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Perspektiven durch Retrospektiven

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IV. Perspektiven auf die Evolutorische Wirtschaftsgeschichte

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Evolution Theory and Economic History: A Partnership of Mutual Necessity?

Beyond the old and New Economic History

The scientific study of the history of economies, which is essential to understanding and explaining the structural dynamics of present economies, is in need of a new general theoretical *framework*. Ever since the eclipse of the so-called "Old Economic History" in the 1960s and 70s by what became overtime a new orthodoxy, the study of economic history by its self-designated practitioners has become too narrow in its theoretical thinking. The approaches and studies of the sort pursued by the leading Old EH practitioners, such as Max Weber, Karl Polanyi, Michael Postan, Eric Hobsbawm, Fernand Braudel, and Barrington Moore, have become less central to the discourse. Their motivations were to make interdisciplinary and overarching attempts to examine the complex history of whole socio-political-economic systems without abstracting the economy from the totality. Many concepts and theories were employed and the historian's concern with reality, complexity, and contingency were central to the methodology. The "New Economic History", on the other hand, accomplished abstraction, greater quantification, and counterfactualism, all in the interests of precision and concision and explanatory progress, and thereby became an orthodoxy upon which the discipline tended to converge. Trying to be more inclusive and totalising certainly comes at a cost of less precision but does permit inclusion of more possible explanatory variables. Indeed, it is now widely understood that a narrow concentration on explaining economic change by reference to economic factors (narrowly defined) alone was a mistake and various attempts are being made to rebuild

forms of interdisciplinarity.¹ However, many of these new broader, encompassing, attempts are, unfortunately, lacking correspondingly broad theoretical *frameworks*, relying all too often on the orthodox theoretical *framework* of rational choice individualism to try to explain the wider social totality. In fact, too often this is just another form of the “economic imperialism” that has been widespread in recent decades.²

At the same time as the orthodox EH has been trying to broaden, historical social science of quite different kinds has been going on elsewhere, influenced by the older traditions that orthodox economic history abandoned and is now struggling to reconnect with. Theorisation of societal history in a wide and long-run *framework* is the goal of broad historical social science (as it was also in the late 19th and early 20th Centuries), among thinkers directly influenced by classical economics, classical sociology, historical materialism, evolutionism, historical geography, demography, and structuralism.³ All these streams have history at their centre. The Positivist turn in the late 19th and early 20th Centuries sundered the socio-historical sciences and the static/historical division opened; but now the old traditions are reviving in new ways.

The central themes of this chapter are, first, the contention, which of course is not a radical claim, that, contra to the current orthodoxy, the discipline of economic history should not be a separate, economistic, field of enquiry but can only make explanatory progress as part of a wider field that includes various kinds of institutions and processes (of economies, politics, governance, and business); social relational structures and cultures; and the ways in which all these are integrated and regulated as a complex system. The second theme involves the question of the evolution of the system over time. How this complex system exists and evolves is a basic problem and the explanation of that will provide an explanation for the history of the economy as a sub-part of the whole. That the economy evolves is a specific proposition that has long been explored, ever since the 18th Century, but the content of that proposition has changed greatly over the centuries and especially in recent decades. It is only recently with the exploration of the value of Darwinian theory that the discussion has really come to life again. Nevertheless, some old traditions of evolutionary theorising, including Marxism, still have value. Third, there have to be distinctions made, then, between the

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- 1 New attempts at interdisciplinary economic history, include Acemoglu, D./J. A. Robinson: *Economic Origins of Dictatorship and Democracy*, Cambridge 2006; North, D. C.,/J. S. Wallis/B. R. Weingast: *Violence and Social Orders: A Conceptual framework for Interpreting Recorded Human History*, Cambridge 2009, van Zanden, J. L.: *The long Road to the Industrial Revolution*, Leiden 2009.
 - 2 Fine, B.: "Economic imperialism": a view from the periphery, *Review of Radical Political Economics*, 34 (2002), S. 187.
 - 3 Examples of this kind of broad, encompassing, social science history include the work of the late Charles Tilly, Clifford Geertz, Robert Brenner (examined in Lloyd 1993), and in articles in every issue of such journals as *Comparative Studies in Society and History*; *Social Science History*; *Annales. Histoire, Sciences Sociales*.

concepts of 'history', 'change', and 'evolution'. Change refers to the obvious fact that economies and societies change over time but the nature of that change process is at issue. More precisely, it can be argued that the process is one of evolution. Evolution is a concept, a manner of reasoning, and a theory of change.⁴ But the history of any system cannot be understood and explained by reduction to a concept of evolution. Just as biological evolution theory does not provide a causal account of the history of a particular species or genus or the whole of all life forms, so the proposition that economic and social history is evolutionary is a hypothesis and also a theory but it does not describe and explain that history, which has been and is an ongoing process of contingent events and structural change. Historical explanation is an empirical field of enquiry that focuses on very specific, actual, events and processes. That historical reality took and takes an evolutionary path and so must be theorised in a particular way is an open question.

