D. C. North (eds), *Empirical Studies in Institutional Change* (Cambridge University Press, 1996), 6-24, 21; see also R. Aguilera/D. Rupp/C. A. Williams/J. Ganapathi, 'Putting the S Back in Corporate Social Responsibility: a Multi-Level Theory of Social Change in Organizations', (2004) 32 *Academy of Management Review* 836-863 [http://papers.ssrn.com/sol3/papers.cfm?abstract_id=567842].

³⁵ See eg O. E. Williamson, 'The Institutions and Governance of Economic Development and Reform', (1996) *Oliver Williamson, The Economics of Governance* (Oxford: Oxford University Press 322-343; and from the point of view of law, see R. A. Posner, 'Creating a Legal Framework for Economic Development', (1998) 13 *The World Bank Research Observer* 1-11.

³⁶ E. A. Posner, *Law and Social Norms* (Harvard University Press, 2000); G. K. Hadfield/E. Talley, 'On Public versus Private Provision of Corporate Law', (2006) 22 *J. Law, Econ. & Org.* 414-441; see the discussion in G.-P. Calliess/P. Zumbansen, *Rough Consensus and Running Code: A Theory of Transnational Private Law* (Hart Publishing, 2010), ch. 2, ch. 5.

³⁷ N. LUHMANN, *SOCIAL SYSTEMS* [GERMAN ORIG.: 1984; JOHN BEDNARZ & DIRK BAECKER TRANSL.] (STANFORD UNIVERSITY PRESS, 1996)

encompassing theory of society as a self-referential system of communication, explicitly drawing upon evolutionary approaches.³⁸ Luhmann's concept of evolution, which constituted a crucial element for his general theory of society, played a decisive role for law: by explaining how evolution occurred through an unending process of *variation*, *selection* and *retention*, Luhmann was able to provide an intricably persuasive model for the explanation of legal change – a model which was on the one hand extremely sensitive to the 'embeddedness' of law in social structures – much like the Realists had indeed seen it – but at the same time, emphasizing law's particular mode of change, adaptation and evolution.³⁹ With view to the fate of evolutionary theory in law, it is important to note, that legal theorists close to systems theory – such as Gunther Teubner⁴⁰ and Karl-Heinz Ladeur⁴¹ – have always insisted on a particular, critical distance to social theories of law's embeddedness on the one hand and to theories of the 'unity of law'⁴² on the other, while certainly engaging with the same conceptual challenges – concerning the relationship between law and society – that these theories were facing. Over time, these explorations have contributed to a considerably rich landscape of conceptual and theoretical assessments of law's evolutionary trends and prospects – studies that eventually received important impulses from both comparative legal scholarship⁴³ as well

³⁸ See also N. Luhmann, 'Evolution und Geschichte', (1975) in: *ders., Soziologische Aufklärung 2* 150-169; N. Luhmann, 'Geschichte als Prozeß und die Theorie sozio-kultureller Evolution', in K.-G. Faber and Meyer (eds), *Historische Prozesse* (Deutscher Taschenbuchverlag, 1978), 413-440; N. Luhmann, 'Verfassung als evolutionäre Errungenschaft', (1989) 9 *Rechtshistorisches Journal* 176-220.

³⁹ For a concise reconstruction of law's mode of change, see only G. Teubner, 'Autopoiesis in Law and Society: A Rejoinder to Blankenburg', (1984) 18 *Law & Society Review* 291-301; but see also the recent, highly interesting development of this theory in G. Teubner, 'Self-subversive Justice: Contingency or Transcendence Formula of Law?' (2009) 72 *Modern Law Review* 1-23.

⁴⁰ G. Teubner, 'Substantive and Reflexive Elements in Modern Law', (1983) 17 *Law & Society Review* 239-285

⁴¹ See the April 2009 GERMAN LAW JOURNAL Symposium in celebration of Professor Ladeur's work "The Law of the Network Society" (Eds., L. Viellechner et al., http://www.germanlawjournal.com/pdf/Vol10No04/pdf_table_of_contents_Vol_10_No_04.pdf)

⁴² See, for example, the work by M. Baldus, *Die Einheit der Rechtsordnung. Bedeutungen einer juristischen Formel in Rechtstheorie, Zivil- und Staatsrechtswissenschaft des 19. und 20. Jahrhunderts* (Duncker & Humblot, 1995), and by D. Felix, *Einheit der Rechtsordnung. Zur verfassungsrechtlichen Relevanz einer juristischen Argumentationsfigur* (Mohr Siebeck, 1998); for an earlier, decidedly political rejection of a concept of 'unity of law', see F. L. Neumann, 'The Change in the Function of Law in Modern Society', (1964) *Neumann, The Democratic and the Authoritarian State (1957)* 22-68, and the excellent study on Carl Schmitt by I. Maus, *Bürgerliche Rechtstheorie und Faschismus. Zur sozialen Funktion und aktuellen Wirkung der Theorie Carl Schmitts (1976)* (Wilhelm Fink, 1980).

⁴³ See G. Frankenberg, 'Critical Comparisons: Re-Thinking Comparative Law', (1985) 26 *Harvard International Law Journal (Harv. Int'l L.J.)* 411-455; R. Buxbaum, 'Die Rechtsvergleichung zwischen nationalem Staat und internationaler Wirtschaft', (1996) 60 *Rechtswissenschaften* 201-230; R. Sacco, 'Souverainisme d'un vieux comparatiste', (2002) *ZEUP* 727-736; M. Reimann, 'The Progress and Failure of Comparative Law in the Second Half of the Twentieth Century', (2002) 50 *Am. J. Comp. L.* 671-700; H. P. Glenn, 'Doin' the Transsystemic: Legal Systems and Legal Traditions', (2005) 50 *McGill Law Journal* 863-898; A. Riles, 'A New Agenda for the Cultural Study of Law: Taking on the Technicalities', (2005) 53 *Buffalo Law Review* 973.

as from a fast emerging scholarship focusing on the conundrum yet intriguing coupling of 'globalization and the law'.⁴⁴ The continuing, indeed highly productive tension between normative and systems theoretical accounts of the continuing transformation of state governance within and beyond the confines of the nation state has been informing and shaping an immensely rich debate.⁴⁵

Around the same time, that Luhmann had published 'Social Systems', a small revolution occurred in economics that elevated evolutionary theory onto a stage for everyone to see and consolidated its place in the discipline: In 1982, the economists Richard Nelson and Sydney Winter laid out a systematic account of evolutionary elements in the theory of business and economics⁴⁶, by publishing a book that has been depicted as an 'ice-breaker that arguably gave the early process its critical momentum'.⁴⁷ At the outset of their program was the observation that the dramatic dimensions of technological change posed particular challenges to economic theories of growth. From this premise, Nelson & Winter revisited Schumpeter's contribution in search of inspiration and encouragement⁴⁸ to think beyond neo-classical frameworks that they found to be at odds with a highly differentiated landscape of economic innovation and

⁴⁴ G. Teubner, 'The Two Faces of Janus: Rethinking Legal Pluralism', (1992) 13 *Cardozo Law Review* 1443-1462; G. Teubner, 'The King's Many Bodies: The Self-Deconstruction of Law's Hierarchy', (1997) 31 *Law & Society Review* 763-787; P. Zumbansen, 'Piercing the Legal Veil: Commercial Arbitration and Transnational Law', (2002) 8 *European Law Journal* 400-432; G.-P. Calliess, 'Lex Mercatoria: A Reflexive Law Guide To An Autonomous Legal System', in: 2 *German Law Journal* 17 (1 November 2001) available at: <http://www.germanlawjournal.com/article.php?id=109>; P. S. Berman, 'From International Law to Law and Globalization', (2005) 43 *Columbia Journal of Transnational Law* 485-556; C. Scott, 'A Core Curriculum for the Transnational Legal Education of JD and LLB Students: Surveying the Approach of the International, Comparative and Transnational Law Program at Osgoode Hall Law School', (2005) 23 *Penn State International Law Review* 757-773.

