
Laurence S. Moss

Babson College

moss@babson.edu


Contents

1. Preface
3. Mainstream Economics Ignores Custom and Institutions
4. History of Economic Thought
5. Organicism and the Future of Economics
6. Conclusion

1. Preface

Alfred Marshall suggested over a century ago that in the "more advanced stages of economics" the Mecca of the economist is economic biology. According to Marshall, ordinary static concepts (such as "equilibrium") change in meaning and acquire a definite "biological tone" when economists focus their attention to the historical development of economic institutions. Such economists study the balance between the "organic forces of life and decay" rather than the balancing of "crude forces" such as supply and demand.

Marshall's suggestion that economists change their perspective from physical to biological conceptions was not without influence in the history of economics. Those who followed Marshall's suggestion and made the recommended switch to "growth analysis" in economics, such as Edith Penrose did in 1959, had significant influence on the development of formal economic theory during the 1960s as well as some part in shaping the curriculum of the modern business school, with its life-cycle conceptions of product and process development (1). More recently still, Brian Loasby, lamenting the switch to formalistic coherence theoretical models from the study of "co-ordination (in) real economies", has proposed a return to Marshall's Mecca (2).

Marshall's prescient ideas have not received the recognition they deserve by historians of economics. Unfortunately, I was disappointed to discover that the book under review is no exception (3). Surprisingly, Hodgson takes no notice whatsoever of this post-Marshallian literature: he incorrectly concludes that "later Marshallians neglected the biological aspects of Marshall's thinking, and abandoned any attempt to recast economics along biological or evolutionary lines" (p. 107), and asserts that the "dialogue between economics and biology had virtually ceased" after Marshall died in 1924 (p. 107).

In *Economics and Evolution*, Hodgson has more exciting objectives in mind than merely commenting on post-Marshallian thought. He is determined to save economics from increasing formalism and sterility by bringing life back into economics. Hodgson's criticism of mainstream economics is largely the same one made familiar by the so-called institutionalist
school of economic writers, of whom Hodgson appears to be a fellow-traveler (4). Institutionalists complain that the intentionally non-evolutionary approach of modern economists, who wrongfully banish "biological thinking to the fringes of economic science" (p. 108), has brought about a sterile theory (5). Hodgson agrees with this verdict.

Hodgson finds his Mecca in Darwinian biology and that is what this book is all about. In the author's words, he has come to help mainstream economists recognize that the "mechanistic and utilitarian foundations of economic theory must be replaced (and) it is upon these reforming convictions that we should turn to the (Darwinian) biological metaphor to help us build an alternative economics" (p. 267). By "Darwinian biology" Hodgson does not mean the biology of Marshall. Marshall's sorties into biology bore the mark of Herbert Spencer whose notions of progressive social development turned out to be inconsistent with Darwinian reasoning. Modern biological reasoning - the reasoning that informs Hodgson's book - is about evolutionary process, the errors as well as the successes, proceeding irreversibly along time's arrow with no teleological goal in sight. There is no tendency or move toward partial equilibrium. There is no tendency or move toward general equilibrium. On the contrary, there is only adjustment without social progress. According to Hodgson, "in the biological and the economic context, evolution is not a grand optimizer, or a perfectionist. Evolution is awesome and inspiring, but also messy, stupid and tragic" (p. 212).

In addition, economists must learn that they cannot dispense with the troublesome long-run consequences of the second law of thermodynamics. That law reassures us that no matter how religiously we believe in progress, we are indeed sinking into disorder. The humbling implications of modern biological metaphors may disheaten mainstream economists and shake their faith in material progress, but they may also have the salutary effect of sensitizing the profession to the "limits to the natural resources available and to the tolerances of the ecosystems on the planet" (p. 34).

According to Hodgson, the economics profession is actively shopping for an escape from the baggage bequeathed by the neoclassical research program. A change in perspective from static equilibrium to Darwinian biology will not constitute progress in economics, since scientific progress cannot exist for a thoroughgoing Darwinian evolutionist. The switch will merely end the crisis.