Unfortunately, the term 'evolution' has been much misused in the socio-human studies, particularly through a confusion or an elision of 'evolution', 'change' and 'history'. Now the issue of the precise definition and theorisation of evolution is becoming of greater interest to some economic historians, as evidenced by the latest book from Douglass North and his co-authors⁵, in which they outline a kind of evolutionary extension to the New Institutional Economics (NIE), with which he is closely associated. But this extension does work for the concept of evolution that they employ is inadequate and it doesn't place evolutionary theory at the centre of historical enquiry and explanation, with all that that would entail. NIE has been much employed by economic historians, often to valuable effect. There is no doubt that we all are or are all becoming institutionalists. But the problem with NIE is its too close relationship with its parents: Old Institutionalism and Neo-Classical Economic (NCE) Theory. NCE and NIE have limited usefulness for historians. Why? Because of their basic presuppositions of rational and social choice, methodological individualism (despite their claim to be institutionalists), an assumption of the universal efficiency of markets, and lack of interest in genuine historical enquiry. Fundamentally, they lack a well developed ontology of structures as real, evolving, systemic entities, which require historical analysis and structural-evolutionary theory, in order to be understood.⁶

The potential of Darwinian evolution theory, on the other hand, to explain the socio-economic world in general and the history of economies in particular should now be of interest to economic historians. It is already of much interest to business historians. To an economic historian it should seem obvious that the strength of evolution theory should be measured by its empirical applicability to

4 Metcalfe, J. S.: *Evolutionary Economics and Creative Destruction*, London 1998.

5 North/Wallis/Weingast, *Violence and Social Orders*.

6 Much work has been done to articulate this ontology by Tony Lawson (Lawson, T.: *Ontology and the Study of Social Reality*, in: *Cambridge Journal of Economics*, 36 (2012), S. 345–385. See also Lloyd, C.: *The Structures of History*, Oxford/Cambridge MA 1993.

historical enquiry. Just as Darwinian biological theory was able to “capture” biological science because of its explanatory power, so the capacity of Darwinian theory (or some other similar, perhaps Lamarckian, version of evolution theory) to be transposed to social explanation should be evaluated for its empirical power. Of course, Darwinian theory is not in some sort of simple competition with alternatives for explaining the social world with a “winner takes all” outcome. Rather, Darwinian theory, about which there is much discussion and dispute, is part of a wider array of theoretical and methodological concepts and *frameworks* in the social sciences that should be seen as requiring critique, amendment, selection, and, above all, *synthesis*, in order to build increasingly powerful descriptions and explanations in some sort of a progressive process of description-theory-explanation-redescription-theory-explanation... and so on.⁷ The ‘evolutionary turn’ in the social sciences that has grown since the 1970s⁸ has now spread wide-

7 This argument is articulated at length Runciman, W. G. A.: *A Treatise on Social Theory*, 3 Vols, Cambridge 1983, Vol I.

8 Runciman Vol I (1983); Runciman, W. G. A.: *The Theory of Cultural and Social Selection*, Cambridge 2009; Blyth, M./G. M. Hodgson/O. Lewis/S. Steinmo: Introduction to the Special Issue on the Evolution of Institutions’, in: *Journal of Institutional Economics*, 7/3 (2011), S. 299–315; Numerous writings from Hodgson, for example some key works: Hodgson, G. M.: *An Evolutionary Theory of Long-Term Economic Growth*, *International Studies Quarterly*, 40 (1996), S. 391–410; Hodgson, G. M.: *Darwinism in Economics: From Analogy to Ontology*, in: *Journal of Evolutionary Economics* 12 (2002), S. 259–281; Hodgson, G. M.: *The Nature and Units of Social Selection*, in: *Journal of Evolutionary Economics* 16 (2006), S. 477–489; Hodgson, G. M.: *Darwinian Coevolution of Organizations and the Environment*, in *Ecological Economics* 69 (2008), S. 700ff.; Hodgson, G. M.: *The Great Crash of 2008 and the Reform of Economics*, in *Cambridge Journal of Economics* 33 (2009), S. 1205–1221; Hodgson, G. M.: *Choice, Habit and Evolution*, in: *Journal of Evolutionary Economics* 20 (2010), S. 1–18; Hodgson, G. M.: *Toward an Evolutionary and Moral Science*, in: *Journal of Economic Issues*, XLVI:2 (2012), S. 265–275; Hodgson, G. M./T. Knudsen: *Dismantling Lamarckism: Why Descriptions of Socio-economic Evolution as Lamarckian are Misleading*, in: *Journal of Evolutionary Economics*, 16 (2006) 343–366; Hodgson, G. M./T. Knudsen: *Why We need a Generalized Darwinism, and Why Generalized Darwinism is not Enough*, in: *Journal of Economic Behavior and Organization* 61 (2006), S.1–19; Hodgson, G. M./T. Knudsen: *Evolutionary Therorizing Beyond Lamarckism: A Reply to Richard Nelson*, in: *Journal of Evolutionary Economics*, 17 (2007), S. 353–359; Hodgson, G. M./T. Knudsen: *In Search of General Evolutionary Principles: Why Darwinism is too Important to be left to the Biologists*, *Journal of Bioeconomics* 10 (2008) S. 51–69; Hodgson, G. M./T. Knudsen: *Darwin’s Conjecture: The Search for General Principles of Social and Economic Evolution*, Chicago 2010; Numerous writings from Witt, for example some key works: Witt, U.: *Observational Learning, Group Selection, and Societal Evolution*, in: *Journal of Institutional Economics*, 4/1 (2008), S. 1–24; Witt, U.: *What is Specific About Evolutionary Economics?*, in: *Journal of Evolutionary Economics* 18 (2008), S. 547–575; Witt, U.: *Economic Behavior: Evolutionary Versus Behavioral Perspectives*, in: *Biological Theory*, Vol. 7 (2012); Numerous writings from Nelson, for example some key works: Nelson, R. R.: *Bringing Institutions into Evolutionary Growth Theory*, in: *Journal of Evolutionary Economics* 12 (2002), S. 17–28; Nelson, R. R.: *Evolutionary Social Science and Universal Darwinism*, in: *Journal of Evolu-*