⁴⁵ See, for example, the contributions to H. Brunkhorst (ed) *Demokratie in der Weltgesellschaft* (Nomos, 2009), M. Schulte/R. Stichweh (eds), *Weltrecht* (Duncker & Humblot, 2008) and Peer Zumbansen & Achilles Skordas (eds.), *The Kantian Project of International Law: Engagements with Jürgen Habermas' 'The Divided West'*, 10 *German Law Journal* 1-114 (2009), available at: <http://www.germanlawjournal.com/index.php?pageID=2&vol=10&no=1>. See already the contributions to P. Niesen/B. Herborth (eds), *Anarchie der kommunikativen Freiheit. Jürgen Habermas und die Theorie der internationalen Politik* (Suhrkamp, 2007).

⁴⁶ R. R. Nelson/S. G. Winter, *An Evolutionary Theory of Economic Change* (The Belknap Press of Harvard University Press, 1982); see already their essays leading up to the book: R. Nelson/S. Winter, 'Toward an evolutionary theory of economic capabilities', (1973) 63 *American Economic Review* 440-449; R. Nelson/S. Winter, 'Neoclassical vs. Evolutionary Theories of Economic Growth: Critique and Prospectus', (1974) 84 *American Economic Review* 886-905; for a discussion of Nelson's and Winter's proximity to Schumpeter and an ultimately skeptical assessment of Nelson's & Winter's contribution, see V. W. Ruttan, 'Induced Innovation, Evolutionary Theory and Path Dependence: Sources of Technical Change', (1997) 107 *The Economic Journal* 1520-1529, at 1524: "dead end"

⁴⁷ K. Dopfer, 'Evolutionary economics: a theoretical framework', in K. Dopfer (ed) *The Evolutionary Foundation of Economics* (Cambridge University Press, 2005), 3-55, 3

⁴⁸ R. Nelson, 'Economic Development From the Perspective of Evolutionary Economic Theory', (2006) *Working Papers in Technology Governance and Economic Dynamics no. 2* available at: <http://hum.ttu.ee/wp/paper2.pdf>, at 4 "strongly inspired by Schumpeter"

production.⁴⁹ Building on and expanding further a ‘behavioral’ approach to firms⁵⁰, Nelson & Winter posited – against the neo-classical assumption of firms’ maximization orientation – that “a firm at any time operates largely according to a set of decision rules that link a domain of environmental stimuli to a range of responses on the part of firms. While neoclassical theory would attempt to deduce these decision rules from maximization on the part of the firm, the behavioral theory simply takes them as given and observable.”⁵¹ At the heart of their concept of the firm as operating within a particular environment was the idea that it would be impossible to describe the dynamics of change of inter-organizational decisions without taking into account the manifold input and output relations between the firm and its – constantly changing⁵² – environment. This contention still lies at the base of Nelson’s and Winter’s theory today: “At the broadest level, and possibly the deepest, the difference between evolutionary economic theory that is taking shape, and the neoclassical theory that has dominated microeconomic theorizing over the last thirty years, is that evolutionary theory sees the economy as always in the process of change, with economic activity almost always proceeding in a context that is not completely familiar to the actors, or perfectly understood by them.”⁵³ In the following, this approach has inspired a true plethora of innovative studies in management⁵⁴ and organizational studies⁵⁵, industrial organization⁵⁶, the theory of the firm⁵⁷, in political

⁴⁹ R. Nelson/S. Winter, 'Neoclassical vs. Evolutionary Theories of Economic Growth: Critique and Prospectus', (1974) 84 *American Economic Review* 886-905, 890: “It seems obvious that research on economic growth within the neoclassical theory is creating new intellectual problems more rapidly than it is solving them. One can continue to search for solutions to these problems guided by the assumptions of neoclassical theory. Or, one can try a new tack.”

⁵⁰ See already A. A. Alchian, 'Uncertainty, Evolution, and Economic Theory', (1950) 58 *Journal of Political Economy* 211-221, 218: “...the consequence of this is that modes of behavior replace optimum equilibrium conditions as guiding rules of action.”

⁵¹ Nelson & Winter (1974), at 891

⁵² A. A. Alchian, 'Uncertainty, Evolution, and Economic Theory', (1950) 58 *Journal of Political Economy* 211-221, 219: “Comparability of resulting situations is destroyed by the changing environment. As a consequence, the measure of goodness of actions in anything except a tolerable-intolerable sense is lost, and the possibility of an individual’s converging to the optimum activity via a trial-and-error process disappears. Trial and error becomes life or death. It cannot serve as a basis of the individual’s method of convergence to a ‘maximum’ or optimum position. Success is discovered by the economic system through a blanketing shotgun process, not by the individual through a converging search.”

⁵³ R. Nelson, 'Economic Development From the Perspective of Evolutionary Economic Theory', (2006) *Working Papers in Technology Governance and Economic Dynamics no. 2* available at: <http://hum.ttu.ee/wp/paper2.pdf>, at 1. See also R. J. Nelson, 'Recent Evolutionary Theorizing about Economic Change', (1995) 33 *Journal of Economic Literature* 48-90.

⁵⁴ J. T. Mahoney/J. R. Pandian, 'The Resource-Based View Within the Conversation of Strategic Management', (1992) 13 *Strategic Management Journal* 363-380

⁵⁵ M. Zollo/S. Winter, 'Deliberate Learning and the Evolution of Dynamic Capabilities', (2002) 13 *Organization Science* 339-351

⁵⁶ G. Dosi/F. Malerba, 'Interpreting industrial dynamics twenty years after Nelson and Winter's *Evolutionary Theory of Economic Change*', (2002) 11 *Industrial and Corporate Change* 619-622

economy⁵⁸ as well as in – legal theory.⁵⁹ Meanwhile, the originators of this line of thinking have themselves embarked on a very fruitful revisiting and further development of some of their initial starting points⁶⁰, eventually opening up perspectives for a better understanding of evolutionary processes as ‘learning processes’.⁶¹

III. THE ROLE OF INSTITUTIONS IN ECONOMIC THOUGHT

Among these, sociology as well as business and economics seem to have taken the lead in further developing evolutionary theories of institutional change,⁶² spurred by the emergence of New Institutional Economics centering around Douglass North⁶³ and Oliver Williamson⁶⁴ - with “new” evolutionary economics continuing to push for further sophistication of the theoretical apparatus.⁶⁵ The importance of this research lies in its untiring – if varied – engagement with the tension between market and non-market regulation, a tension which powerfully unfolds from within the definition of ‘institutions’. In Professor North’s words, “Institutions are the humanly devised constraints that structure political, economic and social interaction. They

⁵⁷ See, for example, R. Whittington/M. Mayer/F. Curto, 'Chandlerism in Post-War Europe: Strategic and Structural Change in France, Germany and the UK, 1950-1993', (1999) 8 *Industrial and Corporate Change* 519-551, and the contributions to P. Dimaggio (ed) *The Twenty-First Century Firm. Changing Economic Organization in International Perspective* (Princeton University Press, 2001).

⁵⁸ P. A. Hall/D. Soskice (eds), *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage* (Oxford University Press, 2001)

⁵⁹ See, e.g., G. Teubner, 'Eigensinnige Produktionsregimes: Zur Ko-evolution von Wirtschaft und Recht in den varieties of capitalism', (1999) 5 *Soziale Systeme* 7-25 Idiosyncratic Production Regimes: Co-evolution of Economic and Legal Institutions in the Varieties of Capitalism. In: John Ziman (ed.), *The Evolution of Cultural Entities: Proceedings of the British Academy*, Oxford University Press, Oxford 2002, 161-182

⁶⁰ See, in this context, R. R. Nelson, 'Understanding economic growth as the central task of economic analysis', in F. Malerba and S. Brusoni (eds), *Perspectives on innovation* (Cambridge University Press, 2007), 27-41, 31, highlighting the need to take a more comprehensive look at the institutions shaping technological change, here referring to ‘social technologies’.

