

1. Institutions and evolution of capitalism in Geoff Hodgson's work

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1.1 CELEBRATING GEOFF HODGSON

In work spanning four decades, Geoff Hodgson has made many path-breaking contributions to institutional economics, evolutionary economics, economic methodology, the history of economic thought and social theory more broadly. In recognition for these lasting contributions, Hodgson was awarded the Veblen-Commons Prize by the Association for Evolutionary Economics in 2012. In 2014, he was the recipient of the International Joseph A. Schumpeter Society's biennial Schumpeter Prize for his important book, *Conceptualizing Capitalism: Institutions, Evolution, Future*. And in 2016, his *How Economics Forgot History: The Problem of Historical Specificity in Social Science*, published in 2001, was listed in the top 50 economics books of the last 100 years by the World Economics Association. Hodgson's reputation as a significant and prolific writer,¹ whose work transcends traditional disciplinary boundaries, is matched by his credentials as an academic entrepreneur, whose involvement in the formation of two international scholarly societies and the foundation of the *Journal of Institutional Economics* has expanded the opportunities for constructive dialogue among social scientists.²

To celebrate Hodgson's fantastic career, this *Festschrift* brings together 19 original contributions by world-leading scholars in specific areas that have played a significant role in influencing Hodgson's thinking or represent key debates to which he has contributed. The five chapters assembled in Part II discuss some of the philosophical and methodological aspects of Hodgson's work, and clarify the Veblenian foundations of his view of economic agents. Part III comprises seven chapters that position and engage with Hodgson's contributions to institutional economics, while Part IV includes seven chapters that situate and build on his contributions to evolutionary economics. Inevitably, the division of chapters into parts is somewhat artificial. Not only do the themes discussed under the headings 'institutional economics' and 'evolutionary economics' intersect in various

ways, but also the tradition that runs from Veblen to Hodgson has long defined itself as ‘institutional and evolutionary economics’ (or ‘evolutionary and institutional economics’). In Part V, the concluding conversation with Hodgson covers some of the connections between the two fields.

1.2 CONTRIBUTIONS TO THE *FESTSCHRIFT*

Hodgson is one of the most philosophically minded economists writing today. Over the course of his career, he has gone to great lengths to clarify his philosophical and methodological positions. Part II opens with Sheila Dow’s (Chapter 2) discussion of the links between Hodgson’s ontological commitments and his epistemology. On the one hand, Hodgson believes that the absence of uniformity in socio-economic systems, located in historical time and geographical space, implies that economic explanations must rest on a combination of general and specific theories. This claim underpins his critique of excessive generalization characteristic of the mainstream, but also his evaluation of Adam Smith and John Maynard Keynes. On the other hand, Hodgson denies that the complexity of the subject matter, and the attendant impossibility of complete knowledge, justify the postmodernist credo that ‘anything goes’. Instead, Hodgson believes that an open-system ontology implies an open system of knowledge that allows for a variety of approaches, and underlines the value of the pragmatist method of abduction, namely the formulation of new explanatory hypotheses through the creative connection of alternative approaches. Dow shows that, contrary to Hodgson’s assessment, both Smith and Keynes accepted this position.

Most economists today believe that mathematical models generate new explanatory hypotheses. Since most methodologists of mathematical modelling in economics also consider that models provide accounts of how real-world phenomena are produced, attention has mostly focused on how patently unrealistic models can nonetheless explain. Prevailing interpretations present models as counterfactual credible worlds or useful fairy tales that communicate important messages. The debate has also focused on whether the models’ false assumptions do any of the explaining. In line with Hodgson’s view that further discussion and inquiry in this area is needed, Tony Lawson (Chapter 3) engages with these ideas, and defends the proposition that mathematical models in economics do not, and cannot, explain. Since models of this kind involve treating the open system that is social reality as a closed one, they do not merely simplify reality; they distort it. It is therefore hardly surprising, Lawson concludes, that models fail to provide insights into real-world causal relations.

