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

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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, Gralf-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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"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 & Gralf-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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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).

debates surrounding school curricula and the collision of religion and evolution. 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.” 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 Maine and Oliver Wendell Holmes 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.” 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 comparative but also of historical, detailed studies of different legal cultures, if one wanted to make any more generalizable assertions regarding legal change.

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

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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’.

onto Smith’s inquiry into circumstances contributing to the particular dynamics of economic change in his time. Subsequently, in particular Hayek’s 1945 knowledge-based account of market processes and Alchian’s 1950 essay on ‘Uncertainty, Evolution, and Economic Theory’ were among the first to pave the way for a promising promotion of evolutionary concepts in economics, with important parallel developments in the natural sciences. 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. 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 David and the sociological work by scholars such


as Nico Stehr and Volker Meja. 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. While the breathtaking ascendance of ‘law and economics’ has irreversibly transformed both practice and theory of law, the economist’s depiction of this alleged cross-disciplinary dialogue is as legendary 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.

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

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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’\(^\text{24}\), 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’\(^\text{25}\). 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 rights\(^\text{26}\) on the basis of which emerged comprehensive concepts of economic governance\(^\text{27}\), the economics of institutions\(^\text{28}\), institutional diversity\(^\text{29}\), and social norms.\(^\text{30}\) 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.\(^\text{31}\) 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.


\(^{28}\) T. Eggertsson, Economic behavior and institutions (Cambridge University Press, 1990); T. Eggertsson, 'A note on the economics of institutions', in L. J. Alston, T. Eggertsoon 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.’


\(^{31}\) T. Eggertsson, 'A note on the economics of institutions', in L. J. Alston, T. Eggertsoon 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 bodies\textsuperscript{32}, economic theorizing has become increasingly sensitive to the unpacked assumptions relating to the desired stability of property rights enforcement\textsuperscript{33}, with the more long-term consequences of this development and the more recent interest in the cognitive basis for individual choice-making\textsuperscript{34} 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 economies\textsuperscript{35}, while the latter are engaged in a critique of the political nature of social norms.\textsuperscript{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.\textsuperscript{37} Luhmann thus aimed at developing an all-


\textsuperscript{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.\textsuperscript{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 \textit{variation, selection} and \textit{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.\textsuperscript{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 Teubner\textsuperscript{40} and Karl-Heinz Ladeur\textsuperscript{41} – 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’\textsuperscript{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
contceptual and theoretical assessments of law’s evolutionary trends and prospects – studies
that eventually received important impulses from both comparative legal scholarship\textsuperscript{43} as well

\textsuperscript{38} See also N. Luhmann, ‘Evolution und Geschichte’, (1975) in: ders., \textit{Soziallogische Aufklärung} 2 150-169; N.
Luhmann, ‘Geschichte als Prozeß und die Theorie sozio-kultureller Evolution’, in K.-G. Faber and Meyer (eds),
\textit{Historische Prozesse} (Deutscher Taschenbuchverlag, 1978), 413-440; N. Luhmann, ‘Verfassung als evolutionäre

\textsuperscript{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 \textit{Law & Society Review} 291-301; but see also the recent, highly interesting
development of this theory in G. Teubner, ‘Self-subversive Justice: Contingency or Transcendency Formula of

\textsuperscript{40} G. Teubner, ‘Substantive and Reflexive Elements in Modern Law’, (1983) 17 \textit{Law & Society Review} 239-285

\textsuperscript{41} See the April 2009 \textit{GERMAN LAW JOURNAL} Symposium in celebration of Professor Ladeur’s work “The Law of
the Network Society” (Eds., L. Viellechner et al.,

\textsuperscript{42} See, for example, the work by M. Baldus, \textit{Die Einheit der Rechtsordnung. Bedeutungen einer juristischen Formel
in Rechtstheorie, Zivil- und Staatsrechtswissenschaft des 19. und 20. Jahrhunderts} (Duncker & Humblot, 1995), and
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) \textit{Neumann, The
Democratic and the Authoritarian State} (1957) 22-68, and the excellent study on Carl Schmitt by I. Maus,
\textit{Bürgerliche Rechtstheorie und Faschismus. Zur sozialen Funktion und aktuellen Wirkung der Theorie Carl Schmitten’s

727-736; M. Reimann, ‘The Progress and Failure of Comparative Law in the Second Half of the Twentieth Century’,
as from a fast emerging scholarship focusing on the conundrical yet intriguing coupling of ‘globalization and the law’. 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.

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 economics, by publishing a book that has been depicted as an ‘ice-breaker that arguably gave the early process its critical momentum.’ 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 encouragement to think beyond neo-classical frameworks that they found to be at odds with a highly differentiated landscape of economic innovation and

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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.”


economy as well as in legal theory. 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 points, eventually opening up perspectives for a better understanding of evolutionary processes as ‘learning processes’.