⁶¹ Nelson, 2007, preceding note, at 34.

⁶² R. J. Nelson, 'Recent Evolutionary Theorizing about Economic Change', (1995) 33 *Journal of Economic Literature* 48-90.

⁶³ D. C. North, *Institutions, Institutional Change and Economic Performance* (Cambridge University Press, 1990); D. C. North, 'Institutions', (1991) 5 *J. Econ. Persp.* 97-112; D. C. North, 'Economic Performance Through Time', (1994) 84 *American Economic Review* 359-368 (Nobel Prize Lecture); D. C. North, *Understanding the Process of Economic Change* (Princeton University Press, 2005)

⁶⁴ O. Williamson, *The Economic Institutions of Capitalism* (Free Press/MacMillan, 1985); O. E. Williamson, 'The Modern Corporation: Origins, Evolution, Attributes', (1981) 19 *Journal of Economic Literature* 1537-1568.

⁶⁵ R. Nelson, 'Economic Development From the Perspective of Evolutionary Economic Theory', (2006) *Working Papers in Technology Governance and Economic Dynamics no. 2* available at: <http://hum.ttu.ee/wp/paper2.pdf>, 6: “The new evolutionary growth theory that is emerging sees economic growth as the result of the coevolution of technologies, firm and industry structures, and supporting and governing institutions.”

consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (laws, property rights).⁶⁶ In his important study of 1990, he observed: "As defined here, they [institutions] therefore are the framework within human interaction takes place."⁶⁷ It is against this relatively flexible definition that North has been arguing for the central role of institutions for long-term economic performance. North's contribution to an increasingly interdisciplinary dialogue concerning market regulation in historical perspective can hardly be overestimated. As academic interest in the nature, culture and trajectory of the market⁶⁸ among legal scholars, economists, economic historians, geographers and political economists again soared in recent years⁶⁹, Douglass North's insistence on an interdisciplinary, historically grounded analysis of the different institutions that structure market behavior proved to be a crucial contribution to a more engaged and more challenging exchange between scholars in different disciplines. Building on and eventually substantively expanding his earlier interest in 'institutions' *per se*, North in his more recent work has adopted a decidedly social-theory perspective, from which he places a central emphasis on the nature and volatility of societal change and on the resulting uncertainty, that characterizes long-term oriented theorizing. Central to this reorientation is the role of intentionality with regard to institutional change.⁷⁰ With this, North connects his important

⁶⁶ D. C. North, 'Institutions', (1991) 5 *J. Econ. Persp.* 97-112, at 97

⁶⁷ D. C. North, *Institutions, Institutional Change and Economic Performance* (Cambridge University Press, 1990), at 4

⁶⁸ See of course already H. C. White, 'Where Do Markets Come From?' (1981) 87 *American Journal of Sociology* 517-547.

⁶⁹ See, e.g., J. Lie, 'Sociology of markets', (1997) 23 *Annual Review of Sociology* 341-360; E. F. Rosenbaum, 'What is a market? On the methodology of a con-tested concept', (2000) LVIII *Review of Social Economy* 455-482; N. Fligstein, *The Architecture of Markets. An Economic Sociology of Twenty-First-Century Capitalist Societies* (Princeton University Press, 2001); see also the contributions to V. Nee/R. Swedberg (eds), *The Economic Sociology of Capitalism* (Princeton University Press, 2005), and V. Nee/R. Swedberg, 'Economic Sociology and New Institutional Economics', in C. Ménard and M. M. Shirley (eds), *Handbook of New Institutional Economics* (Springer, 2005), 789-818. Besides the recent renaissance in economic sociology, the contributions by scholars interested in the 'Varieties of Capitalism' are of particular interest in this regard: see, e.g., the landmark volume by P. A. Hall/D. Soskice (eds), *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage* (Oxford University Press, 2001), and the preceding work by D. Soskice, 'Divergent Production Regimes: Coordinated and Uncoordinated Market Economies in the 1980's and 1990's', in H. Kitschelt, P. Lange, G. Marks and J. D. Stephens (eds), *Continuity and Change in Contemporary Capitalism* (Cambridge University Press, 1999), 101-134, and J. R. Hollingsworth, 'The Institutional Embeddedness of American Capitalism', in C. Crouch and W. Streeck (eds), *Political Economy of Modern Capitalism. Mapping Convergence and Diversity* (Sage, 1997), 133-147, as well as W. Streeck, 'Introduction: Explorations into the Origins of Nonliberal Capitalism in Germany and Japan', in W. Streeck and K. Yamamura (eds), *The Origins of Nonliberal Capitalism* (Cornell University Press, 2001), 1-38

⁷⁰ D. C. North, *Understanding the Process of Economic Change* (Princeton University Press, 2005)

institutionalist framework to the increasingly influential⁷¹ work in behavioral finance⁷² and behavioral law & economics⁷³ and makes thus a powerful argument for the necessity to take the complexity of market structures and behaviors seriously – a lesson which will continue to inspire future interdisciplinary research not only in corporate finance and corporate governance⁷⁴, but also in economic sociology, geography and regulatory theory.⁷⁵ Next to the field of *economic geography* that has been gaining new attraction for economists and globally oriented policy makers with regard to regional differences in economic growth and development⁷⁶, and *regulatory theory*, which over the past fifteen years has become something of an umbrella concept for interdisciplinary governance studies⁷⁷, it is in *economic sociology* that we can see a number of important strides in recent years, both with regard to its

⁷¹ See the hesitant treatment, at the time, by one of the most astute scholars of the ECMH himself: E. Fama, 'Market Efficiency, long-term returns, and behavioral finance', (1998) 49 *Journal of Financial Economics* 283-306, 284: "anomalies".

⁷² See the foundational work on the Efficient Capital Market Hypothesis [ECMH] by E. Fama, 'Efficient Capital Markets: A Review of Theory and Empirical Work', (1970) 31 *Journal of Finance* 383-417; M. C. Jensen, 'Some anomalous evidence regarding market efficiency', (1970) 6 *Journal of Financial Economics* 95-101; R. J. Gilson/R. Kraakman, 'The Mechanisms of Market Efficiency', (1984) 70 *Virginia Law Review* 549-644 – see also R. J. Gilson/R. Kraakman, 'The Mechanisms of Market Efficiency Twenty Years Later: The Hindsight Bias', (2003) 28 *Journal of Corporate Law* 715, and L. Stout, 'The Mechanisms of Market Inefficiency: An Introduction to the New Finance', (2003) 28 *Journal of Corporate Law* 635.

⁷³ See the contributions to C. Sunstein (ed) *Behavioural Law & Economics* (University of Chicago Press, 2000); for a very informative discussion and overview, see L. Klöhn, *Kapitalmarkt, Spekulation und Behavioral Finance. Eine interdisziplinäre und vergleichende Analyse zum Fluch und Segen der Spekulation und ihrer Regulierung durch Markt und Recht* (Duncker & Humblot, 2006), 80-153.

⁷⁴ See the brilliant example: R. Aguilera/D. Rupp/C. A. Williams/J. Ganapathi, 'Putting the S Back in Corporate Social Responsibility: a Multi-Level Theory of Social Change in Organizations', (2004) 32 *Academy of Management Review* 836-863 [http://papers.ssrn.com/sol3/papers.cfm?abstract_id=567842].

⁷⁵ As a representative example of work grown out of long-term analysis of the shortcomings of the ECMH, see the scholarship by R. Thaler, 'Anomalies - The January Effect', (1987) 1 *Journal of Economic Perspectives* 197-201; R. Thaler, 'The End of Behavioral Finance', (1999) 55 *Financial Analysts Journal* 12-17; see now R. Thaler/C. Sunstein, *Nudge. Improving Decisions about Health, Wealth and Happiness* (Yale University Press, 2008).