Historians of economic thought have long noted the parallels between mathematical models of the economy and the mathematical models used in physics in the late nineteenth century. In his sweeping overview of the relationships between economics and the natural sciences, Philip Mirowski (Chapter 4) notes that much of the discussion has focused on methodological issues, such as potential explanatory isomorphisms, the uses of natural metaphors and the problem of scientism. But the connection between the two domains runs much deeper: it is epistemic and ontological. All Western discussions of the economy since the fifteenth century have been imbued with notions of nature, and the two notions have been jointly defining one another for centuries. As a result, Mirowski argues, claims that economics underwent a process of denaturalization in the second half of the nineteenth century following the breakdown of the theological conception of nature are incorrect. To fit the new physical conception of nature, economics was re-natured. Not only did appropriations from the natural sciences continue over the course of the twentieth century, but we have been living through yet another bout of re-naturing the economy with the rise of ecology in the recent past.

While many economists were fascinated with the mathematical elegance of physics at the turn of the twentieth century, others, most notably Thorstein Veblen, turned to Darwinian evolutionary ideas. Veblen, as Charles Camic (Chapter 5) observes, is commonly depicted as a marginal, socially detached academic recluse, whose theoretical work was produced in isolation from his colleagues and students. This stereotype involves the separation of Veblen's teaching and service activities from his ideas, as if the latter developed, or could have developed, without the influence of the former. By contrast, Camic shows that Veblen was hardly an academic recluse, and that his various teaching and service responsibilities at the University of Chicago (1892–1906) contributed to the development of his ideas. Veblen's role as the managing editor of the *Journal of Political Economy*, his two terms on the Council of the American Economic Association, his work as a translator and his heavy involvement with teaching led him to interact on a practically daily basis with his professional colleagues and students around many of the very same issues he was writing about.

Veblen famously rejected the neoclassical view of the individual as a lightning calculator of pleasures and pains, and associated institutions with settled habits of thought and action. In line with his commitment to Veblenian thinking and agency-structure reasoning, Hodgson rejects the subjectivist conception of individuals as collections of preferences and views individuals in objectivist terms as distinguishable sets of habits that co-evolve with cumulative change in social structures and institutions. John

Davis (Chapter 6) draws on these ideas to propose an account of reflexive economic agents that explains choice behaviour in a cumulative causation world, in which both linear causation and circular feedback effects matter. Reflexive agents know that their actions can influence their habits and alter the basis for future action, and therefore form expectations about the consequences of their actions not only on the external world but also on themselves. But reflexive agents are reference-dependent and biased towards the habits they already have, Davis argues, with the implication that they are not only distinguishable but also re-identifiable over time.

With the stage thus set, the discussion in Part III turns to positioning and engaging with Hodgson's contributions to institutional economics. Hodgson's long-standing critique of the methodological individualism characteristic of both the mainstream and the new institutional economics revolves around the view that the economy is an open, evolving system in which actors and structures are mutually constituted. This position, as John Groenewegen (Chapter 7) recalls, was instrumental in the formation of the European Association for Evolutionary Political Economy in 1988. It also runs through Hodgson's defence of the habit-based conception of agency characteristic of the original institutional economics and his various non-contractual explanations of the firm. However, according to Groenewegen, the boundaries between the original and the new institutional economics have more recently become blurred, to the point that it is no longer useful to differentiate between the two. Instead, institutional economics can be usefully seen as belonging to a continuum along which different schools of thought are more complements than substitutes. This opens the door for multiple opportunities for mutual learning.

Hodgson's recurring critique of the new institutional economics, Claude Ménard (Chapter 8) argues, serves the purpose of rehabilitating Veblenian institutional economics. However, although there are differences between Hodgson's positions and the institutional economics associated with Ronald Coase, Douglass North and Oliver Williamson, a comparison of Hodgson's definitions of institutions, markets and firms with those developed recently in the Coase–North–Williamson tradition reveals that these have more to do with Hodgson's strategy of differentiation than with fundamental disagreements on substance. Divergences are more substantial when it comes to other issues that new institutionalists consider important but that Hodgson either rejects or overlooks. In particular, Ménard observes, Hodgson's rejection of the concept of hybrid forms and his neglect of intermediate institutions that link the general rules of the game and the agents and organizations operating within these rules produce a somewhat amputated picture of how modern capitalist systems work.