ly and is beginning to develop into one of the fundamental points of coherence that is building towards a new consensus about the *framework* for historical social science. That, at least, is part of the argument of this chapter.

Unfortunately, however, much orthodox theoretical work in economics has little empirical reference or engagement with historical processes but, rather, takes the form of abstract model building and concept formation that is self-referential and formalistic. Indeed, in evolutionary economic theory there has also been such a tendency in recent times. While it can be argued that formalism is an end in itself and might also perhaps inspire some empirical work, the connection between them is usually accidental and tangential. The ontological assumption of the real structural historicity of economics and the methodological principle of source criticism have not been at the centre of much economic theorising. This is a fundamental weakness in economics and lies at the heart of the dysfunctional history/social science divide that has bedevilled the socio-historical field.⁹ The biological sciences, on the other hand, although not always immediately concerned with historical problems, have always, since the Darwinian revolution, had an empirical/historical consciousness at the centre of their domain because biological evolutionary theory has to be quintessentially historical. The evolved and evolving nature of species and of all life cannot be forgotten ever since Darwin. The nature and complex ecological interconnections of all species is the outcome of a long historical process and biological science is constantly concerned with those historically adaptive interconnections. Likewise, geomorphological and cosmological sciences are also essentially historical.

It is ironic and very unfortunate, therefore, that it is the socio-economic sciences that have often lost sight of the historicity of their subject matter, which is in fact the most obviously historical of all the sciences. An explanation for this is beyond this chapter but perhaps it has something to do with having been so captured by formalistic abstraction in the era of empiricist-positivism that the static social sciences, especially economics, have been unable to cast off their ahistoricist outlook for fear of having to abandon much of their quantified empirical content. Also important is the belief that grand historical theorising, which gripped the social sciences in the 19th and early 20th Centuries, was speculative and

tionary Economics 16 (2006), S. 491–510; Nelson, R. R.: Comment on: Dismantling Lamarckism: Why Descriptions of socio-economic Evolution as Lamarckian are misleading by Hodgson and Knudsen, in: Journal of Evolutionary Economics, 17 (2007), S. 349–352; Nelson, R. R.: Economic Development from the Perspective of Evolutionary Theory, in: Oxford Development Studies, 36/1 (2008), S. 9–21; Nelson, R. R./S. G. Winter, S. G.: Evolutionary Theorizing in Economics', in: Journal of Economic Perspectives, 16/2 (2002), S. 23–46; Foster, J.: The Analytical Foundations of Evolutionary economics: From Biological Analogy to Economic Self-Organization, in: Structural Change and Economic Dynamics, 8 (1997), S. 427–451; Colombatto, F.: Towards a Non-Darwinian Theory of Institutional Change', in: Journal of Bioeconomics, 5 (2003), S. 1–25.

9 Lloyd, C.: Toward Unification: Beyond the Antinomies of Knowledge in Historical Social Science, in: History and Theory, 47 (2008), S. 396–412.

politically oppressive, associated with totalitarianism. The “grand narratives” of Marxism, Social Darwinism, Old Evolutionism, Modernization, and so on, were rejected because of their supposed holistic, possibly totalitarian, tendencies at that time, which were thought to remove human choice, agency, and individualism from social life and explanation. The grip of Libertarianism in American culture, which became hegemonic in the post-war decades, is also a factor in all Western discourse. Moreover, the grip of explicit and later implicit teleological thinking, stemming originally from religion and infecting all thought about humanity and nature, retained its hold over the humanities far longer than in the sciences of nature because of the fundamental, long uncriticised, beliefs in the separateness of humanity from nature and the perfectibility of humans. The “copernican revolution”, represented by Darwinism and Marxism¹⁰, has not yet completely succeeded in the socio-human studies, which continue to hide forms of teleology within their precepts, such as beliefs in social progress, or the unilinearity of history, the inevitability of free markets, the drive towards liberty, the triumph of capitalism as an end state, and so on.