⁷⁶ See, e.g., the World Bank's 2009 World Development Report 'RESHAPING ECONOMIC GEOGRAPHY'; see the contributions to G. L. Clark/M. P. Feldman/M. S. Gertler (eds), *Oxford Handbook of Economic Geography* (Oxford University Press, 2003); see also the famous launch by Paul Krugman in 1992 of 'new economic geography' [P. Krugman, *Geography and Trade* (MIT Press, 1992)], and P. Krugman, 'What's new about the new economic geography?' (1998) 14 *Oxford Review of Economics & Politics* 7-17; see further relatively recent creation of a new academic journal in this area: JOURNAL OF ECONOMIC GEOGRAPHY (OUP, since 2001), complementing among others the long-standing ECONOMIC GEOGRAPHY (Clark University, since 1925).

⁷⁷ See, e.g., the overview by S. Burris/M. Kempa/C. Shearing, 'Changes in Governance: A Cross-Disciplinary Review of Current Scholarship', (2008) 41 *Akron Law Review* 1-66; see also the meanwhile seminal article in legal scholarship by O. Lobel, 'The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought', (2004) 89 *Minnesota Law Review* 342-469; for a refreshing perspective with regard to the EU, see C. Möllers, 'European Governance: Meaning and Value of a Concept', (2006) 43 *Common Market Law Review* 313-336; with regard to global financial regulation, see the poignant contribution by J. Black/D. Rouch, 'The development of global markets as rule-makers: engagement and legitimacy', (2008) *Law and Financial Markets Review* 218-233.

engagement with institutional economics as well as with law.⁷⁸ It is from here that important impulses for a more serious, interdisciplinary study of 'law in context', 'law & society' and 'social norms' in their relation to traditional jurisprudence are likely going to be received still.⁷⁹

Surely, not only at a time such as when THE ECONOMIST would dedicate an issue to '*Modern Economic Theory. Where it went wrong- and how the crisis is changing it*' with a number of outspoken defamations of financial economics' hubris concerning perfect markets⁸⁰ have economists cast models into doubt that had been designed to explain economic growth. As indicated above, after Keynes' 1936 *General Theory* and its eventual interim relativization (and subsequent revival⁸¹), the theoretical advances by North and other scholars of New Institutional Economics⁸² are among the most sophisticated and most promising economist contributions to an integrated analysis of economic developments. It is in fact on the basis of and in engagement with the wealth and the challenging, analytical potential of the institutionalist framework that other disciplines such as political economy, economic sociology, economic geography and, certainly, law have been developing over the past decades. This context makes for an intriguing moment to engage in an interdisciplinary analysis of the evolutionary trajectories of law and economics. The proffered depictions, explanations and assessments as they are voiced with regard to the 2007/2008 financial and economic crisis, not only by those who had always 'known', 'warned' or were 'ignored', feed into and complement what will continue to unfold as a crucially important theoretical engagement with the models and toolkits economists, lawyers and social theorists have been relying on since the early 1980s.

⁷⁸ See only V. Nee/R. Swedberg, 'Economic Sociology and New Institutional Economics', in C. Ménard and M. M. Shirley (eds), *Handbook of New Institutional Economics* (Springer, 2005), 789-818, 795: "Slowly [...] it has been realized by economic sociologists that *law* constitutes a central part of the modern economy...". See, in this context, R. Swedberg, 'The Case for an Economic Sociology of Law', (2003) 32 *Theory and Society* 1-37.

⁷⁹ See, e.g., the definition of 'institution' provided by Nee and Swedberg, op. cit., 797-798: "An institution may be conceptualized as a dominant system of interrelated informal and formal elements – customs, shared beliefs, norms, and rules – which actors orient their actions to when they pursue their interests. In this view, institutions are dominant social structures which provide a conduit for social and collective action by facilitating and structuring the interests of actors and enforcing principal agent relationships. It follows from this interest-related definition that institutional change involves not simply remaking the formal rules, but requires the realignment of interests, norms, and power."

⁸⁰ THE ECONOMIST, July 18th-24th, 2009, 12, 68-72

⁸¹ R. Skidelsky, *Keynes. The Return of the Master* (Allen Lane, 2009); P. Davidson, *The Keynes Revolution. The Path to Global Economic Prosperity* (Palgrave Macmillan, 2009)

⁸² For an interim excellent introduction and overview see S. Voigt, *Neue Institutionenökonomik* (Mohr Siebeck (UTB), 2002); meanwhile, see O. E. Williamson, 'The Economics of Governance', (2005) 95 *American Economic Review* 1-18, and E. Ostrom, *Understanding Institutional Diversity* (Princeton University Press, 2005), and the contributions to E. Ostrom, 'Challenges and growth: the development of the interdisciplinary field of institutional analysis', (2007) 3 *Journal of Institutional Economics* 239-264. A very instructive paper is still O. E. Williamson, 'The New Institutional Economics: Taking Stock, Looking Ahead', (2000) 38 *Journal of Economic Literature* 595-613.

While the need for an interdisciplinary and integrated study of the current crisis thus lies in the evident ambiguity of the very starting points of any assessment⁸³, the promise of an interdisciplinary study of institutions goes further still: precisely because of the distinct premises and normative orientations in legal and economic thinking, there is a great need for continued translation of methodological approaches in both disciplines.⁸⁴ The appearance of one in the other – economics in law⁸⁵ and law in economics⁸⁶ – has been indeed been increased rather than limited the need for further dialogue and translation.

As legal scholars and economists continue to demarcate the boundaries of states and markets, we can discern a lot of parallel engagement with evolutionary theory's conceptualizations of institutional lock-in⁸⁷ and path-dependency⁸⁸: such studies are particularly relevant with regard to lawyers' and economists' ongoing attempts to gain a better understanding of the meaning and lessons from 'market failure', a term that has frequently been referred to not only for an identification of the *occasion* but also of the *scope* of state intervention.⁸⁹ Market failure thus presents a formidable example for the illustration of the urgent need of collaborative and interdisciplinary analysis of the institutions involved in successful or failing regulation. For law, a study of market failure goes to the heart of its own understanding, as the definition of a legal concept of market is intimately tied to the foundational understanding of law as such⁹⁰,

⁸³ For an intriguing perspective on the correlation of different periodizations, see J. Mokyr, 'The Knowledge Society: Theoretical and Historical Underpinnings', (2005) *faculty.wcas.northwestern.edu/~jmokyr/Unitednations.PDF* .

⁸⁴ G.-P. Calliess/M. Renner, 'Between Law and Social Norms: The Evolution of Global Governance', (2009) 22 *Ratio Juris* 260-280, 262

⁸⁵ P. H. Rubin, 'Why is the Common Law Efficient?' (1977) 6 *Journal of Legal Studies* 51-63; G. L. Priest, 'The Common Law Process and the Selection of Efficient Rules', (1977) 6 *Journal of Legal Studies* 65-82; H. Eidenmüller, *Effizienz als Rechtsprinzip. Möglichkeiten und Grenzen der ökonomischen Analyse des Rechts* (Siebeck Mohr, 1995); D. Kennedy, 'Distributive and Paternalist Motives in Contract and Tort Law, with Special Reference to Compulsory Terms and Unequal Bargaining Power', (1982) 41 *Maryland Law Review* 563

⁸⁶ L. Bernstein, 'Opting out of the Legal System: Extralegal Contractual Relations in the Diamond Industry', (1992) 21 *Journal of Legal Studies* 115-157; G. K. Hadfield, 'Privatizing Commercial Law', (2001) *Regulation* 40-45; A. Greif, *Institutions and the Path to the Modern Economy. Lessons from Medieval Trade* (Cambridge University Press, 2006)

⁸⁷ B. W. Arthur, 'Competing Technologies, Increasing Returns, and Lock-In by Historical Events', (1989) 99 *The Economic Journal* 116-131