Among Hodgson's several contributions to the theory of the firm, his insistence on the importance of the legal nature of the firm stands out. This is valuable, as Simon Deakin (Chapter 9) explains, because the study of the patterns of legal thought can reveal aspects of economic institutions that are otherwise hard to grasp. The concepts lawyers use to denote the firm in corporate law or employment law, for example, disclose something about its economic nature. But they also reveal something about the nature of law itself. The evolution of legal forms such as the corporation, Deakin argues, is the result of two conflicting pressures: on the one hand, the need to adjust the law to a changing external socio-economic environment, and on the other, the need to maintain the internal consistency of legal thought. Hence the gradual recognition of various forms of entity shielding and the assignment of legal personality to durable, self-governing associational arrangements was not only a historically specific development associated with the long process of industrialization. It was also driven by law's need to maintain internal, self-referential consistency, without which the legal system would dissolve into a mass of undifferentiated commands.

The nature of the corporation is one of oldest controversies in legal theory. Like many scholars in the past, critics of the contractual theory of the corporation developed in the Coasean law and economics tradition argue that corporations are not simply creatures of contract. However, as Richard Langlois (Chapter 10) argues, the fact that the corporation cannot be constructed solely out of voluntary contract is compatible with the claim that it is ultimately nothing but a form of cooperation among rights-holding individuals. To defend this bottom-up position, Langlois shifts attention from contracts to rights, and specifically to the distinction between rights *in personam*, which are created by contract, and rights *in rem*, which underpin property and are created by law. Like property, the corporate entity is an architectural component of abstract law, as opposed to a concession of the state. Corporations are mechanisms through which owners exercise their rights, with the implication that corporations do not have any rights of their own. That owners retain residual control rights over assets shows that entity shielding achieved by corporate law does not diminish a corporation's owners' rights *in rem*.

Hodgson has criticized the economics of property rights, associated among others with Armen Alchian, on the grounds that it fails to distinguish property from possession. From a similar point of view, Ugo Pagano (Chapter 11) rejects the view that private property evolved from the struggle for possession. Absent a collective definition and enforcement of what is considered legitimate possession, this conclusion, famous results from evolutionary game theory notwithstanding, is unwarranted. Pagano combines John Stuart Mill's theory of liberty and Wesley Newcomb

Hohfeld's analysis of legal rights to show that private property is a special case of human rights and liberties, more suitably explained by sexual and group selection, with the implication that uncontested possession evolves from property rights rather than the reverse. Property rights can generate uncontested possession of rival goods but also artificially limit the potentially universal possession of non-rival goods. The latter aspect underpins modern capitalism and the so-called knowledge economy, where intellectual property rights to knowledge can become an obstacle to economic development by limiting liberty and implying high transaction costs.

Hodgson has been concerned not only with key institutions of capitalism, including property, markets and firms, but also with the nature of capitalism itself. In recent work, he has specified a six-condition definition of capitalism. Relying on the income per capita statistics made available in recent years, Andrew Tylecote (Chapter 12) examines what causes the six conditions to appear and which constraining factors might prevent the sustained growth that is meant to follow. The history of two transformations into capitalism that did not quite make it is particularly instructive. The first is the case of the Low Countries, which by the mid-seventeenth century had met all six conditions, but nonetheless stagnated during the eighteenth century, contrary to Britain, where income per capita growth expanded rapidly once the conditions were met. The second is the case of Ming China, where growth failed to manifest despite being, by some estimates, close to economic take-off at around that time. The comparison reveals, Tylecote concludes, that the failure to build a unified home market can be fatal.

Overall, according to Giovanni Dosi, Luigi Marengo and Alessandro Nuvolari (Chapter 13), one finds two explanatory strategies in institutional economics: either institutions are derived from the choices of rational individuals with well-defined preferences, or preferences and indeed the very idea of rationality are derived from institutions. On the first view, institutions are crafted to perform coordinating and governance functions that enhance efficiency by mitigating contracting problems. On the latter view, institutions reproduce path-dependently in a partly self-organizing process, irrespective of efficiency considerations. These differences translate into contrasting views of such key concepts as hierarchy, power, knowledge and learning in organizations. Given that each type of explanation contains a grain of truth, the challenge is to connect them. In line with empirical evidence regarding the influence of institutional arrangements on techno-economic change, Dosi, Marengo and Nuvolari call for an ambitious research programme that addresses the co-evolution of organizations, forms of rationality, preferences and technologies.