Despite the enormous growth of evolutionary economic theorising in recent times the central question regarding this work from the point of view of its explanatory strength, given that, *prima facie*, it should be concerned very much with history, is the extent to which it really is focussed on explaining the *actual history* of economies and going beyond formalism. Does evolutionary economics, despite its claim to heterodoxy, break with the ahistorical and abstract orientation of orthodox economics or does it reproduce the dominant approach of abstract ahistoricism? Is a synthesis of evolutionary economics and economic history occurring, or at least possible? Has evolutionary economic theory been criticised, amended, and improved through empirical application to historical processes? In trying to answer these questions, one complication is that evolutionary economics has many faces, has itself evolved over the past century and a half, and has no agreed social theory as such. Present debates about evolutionary economics – its fundamental precepts and concepts, its main explanatory foci, its connections with Darwinian biological theory, and so on – are not resolved. Nevertheless, there is a core of precepts that defines the general theory and there is now a tendency towards agreement upon fundamental ideas.

In trying to answer, then, the basic question of the evolutionary economics/economic history connection we do have to be clear about two things: firstly,

10 Marx and Engels immediately recognised the anti-teleological/historical significance of Darwin's *Origins* and believed that they were working on parallel paths. See Gerratana, V.: Marx and Darwin, in: *New Left Review* 82 (1973), S. 60-82., who traces the intellectual interconnection between them, including brief correspondence. It seems Darwin never read the copy of *Capital* Vol I that Marx sent him but he certainly did read earlier works of English political economy. The synergy between them has more recently been much discussed and employed by, among others, Stephen J Gould and Richard Lewontin. See Lewontin, R./R. Lewins: Stephen J Gould: What Does it Mean to be a Radical?, in: *Monthly Review* 54:6 (2002).

about what economic history as a semi-separate discipline is or should be trying to explain and, secondly, about the fundamentals of evolutionary economics, especially the new Darwinian economics.

Methodologies of Economic History

There has been much controversy about the disciplinary foundations of economic history. In the 1960s and 70s a significant “renovation” occurred in the sense of the beginnings of a convergence on a theoretical and methodological framework. Judging by the literature in the main journals today, much of that controversy has now subsided and a rough orthodox consensus has emerged. This consensus has three main components: (a) the use of orthodox economic theory, (b) the use of the quantitative techniques of econometrics, particularly regression analysis of historical data series, to try to answer causal questions, and (c) a search for new historical data sources and their codification. Like orthodox economics, economic history has tended to abstract the economy from other dimensions of the social totality, such as social structure, culture, and politics. This was one of the chief aspects of the “renovation”, which abandoned the “Old EH”, which had indeed been interdisciplinary. The push for quantification and measurable aggregate behaviour patterns and exclusion of any qualitative sources and of structural theory meant that these other dimensions had to be left out. Regressions had no space for them. However, in the most recent times this abstraction has been weakened somewhat and there has developed a realisation that governance and institutions (if not political conflict, social structures, and culture), even though defined in a rational choice manner, have to be included.

Related to abstraction is the narrowed theoretical framework that orthodox economic history borrowed from orthodox economics. The old interest in theories derived from many traditions (such as Classical economics, Marxism, evolutionism, institutionalism, Weberian culturalism, social psychology) as all potentially offering insights, was abandoned in favour of Neo-Classical economic theory of behaviour and rational choice as the only useful set of explanatory concepts. With that narrowing and loss of qualitative evidence went the fundamental focus on history as a long-term, contingent, structural process and its replacement with a focus on short-term or present-centric rational choice behavior and the attempt to project contemporary-oriented theory backwards to explain the origins of the present. History became an adjunct to explaining the contemporary economy. Historical economics replaced economic history. A static orientation was easier to subject to econometric techniques and the use of such techniques became an end in itself for some people. Of course, there was, however, still an interest in long-term history by others but the problem for such enquiries then became one of how to conduct them from within the new consensus of theory and method.

The result has tended to be the projection further and further into the past of the new (orthodox) approach, and a growing division between orthodox economic history and other historical enquiries. Thus one of the regrettable consequences of the narrowing of EH methodology and theory has been the cementing of a division between economic and social history. Whereas the Old EH had tried to construct an interdisciplinary approach to the past, which could be called societal history, the new approach has concentrated on the economy, with some opening recently to institutions but still within the orthodox theoretical framework of rational choice individualism.

Furthermore, the widespread use of regression analysis, which requires complete quantification of all variables, has driven a wedge between economic history and other branches of historical enquiry, whether they are interested in quantification or not. The problem with the reliance on regressions is that statistical correlations are not causal explanations. The latter require causal theories of structural mechanisms of various kinds and in the socio-historical sciences these are not well developed. Uncriticised within the orthodoxy is the assumption that rational individualistic choice supplies the causal argument. Correlations supposedly point to aggregates of choice and since the economy is conceived as a large-scale pattern of behavioural aggregates then the correlation supposedly uncovers the causal connection. But this lacks a fundamental dimension to the argument for the correlation might point towards (or might not) to where the structural cause can be found but is not itself the cause.