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, spurred by the emergence of New Institutional Economics centering around Douglass North and Oliver Williamson - with “new” evolutionary economics continuing to push for further sophistication of the theoretical apparatus. 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

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


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.


consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (laws, property rights). In his important study of 1990, he observed: “As defined here, they [institutions] therefore are the framework within human interaction takes place.” 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 market among legal scholars, economists, economic historians, geographers and political economists again soared in recent years, 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. With this, North connects his important

67 D. C. North, Institutions, Institutional Change and Economic Performance (Cambridge University Press, 1990), at 4
institutionalist framework to the increasingly influential\textsuperscript{71} work in behavioral finance\textsuperscript{72} and behavioral law & economics\textsuperscript{73} 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 governance\textsuperscript{74}, but also in economic sociology, geography and regulatory theory.\textsuperscript{75} Next to the field of economic geography\textsuperscript{76} that has been gaining new attraction for economists and globally oriented policy makers with regard to regional differences in economic growth and development\textsuperscript{76}, and regulatory theory, which over the past fifteen years has become something of an umbrella concept for interdisciplinary governance studies\textsuperscript{77}, it is in economic sociology that we can see a number of important strides in recent years, both with regard to its

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\textsuperscript{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 \textit{Journal of Financial Economics} 283-306, 284: “anomalies”.


\textsuperscript{73} See the contributions to C. Sunstein (ed) \textit{Behavioural Law & Economics} (University of Chicago Press, 2000); for a very informative discussion and overview, see L. Klöhn, \textit{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.


engagement with institutional economics as well as with law.\textsuperscript{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.\textsuperscript{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 markets\textsuperscript{80} 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 revival\textsuperscript{81}), the theoretical advances by North and other scholars of New Institutional Economics\textsuperscript{82} 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.


\textsuperscript{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.”

\textsuperscript{80} The Economist, July 18\textsuperscript{th}-24\textsuperscript{th}, 2009, 12, 68-72

\textsuperscript{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)

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 assessment, 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. The appearance of one in the other – economics in law and law in economics – 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-in and path-dependency, 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. 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 such.
because it cannot simply presuppose a market as such.\textsuperscript{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’\textsuperscript{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 manner\textsuperscript{93}:

“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.”\textsuperscript{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.”\textsuperscript{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.\textsuperscript{96} Tightly connected to


\textsuperscript{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 (Edwad Elgar, 2000), , ms. at 14

\textsuperscript{95} David (2008), note 23, at 175

\textsuperscript{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


contract law which has attracted a plethora of focused assessments from the part of New Institutional Economics\textsuperscript{100}, there has certainly been an intensive and fruitful engagement with NIE in corporate law theory.\textsuperscript{101} More recently still, NIE has been subject to lively exchanges within Public International Law.\textsuperscript{102} Another example is the recent revival of lawyers’ interest in Hayek’s idea of spontaneous evolution\textsuperscript{103} Partly in answer to such developments, partly in building on earlier starting points in Marx, Durkheim and Weber, the recently newly burgeoning


\textsuperscript{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 sociology has been making extremely fruitful contributions to an altogether inspiring, interdisciplinary discussion about the nature of markets and institutions. 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 regulation, partly through an intricate mix of privatized as well as transnational 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’ – is of interest beyond the unsurprisingly recurring, traditional lawyers’ laments concerning the loss of regulatory capability and sovereignty. Even before the 2007/2008 economic crisis began to unfold, it had become clear to regulatory and legal theorists that the transformation of Western

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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


that, in fact, ‘We are all Economists Now’\textsuperscript{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 regulation\textsuperscript{116}, 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.\textsuperscript{117} In the face of this, has ‘law lost its lieu?’\textsuperscript{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?\textsuperscript{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.\textsuperscript{120} We understand concurring work on ‘global governance’ to provide an important contribution to a more adequate analysis of the pressing

\textsuperscript{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) \textit{A Companion to Philosophy of Law and Legal Theory} (Blackwell, 1996), 261-279.


legitimacy and accountability concerns arising from a fragmented regulatory landscape.\textsuperscript{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 Coase\textsuperscript{122} and Williamson\textsuperscript{123} on the one hand and on the analysis of markets as spaces of discovery, learning and adaptation\textsuperscript{124}, 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 environment\textsuperscript{125}, 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.\textsuperscript{126}

As already illustrated by evolutionary theory’s noted ‘language deficit’\textsuperscript{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


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

\textsuperscript{126} Willke, previous note, 7.

understood only as a restless search for socially adequate self-descriptions,” catastrophes and the change in social structures lead to a ruining of semantics. 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 operations 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. The same idea applies to other social systems as well, as the recent theorizing over ‘institutional diversity’ amply illustrates. 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) and the German Law Journal. 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.


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


132 www.sfb597.uni-bremen.de

133 www.germanlawjournal.com

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.