⁸⁸ Arthur (1989), preceding note; B. W. Arthur, *Increasing Returns and Path Dependence in the Economy* (University of Michigan Press, 1994); P. A. David, 'Clio and the Economics of QWERTY', (1985) 75 *American Economic Review* 332-337; see also W. J. Baumol, 'Productivity Growth, Convergence, and Welfare: What the Long-Run Data Show', (1986) 76 *American Economic Review* 1072-1085; M. J. Roe, 'Chaos and Evolution in Law and Economics', (1996) 109 *Harvard Law Review* 641-668

⁸⁹ R. O. Zerby Jr./H. McCurdy, 'The End of Market Failure', (2000) 23 *Regulation* 10-14, at 10

⁹⁰ R. L. Hale, 'Coercion and Distribution in a Supposedly Non-Coercive State', (1923) 38 *Political Science Quarterly* 470-494; R. Wiethölter, 'Artikel Wirtschaftsrecht', in A. Görlitz (ed) *Handlexikon zur Rechtswissenschaft* (Wissenschaftliche Buchgesellschaft, 1972), 531-539; D. Campbell, 'The Relational Constitution of Contract and the Limits of 'Economics': Kenneth Arrow on the Social Background of Markets', in S. Deakin and J. Michie (eds), *Contracts, Co-operation, and Competition. Studies in Economics, Management and Law* (Oxford University Press, 1997), 307-336; P. Zumbansen, 'The Law of Society: Governance Through Contract', (2007) 14 *Indiana Journal of Global Legal Studies* 191-233 [available at <http://ssrn.com/abstract=988610>]; see also C. E. Lindblom, 'Market and

because it cannot simply presuppose a market as such.⁹¹ In turn, for economics, and for New Institutional Economics in particular, the question is whether the theoretical framework has a convincing analytical and conceptual grip on contemporary complex regulatory constellations. As has repeatedly been highlighted by Paul David, the general observation that ‘history matters’⁹² by itself is about as explanatory or illuminating as the claim that market failures challenge the embedding legal enforcement system in a straight-forward, causal manner⁹³: “From the foregoing it may be seen that a proper understanding of path-dependence, and of the possibilities of externalities leading to market failure, is not without interesting implications for economic policy. But those are not at all the sorts of glib conclusions that some critics have alleged must follow if one believes that history really matters – namely, that government should try to pick winners rather than let markets make mistakes. Quite the contrary....[...]. One thing that public policy could do is to try to delay the market from committing to the future inextricably, before enough information has been obtained about the likely technical or organizational and legal implications, of an early, precedent-setting decision.”⁹⁴ In another paper, David observed that “[I]f there are ways thus to represent the coevolution of microeconomic behavior with regard to technology choices (technical standardization), or conformance with social norms (custom and convention) and correlated patterns of ideology or beliefs carrying normative force (subjective conformism), the explanatory apparatus available to economists studying long-term trends in technology and social institutions will surely be much more powerful.”⁹⁵ As pointed out by Duncan Kennedy, in a comment on Robert Clark, ‘costs’ are a merely allusive concept, that can hardly carry enough weight on their own to identify or even justify action on the part of a public or private actor.⁹⁶ Tightly connected to

Democracy. Obliquely', (1995) 28 *Political Science and Politics* 684-688, 685: “Market rules do not permit one simply to appropriate what one wants. Appropriating another person’s labor we call slavery, and appropriating assets we call theft. Nor do market rules provide any social instrument for *collective* reassignment of claims.”

⁹¹ See only Hale, previous note; see also the instructive discussion and analysis in F. Johns, 'Performing Power: The Deal, Corporate Rule, and the Constitution of Global Legal Order', (2007) 34 *Journal of Law and Society* 116-138.

⁹² P. A. David, 'Path dependence, its critics and the quest for ‘historical economics’', in P. Garrouste and S. Ioannides (eds), *Evolution and Path Dependence in Economic Ideas: Past and Present* (Edward Elgar, 2000),

⁹³ P. A. David, 'Path dependence in economic processes: implications for policy analysis in dynamical systems contexts', in K. Dopfer (ed) *The Evolutionary Foundations of Economics* (Cambridge University Press, 2008), 151-194

⁹⁴ P. A. David, 'Path dependence, its critics and the quest for ‘historical economics’', in P. Garrouste and S. Ioannides (eds), *Evolution and Path Dependence in Economic Ideas: Past and Present* (Edward Elgar, 2000), , ms. at 14

⁹⁵ David (2008), note 23, at 175

⁹⁶ D. Kennedy, 'Cost-Reduction as Legitimation', (1981) 90 *Yale Law Journal* 1275-1283, at 1281: “an obstacle because it makes the world as it is look rational and necessary, even just (who can object to "cost reduction"?), as opposed to arbitrary and contingent. This is a misrepresentation that has an effect: it diverts energy from the job of finding the truths we need to know about the world if we are to be effective in trans- forming it; it diverts energy from the task of figuring out what the world should be like.”

such an observation is David's own contention that we must apply a much more differentiated tool-kit to explore the interaction between different market actors over time in order to get a better understanding of why things go wrong and how we arrive at such an assessment. What emerges from Professor David's observations is a cautionary approach towards a concept of market failure that is not again re-embedded in a comprehensive historical and systematic institutional study. 'History matters', then, is not a sophisticated enough proposal to engage in a layered, interdisciplinary analysis of how which institutions play a crucial role in the organization of today's market economies. While the concept of path dependency has been developed primarily with confined, nationally grown markets in mind, its relevance for transnational markets and transnational regulatory theory follows from the realization of the stickiness of existing (and newly created) regulatory structures, something which – as before in the case of *lex mercatoria*⁹⁷ – any globally or transnationally aspiring regulatory concept will necessarily have to take into account.⁹⁸

IV. TOWARDS A RENEWED INTERDISCIPLINARY PERSPECTIVE

What follows from the above is that an evolutionary perspective is crucial in the emerging new phase of interdisciplinary inquiry into the relationship between 'public' and 'private' ordering, 'state' vs. 'market' regulation and that there is a continued need to further refine the concept of 'institution'. For such an interdisciplinary dialogue to unfold in an effective way, the continued engagement with each other's methodological starting points and premises is crucial. It is thus necessary to open up respective toolkits and analytical frameworks to comparative and interdisciplinary scrutiny.

It is then against this background, that we can begin to see how reflections, internal to economist and economic-historical theorizing, are in fact mirrored, paralleled and sometimes even anticipated in other disciplines that have been engaging, one way or the other, with the concept or the idea of institutions in the recent past.⁹⁹ Within law, and in particular outside of

⁹⁷ P. Drahos/J. Braithwaite, 'The Globalisation of Regulation', (2001) 9 *Journal of Political Philosophy* 103-128, 110, 111: "a spectacular example of transnational private ordering". With regard to the authors' characterization of the bottom-up nature of *lex mercatoria* as an example of transnational norm creation, see also J. Koven Levit, 'Bottom-Up International Lawmaking: Reflections on the New Haven School of International Law', (2007) 32 *Yale J. Int'l L.* 393-420, and L. Catá Backer, 'The OECD Guidelines for Multinational Corporations: Using Soft Law to Operationalize a Transnational System of Corporate Governance', (2009) *Law at the End of the Day (Blog)* <http://lcbackerblog.blogspot.com/2009/03/oecd-guidelines-for-multinational.html>

⁹⁸ P. Zumbansen, 'Varieties of Capitalism and the Learning Firm. Corporate Governance and Labor in the Context of Contemporary Developments in European and German Company Law [CLPE Research Paper No. 3/2007 and University of Cambridge, Centre for Business Research Working Paper 347, available at: <http://ssrn.com/abstract=993910>], (2007) 8 *European Business Organization Law Review [EBOR]* 467-496, 488; P. Zumbansen, 'New Governance' in European Corporate Governance Regulation as Transnational Legal Pluralism', (2008) 15 *European Law Journal* 246-276 [available at <http://ssrn.com/abstract=1128145>]; G.-P. Calliess/P. Zumbansen, *Rough Consensus and Running Code: A Theory of Transnational Private Law* (Hart Publishing, 2010)