An example of the absence of causal theory is the burgeoning literature on average heights of people in certain historical economic contexts as a strong pointer towards levels of economic and social development. The greater the average height, the supposed greater levels of nutrition, which in turn indicates higher material standards of living. These relationships are supposedly established by statistical correlations. The assumption is that greater and better food intake causes people to be taller over several generations. This is a kind of Lamarckian argument that has no direct biological support. Lacking in this literature is a discussion of socio-biology and genetics, particularly the issue of epigenesis and gene expression. There seems to be a strong resistance by these researchers to making evolutionary/biological arguments for fear of being labelled as genetic determinists or even racists. But such an argument would be about complex structural causes and would go beyond a simple equation of diet with height. Population genetics, alleles, evolutionary drift, group selection, nutritional properties, and material cultures, should all be part of such an argument. And now the new developments in human microbiomics should be a significant part of the theoretical framework. Thus a fundamental issue is the ontology of the structural process being theorised and studied by Economic History and other socio-historical sciences.

Much has been written recently about the failure of orthodox economics to explain the evolution of economies in the era of boom and bust of the past decade

and thus to provide sound policy prescriptions for governance institutions attempting to remedy the Western Crisis.¹¹ The hubris and failings of governments, regulatory institutions, economic “gurus”, and financial “masters of the universe”, over the past decade, has been plain for all to see but orthodox economics and the governance/regulatory ideology (broadly Neo-Liberal) have not collapsed or even been engaged in a far-reaching critique.¹² Criticism has certainly come from outside the orthodoxy – from the points-of-view of Neo-Keynsianism, Post-Keynsianism, Regulationism, Neo-Marxism, some institutionalism, and evolutionary approaches, among others. But this very variety indicates the weakness of heterodoxy: it’s disputatious fractionality. Orthodoxy coheres, heterodoxy disputes the orthodoxy and among itself. It cannot be otherwise for if they were to become coherent and unified the heterodox movements would become at least an alternative orthodoxy. That is striven for but so far unrealised. Nevertheless, there is a growing consensus among the heterodox schools of economics around three central points:

- (a) ontological/historical: the realist/structural conception of economies as opposed to the behavioural/rational choice/individualist conception, and the quintessentially historical nature of the structural reality;
- (b) the process of change is both the central object of enquiry and that process is evolutionary in some way or other;
- (c) construction of a quantified causal-explanatory narrative of the past and present, which takes contingency, unpredictability, structural continuity, and sudden shifts as all parts of the overall process, as a central aim and not Newtonian prediction.

Towards a new convergent orthodoxy in Economic History?

These three elements of the move towards a new coherent alternative to the economic orthodoxy point the way towards the kind of methodology and theory that are required, and, indeed, which already exist in various forms, and which take us some of the way “back” towards the sorts of work that the Old EH pursued. This kind of work has continued under different labels, such as ‘historical social science’. The task is to somehow pull these strands together into a new synthesis. Another way to state this is to say that what is needed is a methodological and theoretical framework that is inspired, especially and most directly, by the work of Karl Marx, Karl Polanyi, and Fernand Braudel; resulting in new bodies of work such as the French Regulation and Post-Keynesianism Schools of political economy. Most recently we can include the emerging Neo-Darwinian synthe-

11 Eg Hodgson, *The Great Crash of 2008*; Aglietta, M: *The European Vortex*, in: *New Left Review* 75, (May-June 2012).

12 Crouch, C.: *The Strange Non-Death of Neo-Liberalism*, Cambridge 2011.

sis of socio-biology, social selectionism, economic dynamics, and punctuated equilibrium theory, being produced by, among others, W. G. Runciman, Robert Boyd, Peter Richerson, Ulrich Witt, and Geoffrey Hodgson. Further in the background is work on the philosophical foundations of historical social science, which centre on methodological structurism and critical realism.¹³

These elements together would provide a framework that:

- Focuses on systemic (institutional-social relational) structure
- Emphasises structural (societal) change at micro and macro levels of social organisation
- Studies non-linear dynamics and non-equilibrium (complex and chaotic) states of social structures
- Sees processes as influenced by path dependencies, contingent innovation, selection, and learning.

From the empirical point of view this framework cannot be too abstract and over-theoretical. There must be empirical reference and source criticism because the fundamental object and primary task is to explain the evolving, historical, real, social world, and not to refine theory as such. Theory is the tool not the goal. The neglect of actual history with its contingencies, complexities, discontinuities, and path dependencies is the biggest problem in the social sciences that this framework has to overcome. And the neglect of theory by narrative historians is their biggest weakness. Narrative accounts are often partially-formed causal accounts that need greater conceptualization, generalization, and explication in order to become explanatorily persuasive.

Economic History should and does have a well-formed explanatory intention to combine theory and narrative but in recent times has to a large extent been seduced by orthodox economic theory and econometrics into believing that a merger with applied economics, particularly development economics, is the way forward. In this perspective the role of history is to provide materials for analysis and to provide confirmation of theory. The task is then seen no longer as historical explanation but theory refinement.¹⁴ In this context, the question is: can evolutionary economic theory provide an essential ingredient in the new, emerging, synthesis, such that economic history does not go any further towards being applied economics but becomes, instead, an essential core of a new more powerful framework for historical social science? The first step here is to see that the historical approach to explanation always begins with observation and generalisation based on concepts and previous empirical knowledge. The route to theory

¹³ Methodological structurism and critical realism are discussed in Lloyd, *The Structures of History* and Lloyd, *Toward Unification*; Milonakis, D./B. Fine: Douglas North's Remaking of Economic History: A Critical Appraisal, in: *Review of Radical Political Economics*, 39/1 (2007), S. 27–57; Lawson, *Ontology*.