The particular crisis that Hodgson has in mind is the one referred to in the title of a collection of essays edited by Daniel Bell and Irving Kristol (B&K) in 1981 (6). In this book, major economists complain of The Crisis in Economic Theory (7). Hodgson does not define the crisis with any degree of precision. My own reading of B&K suggests that the economists who contributed to the volume were not of one mind about how the alleged crisis ought to be defined. Despite this lack of concensus, Hodgson's book can best be appreciated as an extended essay designed to persuade his economic colleagues that the best prospects for escaping from the B&K crisis in economics is to set sail into the main currents of biological research. Two aspects of Hodgson's bill of particular indictments directed against mainstream neoclassical economics make this purpose clear.


According to Hodgson, the current mechanistic structure of economics is an unfortunate inheritance of the Cartesian/Newtonian world view, which shunted aside Aristotle's legacy and the organicist medieval tradition for a sharp return to the naked atomism of Leucippus and Democritus. The result is contemporary neoclassical economics with all of its defects (p. 234). The greatest fallacy of the mechanists is that the main features of any structure can be accounted for or explained by the characteristics of the elements that make up that structure. Indeed, this has long been the research strategy of general equilibrium reasoning. In most if not all cases, economic structures are made up of individual actors - the "agents" - and it is common in economics to explain the structure by describing the interactions of the individuals.
Hodgson argues that neoclassicals have closed their eyes to a second possibility, which is that "society constitutes individuals as much as individuals constitute society" (pp. 10-11). Here Hodgson draws insights from a variety of writers and most importantly from the works of Nicholas Georgescu-Roegen (GR). The chemical doctrine, as GR described it, insists that economic processes, like chemical compounds, can be decomposed into component parts and that the characteristics of the economic process can always be related back to the properties of the acting individuals. GR vigorously disagreed with the chemical doctrine and pointed out, in a telling example, that "although every inch of the devastation left by a mob could be traced back to an act of some particular individual, an individual by himself can never display the peculiar properties of a mob" (p. 328). He called his commitment to a biological conception "organismic epistemology" (p. 327). Hodgson's commentary resembles that of GR especially in statements like this one: "organicism denies that individuals may be treated as elemental or immutable building blocks of analysis" (p. 11). According to Hodgson, organicism, long discredited among mainstream economists, should be immediately rehabilitated. Why should economists take up this charge? They should do it to enhance the relevance of economic conceptual analysis to real-world developments and end the awful crisis.

Organicist reasoning will, along with other reforms, finally pound the last coffin nail into the casket of methodological individualism (M-I). Hodgson dislikes M-I because, in his mind, it makes a genuinely evolutionary economics impossible and allegedly excludes from economics the organicist notions which so badly need to be restored. M-I holds that all explanations about macroeconomic phenomena should be (in principle) reducible to statements about individual action, since in society it is only individuals that act. It leads to bald rational calculations of decisionmaking individual agents and misdirects attention from the important role that habit or custom plays in the maintenance and functioning of any complex order.

Indeed, modern biology has increasingly taken notice of the central role culture plays in human evolution. Since the crisis in economic theory stems in part from the rational-choice or utility-maximization model of valuation, which has removed the flesh-and-blood individual from modern economics, the restoration of life requires that we acknowledge the importance of habit and custom. Hodgson is quite explicit about the strategy involved in this book: "this work is to attempt to use biology both to help counter the mechanistic metaphor and to provide some basis for the future development of economic science" (p. 24). This brings us to the second of Hodgson's indictments of mainstream economic thinking.

3. Mainstream Economics Ignores Custom and Institutions

According to Hodgson, the concept of economic time used by economists is sorrowfully out of date with the understanding of time that informs both biology and physics. For example, sophomores are taught that when demand increases (that is, "shifts to the right"), price and quantity-traded will increase; when demand decreases back to where it rested originally (that is, "shifts to the left") price and quantity-traded will drop back to their respective original values. The fact that learning occurs whenever time passes makes the return to the status quo most unlikely (8). Economics should adopt a concept of time that treats economic activity as a process-in-time where what happens cannot be reversed.