The chapters comprising Part IV discuss some of the themes that run

through Hodgson's contributions to evolutionary economics, starting with his portrayal of Alfred Marshall as an evolutionist influenced more by Herbert Spencer than by Charles Darwin. Without denying Spencer's role, Stanley Metcalfe (Chapter 14) suggests that there is a Darwinian dimension in Marshall's evolutionary thinking. The idea that a theory of evolution requires variety generation and variety elimination, Metcalfe elaborates, is reflected in Marshall's organic account of the process of firm differentiation through division of labour and integration through organization, and his selectionist account of the competitive struggle for existence. At the heart of this process lies the widely misunderstood concept of the representative firm, which captures the changing composition of competitors within an industry population, and is itself constantly changing. Capitalism, from Marshall's perspective, is never at rest because the economically valuable knowledge upon which it is based is not, and cannot be, at rest. Fundamentally, economic change rests on epistemic foundations because the modern business world is organized to generate and apply new knowledge.

Economists since Marshall have drawn on the analogy between market competition and the Darwinian struggle for existence. Hodgson and other modern evolutionary economists have gone beyond this analogy to suggest that the ontological similarities between evolution in economics and evolution in nature warrant a Generalized Darwinism. This perspective integrates Darwin's notions of survival selection and group selection into a theory of multi-level selection. In the process, as J.W. Stoelhorst (Chapter 15) explains, the idea of sexual selection, which Darwin used to explain why traits that are wasteful from the point of view of survival selection may nonetheless evolve, has been overlooked. Drawing on developments in evolutionary biology, Stoelhorst shows that the causal logic of sexual selection is relevant within the group selection context of the firm, and leads to the rejection of Milton Friedman's famous claim that selection forces in the market force firms to behave as if they were maximizing profits. Specifically, it is likely that the bottom-up process of mutual preference selection between firms and their employees results in organizational cultures that overshoot their functionality in terms of efficiency in product markets.

Multi-level selection theories imply viewing groups as units of selection, which raises a number of ontological and methodological questions. Friedrich Hayek grappled with these issues. Indeed, Hayek's recognition that group selection plays an important role in cultural evolution, understood as the propagation of practices or rules of conduct, relies on the idea of downward causation, which seems to conflict with his defence of methodological individualism. Viktor Vanberg (Chapter 16)

proposes an interpretation of Hayek's thought that resolves this tension. Since the explanatory power of group selection hinges on the specification of a mechanism that translates group advantages into incentives for the required individual behaviour, the question is how higher levels of selection impose constraints on lower levels of selection. At every level of social organization, Vanberg argues, constitutional choices that are shaped by external competition define the rules of internal competition, down to the level of individual actions. Upward causation, originating in individual actions, remains the ultimate driving force in the hierarchy of social organizational levels.

Hodgson's belief that economic explanations must rest on a combination of general and specific theories underpins his defence of Generalized Darwinism: the Darwinian principles of variation, inheritance and selection are necessary, but insufficient, in any analysis of evolving complex systems. Jack Vromen (Chapter 17) shows this claim to be problematic: Generalized Darwinism is not only insufficient, it is sometimes also unnecessary. The argument relies on the distinction between ultimate explanations in terms of natural selection, which explain the distribution of certain patterns of behaviour within a population, and proximate explanations, which focus on how the interplay of external and internal factors causes individuals within the population to behave in certain ways. While the two types of explanation can and should mutually inform each other, they are both equally legitimate. Fundamentally, for Vromen, evolutionary explanations are ill-suited to explain certain kinds of human motivation and behaviour. To understand morality and routines, for example, non-evolutionary proximate explanations are required.

For Hodgson, routines are dispositions for certain collective behaviours, as opposed to actual collective behaviours, in the same way that habits are not individual behaviour but dispositions to behave in certain ways. Habits have temporal and ontological priority over intention and reason, and play a key role in the mutual constitution of individuals and structures. In effect, institutions influence individual behaviour by influencing individuals' habits which, when shared in an organizational context, grow into routines. Markus Becker (Chapter 18) performs a citation analysis on business and management journals in order to assess the impact of these ideas. The analysis reveals not only a great interest among management scholars in Hodgson's work on routines, firm competences and evolution, but also the existence of significant untapped opportunities for advancing management theory. Specifically, Becker contends, a habit-based conception of human agency fits phenomena involving individual-level or organization-level behavioural inertia. It therefore offers a basis for attempts to change individual behaviour or induce organizational change, which is different

from relying on incentives or information that merely alter objective or perceived costs and benefits.