¹⁴ Acemoglu, D.: Theory, General Equilibrium, and Political Economy in Development Economics, in: *Journal of Economic Perspectives*, 24/3 (2010), S. 17–32; Acemoglu/Robinson, *Economic Origins*.

building and theory use (concepts and causal arguments arrived at through invention, adoption, criticism, refinement) is through engagement with empirical sources not through uncritical application of theory.

Towards Darwinian Social Theory?

Evolutionary social theory has to address three interconnected basic questions:

- i) Is all social change evolutionary or are some types of change non-evolutionary? Is the difference between them one of non-linearity versus linearity?
- ii) What is it that evolves in society – culture, ideas, languages, economic behaviour, institutions, organisations, social structures, whole societies, or perhaps the answer is that all these evolve.
- iii) Where should the generative mechanisms of social evolution be sought – in mentalities, cultural forms, beliefs and ideas, behavioural choices and patterns, social interactions, organizational/institutional structures, small and large groups, social classes, societal structures?

Thinking about these questions has led in recent times towards Darwinian theory for the basic reason that Darwinism was able to provide the analytical construct of the generative/structure distinction (or genotype/phenotype) which now seems necessary for any evolutionary theory of history. The theory has to be causal, going beyond (but incorporating) historical description and narrative. For it to be a general theory it must specify general mechanisms, at least at some level of structure, which could be different at various levels. Darwin's fundamental contribution was to provide such a general theory – the theory of natural (or blind) variation, selection, and retention of novelties that have consequences of structural change over time and therefore producing an observable, very long-run history of natural life forms. At the same time as Darwin was writing, Marx was also grappling with constructing a general historical theory of social forms and having read *The Origin of Species* he immediately recognized that Darwin and himself were working in parallel. Marx was attempting to construct a general theory of the same generative/structure kind to explain societal history and eliminate teleological arguments, which Darwin was also attempting to do.

General theory of this kind can be constructed in various ways but it must be historical in the sense that it is able to form the basis for causal/contingent accounts of actual processes in nature, society, and culture. And 'evolutionary history' in any domain must mean endogenous change in the sense that new forms, new structures, emerge from prior forms and not *de novo*. Forms and structures are never created but *emerge*. This must be the case also with social evolution in that even though it may seem that new forms and structures are consciously created through human imagination, planning, and collective agency. In fact new social forms and structures can be constructed only from existing 'materials' even

though those materials (concepts, ideas, rules, social relations, ideologies, behavioural norms, social structures) can be transformed, recombined, augmented, and improved in ways that make them partially new. The creativity of human invention is the most powerful force in social evolution but it is not often fully conscious and it works upon the existing world in intelligible ways but often unintended ways. Structural change, then, is the consequence of human agency but agency is not the same as conscious creativity, which is but a small part of agential action. (more on this below)

Can Darwinian principles be generalized, as the advocates of universal Darwinism propose?¹⁵

Darwinian principles can be understood to include these propositions:

- evolution is possible within all self-organising and self-generating systems with complex structures and populations of semi-autonomous individuals, however individuals and structures are defined
- evolution involves the contingent spread of innovations among populations
- innovations occur only within genotypical microstructural levels of systems
- selection conditions of innovations exist only at meso and macro phenotypical levels of systems
- evolution is not teleological, directional, nor necessarily progressive

The first thing to recognize is that these are principles, not theoretical propositions as such. In biology, Darwinian theory is of natural selection in a very specific, genetic, sense. Innovations occur randomly at the biochemical (genotypical) level and are selected at the phenotypical and populational levels in an environmental/fitness context. Social evolution cannot take this form because of human agency, consciousness, and choice. Social innovations are not blind, biochemical, mutations. Innovations occur within behavioral and cultural patterns, ideas and beliefs, small-group relational structures, and decisions. Innovations are, at least in part, emergent from consciousness and involve human agency. Innovations are also not often intended as such but emerge semi-spontaneously. Unconscious motivations and psycho-social imperatives play a significant role in human innovations. Given this, can there be a theory of social selection of innovations that takes the phenotypical (or structural) form? Clearly, given that innovations occur at what we can understand as the genotypical level of human agency it would seem to follow that structural selection conditions must be part of the theory. Here the ontological foundation plays a crucial role in distinguishing evolutionary/ structural theory from rational choice/ individualist theory. The agency/

15 Advocates include Aldrich, H. E./G. M. Hodgson/D. L. Hull/T. Knudsen/J. Mokyř/ V. J. Vanberg; In Defence of Generalised Darwinism, in: *Journal of Evolutionary Economics* 18 (2008), S. 577–596; Hodgson/Knudsen, Hodgson and Knudsen, *Darwins Conjecture*; Hodgson, *Toward an Evolutionary*.

structure critical realist ontology attributes relational reality to social entities (institutions broadly defined) as well as to individual persons and the socio-geographically structured behavioral patterns in which they necessarily live their lives. Structures are real and exert powerful influences of an enabling, stabilizing, and selectional kind.