According to Hodgson, a more enriched understanding of the implications of passing time would open the door to an economics in which individuals can do creative things. The implication of this theoretical insight is that an economy will never settle down to a position of final equilibrium. Change is unending. Economists should learn from modern biologists what has always been implied by Darwin's theory of evolution. Unless variation occurs constantly, natural selection will "consume its own fuel" and come to an abrupt halt (p. 45). What, then, accounts for the unending supply of variations? The human ability to be creative and produce novel situations and results. The rational-calculation model of homo economicus has ignored this most vital and distinctive feature of human action. This is another reason why
Orthodox economics, especially in the extreme variant of the Mises-Rothbard school, is stuck in a rut of typological thinking. In other words, economic analysis identifies selected categories of action and claims that variation on these archetypes can be found in every civilization past, present and future. This is not modern biological thinking, because in biology a species is only a distribution of characteristics - not a final Platonic form. Over time that distribution of characteristics changes depending on the selection that takes place by way of sexual reproduction. There are no archetype species only distributions of characteristics. Economists have yet to commit to Darwinian methods of reasoning and when they do they will dispense with typological methods of thinking altogether.

According to Hodgson, in an effort to “ape nineteenth century physics” economics became “progressively more reductionist and formalistic.” Economists abstract from cultural institutions which themselves are (or include) the rules and procedures that govern economic transactions. “The science of biology has had to face up to problems of the analysis of complex systems and (biology) seems to offer a tentative way out.” Modern biology has changed in dramatic ways since Marshall declared it the Mecca of economists more than one hundred years ago. Contemporary economists should turn back to the biological metaphor to help us build an alternative economics and finally escape from the crisis in economic theory.

4. History of Economic Thought

Parts II and III of Hodgson's book offer an interpretation of a selected group of economists that gives special attention to how and in what ways they used biological metaphors and reasoning in pursuit of economic analysis. Apparently, Hodgson believes that if he can put a finger on the exact point in the application of biological reasoning to economics where previous writers got stuck, then he can warn contemporary economists not to make the same error.

I read Hodgson as claiming that the writers he examines fall into two broad categories. First, there are the pseudo-biologists who claim that they are linking economic analysis to biological metaphors but are in fact not doing that at all. Second, there are the true biologists who see the light and head toward it, only to become stymied for one reason or another and therefore never to liberate economics from its sinking concrete block of formalistic equilibrium modeling.

The pseudo-biologists typically use evolutionary rhetoric but, as is quite clear from the large corpus of writings in philosophy of biology, the term evolution is often applied to processes that are held to unfold toward a predetermined outcome and then remain unchanged when a stable point has been reached. A large number of economic writers describe their exercises in unfolding determinism as “evolutionary”. Unfortunately, despite their claims they do not use any bone fide methods of Darwinian reasoning. In short, these economists are pseudo-biologists.

The way to separate pseudo-biology from real biology is to ask whether the so-called evolutionary market process is all the time making its way toward some final resting place. If the answer were “yes” then the approach is pseudo-biological and not the real thing. The real biology of Darwin entailed a process that is anti-teleological, a sequence of events that does not (cannot) reach a final equilibrium state and in no way guarantees historical perfection. The pseudo-biologists include most notably Herbert Spencer, whose evolutionary analysis had an enormous influence on economics but fell far short of anticipating and, later, of adapting Darwin's ideas about selection and descent.

Spencer may have recognized that holistic entities interact but this recognition is, according to Hodgson, hardly enough to qualify him as an organicist. In the end, Spencer is
branded an atomist and not an organicist. For Hodgson, as I have already remarked, atomists are the “bad guys” of methodology because they support mechanism and individualism and by implication they promote and perpetuate the B&K crisis in economics. Spencer's celebrated idea that the laws of society move us from a more homogeneous to a heterogeneous state of affairs, and therefore make social arrangements better and guarantee progress, is anti-Darwinian. Darwinian evolution is one of marginal adjustments via natural selection to a constant parade of what might be termed “evolutionary errors” (p. 95). For a thoroughgoing Darwinian there is constant movement and constant adjustment but no progress, just an irreversible process in historical time and most decidedly no movement toward heterogeneity at all. Spencer is not a Darwinian because in Spencer's mind evolution proceeds in predictable directions (10).

As Hodgson applies these same ideas to other economists, we learn that Karl Marx and Friedrich Engels offered an evolutionary theory of social development that did not benefit from Darwinian analysis at all. Much the same is to be said of Alfred Marshall. Surely, it has been established at least since 1990 that the main influence on Marshall was Spencer and not Darwin (11). Still there are places in Marshall's Principles where the word organic appears, suggesting that the battle against mechanism has on its side one of the most influential economists of all time. This, however, is an illusion. Hodgson points out that Marshall used the term to mean that “everything depends on everything else”; this is not biological organicism but simple atomistic/mechanistic reasoning (p. 101). Even the “representative firm” is presented as a retrogressive idea back to the essentialist typological forms that crowd the landscape of pre-Darwinian biology (12).