⁹⁹ A brilliant historical and conceptual analysis is provided by Joel Mokyr, *The Institutional Origins of the Industrial Revolution*, unpublished Ms., Northwestern University 2007.

contract law which has attracted a plethora of focused assessments from the part of New Institutional Economics¹⁰⁰, there has certainly been an intensive and fruitful engagement with NIE in corporate law theory.¹⁰¹ More recently still, NIE has been subject to lively exchanges within Public International Law.¹⁰² Another example is the recent revival of lawyers' interest in Hayek's idea of spontaneous evolution¹⁰³ Partly in answer to such developments, partly in building on earlier starting points in Marx, Durkheim and Weber, the recently newly burgeoning

¹⁰⁰ Here, the field is vast and polarized: see, e.g., O. E. Williamson, 'The New Institutional Economics: Taking Stock, Looking Ahead', (2000) 38 *Journal of Economic Literature* 595-613, 599; R. E. Scott, 'The Death of Contract Law', (2004) 54 *University of Toronto Law Journal* 369-390; D. Campbell, 'The Incompleteness of our Understanding of the Law and Economics of Relational Contract', (2004) 2004 *Wisconsin Law Review* 645-678.

¹⁰¹ See the early contributions, building on Coase (1937, 1960), by A. A. Alchian/H. Demsetz, 'Production, Information Costs, and Economic Organization', (1972) 62 *American Economic Review* 777-795, E. Fama/M. C. Jensen, 'Agency Problems and Residual Claims', (1983) 26 *Journal of Law and Economics* 327-349, and O. E. Williamson, 'The Modern Corporation: Origins, Evolution, Attributes', (1981) 19 *Journal of Economic Literature* 1537-1568; building on these foundations, e.g., M. J. Roe, 'Chaos and Evolution in Law and Economics', (1996) 109 *Harvard Law Review* 641-668; M. J. Roe, 'Corporate Law's Limits', (2002) 31 *J. Legal Studies* 233-271; B. R. Cheffins, 'Does Law Matter? The Separation of Ownership and Control in the United Kingdom', (2001) XXX *J. Leg. Stud.* 459-484; B. R. Cheffins, 'The Trajectory of (Corporate) Law Scholarship', (2004) 63 *Cambridge Law Journal* 456-506; W. W. Bratton/J. A. McCahery, 'Incomplete Contracts Theories of the Firm and Comparative Corporate Governance', (2001) 2 *Theoretical Inquiries in Law* Article 7; P. A. Gourevitch, 'The Politics of Corporate Governance Regulation', (2003) 112 *Yale Law Journal* 1829-1880; P. Zumbansen, 'Spaces and Places: A Systems Theory Approach to Regulatory Competition in European Company Law', (2006) 12 *European Law Journal* 534-556.

¹⁰² A. van Aaken, 'Effectuating Public International Law Through Market Mechanisms?' (2009) 165 *Journal of Institutional and Theoretical Economics* 33-57; P. Zumbansen, 'The State as Black Box and the Market as Regulator', (2009) 165 *Journal of Institutional and Theoretical Economics* 62-70, available at <http://ssrn.com/abstract=1292789>; A. T. Guzman, *How International Law Works. A Rational Choice Theory* (Oxford University Press, 2008), and the *Symposium* on Guzman's book in 1 *INTERNATIONAL THEORY* 283-343 (2009)

¹⁰³ See F. A. Hayek, *The Constitution of Liberty [1960]* (Routledge, 2006), 53: "For the first time it was shown that an evident order which was not the product of a designing human intelligence need not therefore be ascribed to the design of a higher, supernatural intelligence, but that there was a third possibility – the emergence of order as the result of adaptive evolution"; for the distinction between 'economy' (as "an organization or an arrangement in which someone consciously uses means in the service of a uniform hierarchy of ends") and 'market' ("spontaneous order"), see F. A. Hayek, 'Competition as a Discovery Procedure (orig. German 1968; Marcellus S. Snow transl.)', (2002) 5 *Quarterly Journal of Austrian Economics* 9-23, at 14; see already F. Hayek, 'The Use of Knowledge in Society', (1945) 35 *American Economic Review* 519-530, reprinted in HAYEK, *INDIVIDUALISM AND ECONOMIC ORDER* 77-91 (1996), at 88: "We make constant use of formulas, symbols, and rules whose meaning we do not understand and through the use of which we avail ourselves of the assistance of knowledge which individually we do not possess. We have developed these practices and institutions by building upon habits and institutions which have proved successful in their own sphere and which have in turn become the foundation of the civilization we have built up." For a defense against an outsider's critique of the normative implications of spontaneous order, see, e.g., R. Sugden, 'Spontaneous Order', (1989) 3 *Journal of Economic Perspectives* 85-97, 97; ; see also the recent discussion, see P. Hardos/D. Rahoc, 'Blundering into wisdom? The missing elements of Hayek's spontaneous order liberalism', (2008) *Working Paper* <http://ssrn.com/abstract=1261873>.

field of economic sociology¹⁰⁴ has been making extremely fruitful contributions to an altogether inspiring, interdisciplinary discussion about the nature of markets and institutions.¹⁰⁵ For their part, lawyers have been pressured to respond to this challenge from a particular set of perspectives, partly constituted through the uncertainties connected to increasingly contractualized public services and a fundamental reconsideration of law's role in market regulation¹⁰⁶, partly through an intricate mix of privatized¹⁰⁷ as well as transnational¹⁰⁸ modes of norm-generation. This development within legal doctrine and legal theory – in the midst of which we find a vividly continuing debate about 'social norms'¹⁰⁹ – is of interest beyond the unsurprisingly recurring, traditional lawyers' laments concerning the loss of regulatory capability and sovereignty.¹¹⁰ Even before the 2007/2008 economic crisis began to unfold, it had become clear to regulatory and legal theoreticians that the transformation of Western

¹⁰⁴ For an assessment, see V. Nee/R. Swedberg, 'Economic Sociology and New Institutional Economics', in C. Ménard and M. M. Shirley (eds), *Handbook of New Institutional Economics* (Springer, 2005), 789-818.

¹⁰⁵ J. Beckert, 'The Great Transformation of Embeddedness. Karl Polanyi and the New Economic Sociology', (2007) *Max-Planck-Institut für Gesellschaftsforschung/Max-Planck-Institute for the Study of Societies, MPIfG Discussion Paper 07/1*; J. Beckert/W. Streeck, 'Economic Sociology and Political Economy. A Programmatic Perspective', (2008) *MPIfG Working Paper 08/4* <http://www.mpifg.de/pu/workpap/wp08-4.pdf> M. J. Beckert, 'The social order of markets', (2009) 38 *Theory and Society* 245-269. V. Nee/R. Swedberg, 'Economic Sociology and New Institutional Economics', in C. Ménard and M. M. Shirley (eds), *Handbook of New Institutional Economics* (Springer, 2005), 789-818; see already the landmark work by R. Swedberg, *Max Weber and the Idea of Economic Sociology* (Princeton University Press, 1998), and the collection of essays in V. Nee/R. Swedberg (eds), *The Economic Sociology of Capitalism* (Princeton University Press, 2005)

¹⁰⁶ A. C. Aman Jr., 'The Limits of Globalization and the Future of Administrative Law: From Government to Governance', (2001) 8 *Indiana Journal of Global Legal Studies* 379-400; G. Teubner, 'After Privatisation? The Many Autonomies of Private Law', in T. Wilhelmsson and S. Hurri (eds), *From Dissonance to Sense: Welfare State Expectations, Privatisation and Private Law* (Ashgate, 1999), 51-82; P. Zumbansen, 'Law After the Welfare State: Formalism, Functionalism and the Ironic Turn of Reflexive Law', (2008) 56 *American Journal of Comparative Law* 769-805

¹⁰⁷ R. C. Ellickson, *Order without Law: How Neighbors Settle Disputes* (Harvard University Press, 1991).