Evolutionary Mechanisms? The Significance of Agency within Groups and Institutions

Thus new evolutionary thinking emphasises a micro/macro hierarchy in all social systems at any level of scale, from small groups to whole societies and even the global system. This implies a distinction between generational and structural levels of causal power and a non-linearity of trajectories that result from this micro/macro hierarchy of causation. Only the micro level can be generatively causal because only at the level of human agency, consciousness, and choice does the power of innovation reside. The macro social structure has no generative but only conditional causal power. Macro relational structures cannot make innovations or choices. Groups of people can together generate (potential) innovations but the agency within those groups always resides at the individual human level. Human groups, social relational structures, institutions, organisations, social classes, communities, do not constitute holistic, agential entities with generational power. Holistic ontologies and theories that attribute organic/causal powers to such entities are seriously mistaken and perhaps even dangerous. Such attributions are often associated with teleological thinking.

The agency power of the generative micro level comes from evolved human attributes but these are always stimulated, activated, path dependent, moulded, within specific contexts. Propensities for co-operation, reciprocity, fairness, egalitarianism, individualism, and greed are not simply and directly causal of human behavior.¹⁶ Humans are agents only within organised groups, cultures and institutions with close integration – individuals usually have no social power outside groups, cultures and institutions. (Even Robinson Crusoe formed a social group at the first opportunity.) But the variability of agency is not just socially specific, it's also psychological and personal. The power of individual personality – that bundle of attributes that arise from genetic inheritance and social conditioning – is crucial to agential-social power.

The question, then, of the nature and locus of human agency, which is the fundamental (but not the only) force of history in society, must be addressed by theory. In all other evolving systems there are natural forces – biochemical, at-

¹⁶ See Boyd, R./P. J. Richerson: *Not By Genes Alone: How Culture Transformed Human Evolution*, Chicago 2005.

mospherical, geothermal, astrophysical – that operate (often together) over eons to produce the history of the earth and the universe. These forces also operate within humans as natural beings. But consciousness and hierarchical social integration makes a huge difference. Agency, however, cannot be reduced to consciousness and to the choices that people make individually and collectively. This is the great mistake of orthodox economics. Agency operates in and through conscious and unconscious motivations and social interactions. Rational choice is only a small part of human social life. Agency enables humans to live their lives within pre-existing social structures that they must continually maintain and reproduce and occasionally transform. Most behavior is ‘simply’ semi-consciously socially reproductive rather than reflective of choices and certainly not of economically-rational choices. Human life is a process of ongoing social interaction and social maintenance that is necessary to existence of every person in a way far more complex and varied than with any other social species.

The task for economics, then, (which should actually be Socio-Political-Economics) is to build a theory of the evolving complex but real micro/macro structure of social systems of production and how local actual formations vary in embodiment of generalities of agency and hierarchies of structure. The micro-macro dynamic implies that historical political economy, economic history, institutional history, business history, and even political and social history, should merge because complex social systems cannot be abstracted realistically. This approach to theory-building must explain the evolving institutionalisation, regulation, and structure of production processes via their micro and macro organised and socially-integrated forms over long periods of time.

Thus a crucial component of such theorizing is about the formation, structure, and dynamics of institutions as formal and informal organizations of hierarchies of social relations of co-operation, integration, power, norms, rules, roles, and goal-directed behavioral patterns. A rich conception of institutions sees them as social structures:

- Having both formal (conscious) and substantive (social) integration, organization, and regulation,
- Initiating changes, through collective decisions and behaviors, in their environments (eg through the implementation of new collective behavioral strategies and technological innovations),
- Reacting (or adapting) consciously to environmental change via collective decisions and behaviors

The importance of individual and collective agency to these processes of institutional dynamics must be stressed. Furthermore, social agency is able to bring about “cross-organism” and “cross-species” diffusion of change, or integration, or even blending (something that cannot occur in nature) in the sense of the interaction of institutions and even of whole societies. These possibilities are of course a factor in generating development at all levels of an economy and society. This is one of the many ways that social evolution differs from biological evolu-

tion. Thus, while an evolutionary theory can help to explain social and economic change, care is needed to ensure that biological analogies are not carried too far and certainly that biological determinism is not somehow smuggled in.