Although interest in industry dynamics, organizational ecology and other evolutionary perspectives has grown among management scholars, particularly in the strategy and organizations literatures, the nature and operation of the selection processes at work have received very little attention. Thorbjørn Knudsen (Chapter 19) proposes a simple model of organizational evolution designed to examine how selection processes influence the evolution of organizational productivity and fitness. A series of experiments illustrate how the nature of the selection process and the level of selection pressure influence the population-wide level of fitness and productivity over time. The simulation results show that the distinction between subset selection and successor selection has important consequences. Furthermore, the results reveal that it is crucial to consider how selection operates on actual phenotypic properties while identifying the underlying genotypic properties that are transmitted in processes of organizational replication. Researchers, Knudsen concludes, should carefully consider how these processes and properties are expressed in populations of social organizations.

Modern evolutionary economics, write Kurt Dopfer and Jason Potts (Chapter 20), is at its best in simulation or theoretical modelling, or in devising broad theoretical schemes. Yet it remains empirically weak because the basic elements of an evolutionary approach – behaviours, habits, routines, technologies and institutions – are neither naturally nor easily quantitative, and unlike the market outcomes studied in the neoclassical framework, do not generate data in the process of their operations. Given its concern with qualitative phenomena, most notably the ideas, knowledge and generic rules that an economic order is made of, Dopfer and Potts argue that the principal methodological challenge facing evolutionary economics as a science requires the translation of theoretical constructs into empirical measures. This endeavour can be usefully organized around the micro-meso-macro analytical framework in which the basic empirical measures are the various dimensions of a meso unit: heterogeneity, variety, frequency. The generic taxonomy of orders, classes and phases of a rule provides the architecture for developing a comprehensive map of the measure space of an evolving economy.

The volume concludes, in Part V, with a conversation with Hodgson. The interviews we conducted (Chapter 21) cover many, but by no means all, of the important topics addressed by the other contributors. The conversation clarifies some of the main threads that run through Hodgson's work, and supplements many of the points made in preceding chapters. Among the topics addressed are the problems with the neoclassical utility

maximization framework, the necessity to include moral motivations in a theory of human behaviour, and the requirement that such a theory be consistent with evidence from evolutionary biology and psychology. These considerations lead to a distinction between different kinds of, and reasons for, rule-following behaviour. The discussion moves on to address key aspects of Hodgson's methodology, and then turns to his assessment of the present position of heterodox economics. We close with an overview of the strategy of the *Journal of Institutional Economics* and interdisciplinary institutional research more generally.

1.3 CONCLUDING COMMENTS

The chapters in this *Festschrift* cover many of the important topics in economic methodology, institutional economics and evolutionary economics that Hodgson has contributed to.³ Taken together, they also reveal key features of the 'Hodgson brand'. These recognizable aspects of Hodgson's writing include his firm commitment to pluralism and interdisciplinarity, his capacity to integrate insights from the social sciences and the natural sciences, and his insistence that the constructive dialogue among researchers, both within and across disciplinary boundaries, is seriously impaired by the absence of linguistic precision and clear (taxonomic) definitions. Incisive and comprehensive accounts of the history of the concepts he engages with, and the breadth of the literature thus covered, are also characteristic of Hodgson's work. Like many others, we have been profoundly influenced by Hodgson, and owe him a debt of gratitude.⁴ It is an honour to count him as a mentor and a friend.

NOTES

1. In addition to 19 monographs (including two forthcoming books) and 11 edited volumes, Hodgson has published over 350 articles in journals and books. The full list can be consulted at <https://www.geoffreymhodgson.uk>. According to Google Scholar, Hodgson's work has attracted over 37,000 citations, including an average of over 2,300 in each of the past ten years.
2. Hodgson played a pivotal role in the formation of the European Association for Evolutionary Political Economy (EAEPE) in 1988 and the World Interdisciplinary Network for Institutional Research (WINIR) in 2013. He established the *Journal of Institutional Economics* through EAEPE in 2004 and has served as its Editor-in-Chief ever since. Since the publication of the first issue in 2005, the journal has grown in visibility and prominence. It is currently sponsored by both EAEPE and WINIR, as well as by the Society for the Advancement of Socio-Economics (SASE).
3. Given the breadth of Hodgson's contributions, it is hardly surprising that a number of themes that have mattered in his career are absent in this volume. The most important

missing theme revolves around the place of Karl Marx in Hodgson's thought, and includes topics such as socialism, planning and utopia.

4. We both had the good fortune of being, first, Hodgson's PhD students and, second, his colleagues at the University of Hertfordshire.