¹⁰⁸ G. Teubner, 'Global Bukowina: Legal Pluralism in the World Society', in G. Teubner (ed) *Global Law Without A State* (Ashgate, 1997), 3-28.

¹⁰⁹ See E. A. Posner, *Law and Social Norms* (Harvard University Press, 2000); J. N. Drobak (ed) *Norms and the Law* (Cambridge University Press, 2006); for a critical perspective see the author of 'Order without Law', R. C. Ellickson, 'Law and Economics Discovers Social Norms', (1998) 27 *Journal of Legal Studies* 537-565; see also the magnificent analysis of the inherent depoliticizing effects of the anti-regulatory efficiency claim advanced by norm proponents, by D. Charny, 'Illusions of a Spontaneous Order: 'Norms' in Contractual Relationships', (1996) 144 *University of Pennsylvania Law Review* 1841-1858, one of the many outstanding papers in the excellent Symposium Issue on 'Law, Economics, and Norms', published in 144 *UNIVERSITY OF PENNSYLVANIA LAW REVIEW* 1643-2339 (1996); with regard to the 'norms vs. regulation' conflict for example in the current debate over a Common Frame of Reference for European Private Law, see, on the one hand: J. Smits, 'European Private Law: a Plea for a Spontaneous Legal Order', in D. Curtin, J. Smits, A. Klip and J. McCahery (eds), *European Integration and Law* (Intersentia, 2006), 85, and, on the other: M. W. Hesselink, 'A spontaneous order for Europe? Why Hayek's libertarianism is not the right way forward for European private law', (2008) *Centre for the Study of European Contract Law, Working Paper Series No. 2008/07* <http://ssrn.com/abstract=1270566>.

¹¹⁰ P. Zumbansen, 'Introduction: Private Ordering in a Globalizing World: Still Searching for the Basis of Contract', (2007) 14 *Indiana Journal of Global Legal Studies* 181-190

welfare states in the context of an IT-driven globalization of markets of goods, production, services and migration posed a new set of conceptual challenges that could henceforth only be approached from within an interconnected interdisciplinary agenda.¹¹¹

And yet, despite these manifold intersections, the different strands of evolutionary theory have not been brought together for a comprehensive analysis of the change of legal and economic institutions. The elephant in the room continues to be the tension between *economic* and *legal* governance, or more precisely the relation between the social order as conceived either from an economic or from a legal perspective. So far unanswered remains the question regarding the reasons for the existence of a legal order beyond its affirmation as an *enforcement* framework for market ordering. As shown by Donald Elliott's astute analysis of evolutionary theories in legal and economic scholarship twenty-five years ago, "Economic theories of legal evolution also depend on the assumption that a legal system already exists."¹¹² By not, however, being able to answer whether the legal system predates – historically or normatively – the economic system, the economic story of markets and their embeddedness in a legal enforcement mechanism remains on a purely abstract level: it distinguishes between the market and the state by resorting to terms such as market and non-market order mechanisms. This, however, attempts to answer the question as to what constitutes the relation between the two spheres without providing for a definition of or a justification of the distinction in the first place. That the legal system exists to remedy market failures does not explain whether the market failure is in fact something else than a political or, regulatory failure.¹¹³ It is here, where the evolutionary strands in law, economics and sociology have much to contribute.

V. CONCLUSION: LEGAL AND ECONOMIC GOVERNANCE OF THE TRANSNATIONAL KNOWLEDGE SOCIETY

It is a certain irony, that not only the politically self-conscious exclamation that 'We are all Realists Now', resounding many years ago¹¹⁴, would eventually be succeeded by the realization

¹¹¹ See e.g. D. Levi-Faur, 'The Global Diffusion of Regulatory Capitalism', (2004) 598 *The Annals of The American Academy of Political and Social Science* 12-29, and S. Sassen, 'Globalization or denationalization?' (2003) 10 *Review of International Political Economy* 1-22; K.-H. Ladeur, *Negative Freiheitsrechte und gesellschaftliche Selbstorganisation* (Mohr Siebeck, 2000).

¹¹² E. D. Elliott, 'The Evolutionary Tradition in Jurisprudence', (1985) 85 *Columbia Law Review* 38-94, at 71

¹¹³ For an early analysis of this connection, see of course R. L. Hale, 'Coercion and Distribution in a Supposedly Non-Coercive State', (1923) 38 *Political Science Quarterly* 470-494; M. R. Cohen, 'Property and Sovereignty', (1927) 13 *Cornell Law Quarterly* 8-30.

¹¹⁴ J. W. Singer, 'Legal Realism Now', (1988) 76 *California Law Review* 465-544, at 467

that, in fact, 'We are all Economists Now'¹¹⁵, but that we seem to now be experiencing yet another relativization of perspective. A pronouncement of the sort 'We are all Interdisciplinary Governance scholars now', would, however, have only a faint ring to it. The underlying conundrum is that of the trajectories of institutional and normative change, which occupy much of economic and legal inquiry, before and in light of the global financial and economic crisis of 2007-2009. Meanwhile, the intellectual competition over the primacy of economic or legal reasoning in the imagination of ('sustainable', 'good', 'just') governance occurs in the shadow of a dramatic transformation of the spaces for economic and legal ordering. Precisely at a moment where legal scholars, political scientists and sociologists have come to accept the transnational challenge to the traditional concepts of law and legal regulation¹¹⁶, also the economists' ascription to law, the state and to the correlation between the two as constituting the relevant enforcement framework for economic action needs to be revisited. It is here where we can identify an urgent need but already promising contours of an interdisciplinary inquiry into the nature of 'institutions' of economic and legal governance. Much seems to be at stake: as a utopia of transnational governance continues to linger at the horizon of libertarian imaginations of globally integrated markets, neither discipline appears yet to have an appropriate governance theory at hand. The space of human interaction and of regulation beyond the nation state can be depicted either as the Wild West of unrestrained individual liberty, or as an extremely fragile and contested space of struggles over recognition, politics and community.¹¹⁷ In the face of this, has 'law lost its lieu?'¹¹⁸ Is the 'Global Bukowina', which inspired legal sociologists at the respective beginnings and ends of the twentieth century, a realm of law, of social norms or of economic liberties?¹¹⁹ What are we to make of these distinctions, after all? To be sure, this process does not continue in a quiet state of contentment and wonder, but rather in surprise, happenstance and terror.¹²⁰ We understand concurring work on 'global governance' to provide an important contribution to a more adequate analysis of the pressing

¹¹⁵ Regarding the slogan as used with reference to legal realism and for the surrounding debate, see B. Leiter, 'Legal Realism', in D. Patterson (ed) *A Companion to Philosophy of Law and Legal Theory* (Blackwell, 1996), 261-279.

¹¹⁶ P. C. Jessup, *Transnational Law* (Yale University Press, 1956); R. O. Keohane/J. S. Nye, 'Introduction', in J. S. Nye and J. D. Donahue (eds), *Governance in a Globalizing World* (Brookings Institution, 2000), 1-41; D. Harvey, *Cosmopolitanism and the Geographies of Freedom* (Columbia University Press, 2009).

¹¹⁷ See, for example, R. Kreide, 'The Ambivalence of Juridification. On Legitimate Governance in the International Context', (2009) 2 *Global Justice: Theory Practice Rhetoric* 18-34; R. Cotterrell, 'Transnational Communities and the Concept of Law', (2008) 21 *Ratio Juris* 1-18.