The Formalistic Weakness of New Darwinian Economic Theory

Too much evolutionary economic 'theorising' is abstractly formalistic as a kind of private language without empirical reference to actual economies.¹⁷ Despite the burgeoning conceptual debate among evolutionary economists, including the many attempts at recasting economic development theory, very little work has been done to develop an integrated evolutionary economic history, especially employing Darwinian evolutionary theory. Evolutionary Economic History had flourished in the late 19th and early 20th century but it was vitiated (except in the Marxist tradition) by the lack of a general causal/explanatory argument. On the other hand, a great deal of work has been done recently to develop evolutionary business history¹⁸ by employing empirical enquiry and evolutionary conceptual/causal arguments. The history of corporations and industries have been studied via very precise evolutionary theorising. Then why has evolutionary economic history in the macro sense lagged? Perhaps the reason has to do with the much greater difficulty there is in constructing a theoretical-empirical history of macro economic aggregates (whole economies) because of the much more complex problem of conceptualising the hierarchical/causal structure in such a way that it would lend itself to Darwinian or Lamarckian theorising in the same way as the structure of much smaller institutions do. Does evolutionary economics in fact have an implicit ontological difficulty with whole national and even global economies as real entities? Does Darwinian theory actually balk at conceptualising and explaining whole economies because there is no analogy with biological structures on this level of aggregation? Surely that cannot be the case for one of the main focuses in biological science is the ecosystem level of analysis, which could be understood as analogous to the whole economy. Should whole national economies be conceptualised and analysed as existing in a manner analogous to ecosystems and thus requiring such a theory? The well-developed school of ecological economics has not actually developed such a conception for it focuses on the economy-natural environment interconnection but there have been attempts at such analogous arguments, including in Alfred Marshall's work.

17 A striking example is that of Potts, J.: *The New Evolutionary Microeconomics: Complexity, Competence, and Adaptive Behavior*, Cheltenham 2001.

18 See the excellent example of Murmann, J. P.: *Knowledge and Competitive Advantage, The Co-Evolution of Firms, Technology, Natural Institutions*, Cambridge 2003.

But this problem can be overcome by using, firstly, a combination of concepts that builds on and goes beyond some of the recent work in business history (which has also been interested in ecosystems reasoning) to recognise the significance of integrated and causal hierarchies of formal and substantive regimes of regulation at various levels of aggregation and self-organization right up to the whole global system, and of populations of institutions that are interconnected in networks of organization and regulation. That is, more conceptualisation of the density, integrative, and hierarchical nature of economic structure is needed. Secondly, allied to that is the need for more conceptualisation of the nature of agency and of the interconnection of agency and structure as a structuring process over time. And, thirdly, there is a need to incorporate into research the significance of events as both contingencies and in causal chains. Theory always has a blind spot about contingencies because by definition contingencies are unpredictable and less explicable than continuities, interconnections, and mechanisms. Thus the scientific study of the evolving complexity of economies must always go, obviously, beyond theory to history.

Towards the Structuralist/ Regulationist/ Evolutionary/ History Synthesis

Economic history needs institutional and evolutionary theory and evolutionary theory must be developed in context of explaining actual history so as to avoid abstract irrelevancy.

Thus there the two tasks coincide and merge in the way that Marx showed and as, more recently, other historical social scientists have showed¹⁹: the description of history (using a framework of concepts), and the construction of theoretical-causal accounts of non-linear structural evolutionary history. The way forward towards a new historical social science and the social science historical accounts that are the empirical outcome, then, has already been shown by several streams of work in historical social science, especially in historical political economy, which economic historians interested in the long-run would do well to build upon. The influence of Marx, Polanyi, Braudel, and Runciman is paramount in the theory-history building process. One fruitful approach has been the French Regulation School²⁰, which has built a theoretical framework by, indeed, focusing on the dynamic agency/structure (micro-macro) relationships as a complex formal and substantive regulatory structure whose conceptualization owes much to systems theory and structuralism. Aglietta's pioneering study of American eco-

19 Eg the work of W. G. Runciman, Barrington Moore, Robert Brenner, Charles Tilly.

20 See Boyer, R./Y. Saillard: Regulation Theory: The State of the Art, London, 2000; Boyer, R.: How and Why Capitalisms Differ, *Economy and Society*, 34/4 (2005), S. 509-557.

conomic history was crucial in establishing some of the foundational themes of this synthesis.²¹

The Regulationist/Evolutionary Approach emphasises complex connections between structure and agency as well as contingency and path dependency, in particular

- the systemic integration of large-scale societal structures,
- the necessity and power of formal and substantive regulatory mechanisms of social, economic and governance kinds,
 - the significance of inherited endowments of nature, institutions, and culture as structural contexts,
 - the significance of stabilization mechanisms of a path dependent kind,
 - the significance of emergence and selection of managerial, institutional, and technical innovations,
 - the significance of historic crises (from chaotic instabilities) and transitions – producing a punctuated equilibrium long-term path of history.

A Relationship of Mutual Necessity? Evolution and History Together Again?

So, if we wish to explain economic history we must be evolutionary political economists and social science historians, just as old schools of thinkers implicitly believed they were in the 19th Century, notably the German Historical School, Marxists, and British evolutionary economic historians. In the 20th Century, the Modernization School of the 1950s and 60s (influenced in part by Weber and Parsons) believed they were carrying on this tradition but their evolutionary theory was a simple stages theory centering on a traditional/modern dichotomisation of societies. The richest contributions in the 20th Century came from Western Marxism, the French Annales School, and Karl Polanyi but none had a well developed evolutionary theory as such. That development has come most impressively from those historical political economy theorists who have attempted to build a synthesis of these three approaches plus evolutionary theory, most notably the French Regulation School and the New Evolutionists. Much empirical/historical work remains to be done to show the strength of this emerging framework for historical social science, incorporating a 'New, New' Economic History as one of the main foci of research.

²¹ Aglietta, M.: *A Theory of Capitalist Regulation: The US Experience*, London 1976.

Further Reading:

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