¹¹⁸ Amstutz, *Global (Non-)Law*, *supra* at 476. See also M. Kaldor, *Global Civil Society: An Answer to War* (Polity, 2003) (as to the civil society); H. Brunkhorst, *Solidarity. From Civic Friendship to a Global Legal Community* [Jeffrey Flynn transl.] (MIT Press, 2005); and N. Luhmann, 'The World Society as a Social System', (1982) 8 *International Journal of General Systems* 131-138 (describing the fragmentation of world society).

¹¹⁹ See G. Teubner, 'Global Bukowina': Legal Pluralism in the World Society', in G. Teubner (ed) *Global Law Without A State* (Ashgate, 1997), 3-28.

¹²⁰ For recent illustrations, see B. d. Sousa Santos, 'The World Social Forum and the Global Left', (2008) 36 *Politics & Society* 247-270, and C. Marazzi, *The Violence of Financial Capitalism* (Edizioni Casagrande, 2010).

legitimacy and accountability concerns arising from a fragmented regulatory landscape.¹²¹ In an attempt to complement this research, we posit that an evolutionary perspective on governance offers a further set of insights into the changes in legal and economic governance. It is from this perspective, that we might see emerging ‘lessons’ from a parallel observation of legal and economic governance. Drawing on the distinction between markets and hierarchies, as developed and expressed in work following Coase¹²² and Williamson¹²³ on the one hand and on the analysis of markets as spaces of discovery, learning and adaptation¹²⁴, on the other, we an increasingly narrow applicatory space for a traditional understanding of legal regulation, as informed by a set of constitutional, normative ideals and embedded in a stable institutional framework. In this situation, however, we are faced with the ‘stripping down’ of law from a functionalist perspective. This function, in a context of a dramatically changing institutional environment¹²⁵, re-emerges as a stubborn insistence on the distinction between legal and illegal. In concert with ‘economic governance’, legal governance finds its place and calling in contra-factually upholding a normative aspiration to continue to make the distinction between legal and illegal – despite the absence of its traditional institutional framework. Law, then, can only purport to illustrate the challenges of having to identify, create and constantly re-adapt the context in which it is possible to make this distinction. This is what is meant with the need for contemporary governance theories to look beyond traditional concepts of political order and democratic governance.¹²⁶

As already illustrated by evolutionary theory’s noted ‘language deficit’¹²⁷, the same struggle over semantics marks the interdisciplinary confusion over the terms, basis and contours of ‘governance’. While it is true, that “[t]oday’s problems are determined by the fact that the fundamental structural change of functional differentiation has destroyed the Old European semantics without residue, and that even the most hectic post-modern *polysémies* can be

¹²¹ U. Beck, *World at Risk* [orig. German "*Weltrisikogesellschaft*" (Frankfurt: Suhrkamp); Ciaran Cronin, transl.] (polity, 2009); A. Stone Sweet, 'Constitutionalism, Legal Pluralism, and International Regimes', (2009) 16 *Indiana Journal of Global Legal Studies* 621-645.

¹²² R. Coase, 'The Nature of the Firm', (1937) 4 *Economica* 386-405.

¹²³ O. E. Williamson, *Markets and Hierarchies. Analysis and Antitrust Implications* (Free Press, 1975); O. E. Williamson, 'The New Institutional Economics: Taking Stock, Looking Ahead', (2000) 38 *Journal of Economic Literature* 595-613; O. E. Williamson, 'The Economics of Governance', (2005) 95 *American Economic Review* 1-18.

¹²⁴ F. Hayek, 'The Use of Knowledge in Society', (1945) 35 *American Economic Review* 519-530; F. A. Hayek, 'Competition as a Discovery Procedure (orig. German 1968; Marcellus S. Snow transl.)', (2002) 5 *Quarterly Journal of Austrian Economics* 9-23; C. M. Tiebout, 'A Pure Theory of Local Expenditures', (1956) 64 *Journal of Political Economy* 416-424.

¹²⁵ Compare H. Willke, *Smart Governance. Governing the Global Knowledge Society* (Campus, 2007), Ch. 1 and 2.

¹²⁶ Willke, previous note, 7.

¹²⁷ K. Dopfer, 'Evolutionary economics: a theoretical framework', in K. Dopfer (ed) *The Evolutionary Foundation of Economics* (Cambridge University Press, 2005), 3-55, 18.

understood only as a restless search for socially adequate self-descriptions,” catastrophes and the change in social structures lead to a ruining of semantics.¹²⁸ Communication, then, from the perspective of systems theory, constituting the semantics of the particular observing systems such as law, politics, economics and others, is, in the context of fiercely competing ‘truth’ claims brought forward from different social rationalities, inevitably *thrown back onto itself*. The legal system must – and will – process the change in its environment by relying on its very own available operations¹²⁹ that now will follow into the depths of societal differentiation to focus on what Mariana Valverde refers to as the small ‘T’s in comparison to the large ‘T’ in a search for truthfulness.¹³⁰ The same idea applies to other social systems as well, as the recent theorizing over ‘institutional diversity’ amply illustrates.¹³¹ Taken together, we are left with contradicting impressions of a world falling apart, of reference systems eroding, on the one hand, and of interdisciplinary enrichment, inspiration and emerging understandings on the other.

This volume accepts this apparent contradiction by bringing together research from different fields and with different perspectives on the problem of institutional evolution. The basis for this volume was an interdisciplinary research project on *Law, the State and Evolutionary Theory*, jointly conducted by the Collaborative Research Center *Transformations of the State* at the University of Bremen (Germany)¹³² and the *German Law Journal*.¹³³ In addition to work developed in this context, the present volume contains a number of chapters by some of the most prominent evolutionary theory scholars working today. The collection thus aims at providing a reference point for scholars from different traditions and different fields for an inquiry into the meaning and promises of evolutionary theory for future theorizing about legal and economic governance. The authors contributing to this volume specifically employ evolutionary theory in order to explore the challenges arising from the fundamental transformation of statehood that has been so powerfully captured by Saskia Sassen as an erosion of state sovereignty both from ‘below’, brought about by processes of privatization and emerging forms of public-private governance, and from ‘above,’ through processes of transnationalization of collaborative, regulatory governance.¹³⁴

¹²⁸ G. Teubner, 'Dealing With Paradoxes: Derrida, Luhmann, Wiethölter', in O. Perez and G. Teubner (eds), *Paradoxes and Inconsistencies in Law* (Hart Publishing, 2006), 41-64, with reference to N. Luhmann, *Law as a Social System* (K Ziegert transl., F Kastner, D Schiff, R Nobles, R Ziegert eds.) (Oxford University Press, 2004)

¹²⁹ N. Luhmann, *A Sociological Theory of Law* (Routledge Kegan & Paul, 1985); N. Luhmann, 'Operational closure and structural coupling: the differentiation of the legal system', (1992) 13 *Cardozo Law Review* 1419-1441

¹³⁰ M. Valverde, *Law's Dream of a Common Knowledge* (Princeton University Press, 2003), ch.1

¹³¹ E. Ostrom, *Understanding Institutional Diversity* (Princeton University Press, 2005); E. Ostrom, 'Challenges and growth: the development of the interdisciplinary field of institutional analysis', (2007) 3 *Journal of Institutional Economics* 239-264

¹³² www.sfb597.uni-bremen.de

¹³³ www.germanlawjournal.com

¹³⁴ See S. Sassen, 'The State and Economic Globalization: Any Implications for International Law?' (2000) 1 *Chicago Journal of International Law* 109-116. See also H. Schepel, *The Constitution of Private Governance*.

By contributing to an ongoing exploration of evolutionary approaches to economics, law and their respective intersections, its first and foremost goal is to provide an overview of the variety of evolutionary perspectives, and how these have been contributing to the design of theories of institutional change in response to the contemporary complex realities of legal and economic change. In that sense, the following chapters should be understood as providing a necessary first step for putting forward for discussion a number of methodological elements towards an evolutionary theory that can fruitfully be employed in both law and economics in order to address some of the most pressing questions of contemporary social theory.