American institutionalists have long benefitted from the existence of the Austrian school of economics, with its roots in Carl Menger's writings and its subsequent line of anti-organicist writers. The Austrian writers have served as whipping boys for the institutionalist critique against atomistic individualism and extreme rational calculation. Yet when all is said and done, it is hard to ignore that the founder of the Austrian school, Carl Menger, had quite a bit to say about the development of institutions and how they function to help make markets more efficient. Menger's classic account of the origin of money is a case in point (13). Hodgson goes about the task of destroying the claim that Menger-was-an-evolutionist with much care and dedication. First of all, Menger's account of how money arises as the unintended consequence of economizing behavior is flawed. Spontaneous evolution has not accounted for those supporting institutions that are needed to help maintain the quality of the money commodity from false measure (the private coin clippers and other counterfeiters). Second, Menger's account of the origin of money has the money-institution reaching a final end-state or equilibrium. At some point the money commodity “has been selected by the community” and that is the end of the evolutionary story. The idea that the evolutionary process ends or reaches a state of rest is anti-Darwinian. Menger, like Marshall, fails to make the grade as a Darwinian evolutionist. Despite appearances to the contrary, both Menger and Marshall offered only pseudo-biological analysis, and that is bad economics.

Joseph Schumpeter fares no better than Menger and Marshall. Schumpeter's main interest was in reconciling static equilibrium (Walrasian economics) with dynamic change (p. 140). While Hodgson refers to Schumpeter's scientific efforts toward this end as “extraordinary”, they were in the end “unsuccessful” (p. 140). Even more startling is Hodgson's suggestion that a flourishing international professional association called "The Schumpeter Society" has been misnamed! (14) Hodgson concluded that even the study of “technical change, in the strict sense of the development of new technological knowledge and possibilities, and the diffusion of knowledge are almost wholly absent from (Schumpeter's) exposition” (p. 150). In addition, there is nothing in Schumpeter about the selection of habits and customs and their contribution to the survival of collective notions such as the “economic system”. If Hodgson were correct, then perhaps a better name for the Schumpeter Society might be the "Thorstein Veblen Society" - for no other reason than that Veblen, who built his theories on the American pragmatic tradition, seemed to get his Darwinian biology correct. It turns out that Thorstein Veblen is the hero of Hodgson's book.
Veblen was the one economist who rose above the pack to pioneer the true beginning of Darwinian reasoning in economics. His legacy is the inspiration for Hodgson and others to complete the job left undone by Menger, Marshall, Schumpeter, and others. According to Hodgson, what attracted Veblen to Darwin was his method of examining "causal processes (in historical time), never ending and cumulative in nature, never reaching a state of equilibrium or rest..." (p. 129). Veblen's organizing idea for his writings may be simplified as follows:

institutions are constantly evolving, and they do so at different rates, and the results are discontinuities and disturbances of a most interesting sort (p. 131). Veblen's humorous accounts of the vestigial institutions of everyday life are reflections of this underlying Darwinian thinking (15).

Veblen was also quite clear about what it is that evolves, that is, the precise description of what exactly is selected by natural selection. The habits that characterize a culture are what are selected. The only twentieth-century economist to rival Veblen's achievement was Friedrich A. Hayek. Hayek is a member of the Austrian school with a lifetime of investment in equilibrium styles of research (16). He admitted his Mengerian origins and an interest in spontaneous social formations, and in his later writings he set forth a potpourri of ideas, including the notion of cultural evolution. The idea that culture is autonomous and that the rules and institutions of society themselves evolve was, in Hodgson's view, enough to prove that "Hayek's conception of evolution is clearly different from that (of) [...] Herbert Spencer..." (p. 162). But was Hayek's conception of evolution different enough to make him a Darwinian?

Hayek insisted that the theory of cultural evolution and biological evolution are, "although analogous in some important ways, hardly identical" (17). According to Hayek, habits and other rules of behavior are selected on the basis of their efficiency in promoting order within the group. This order promotes success over time. Elsewhere, especially in his scientific writings, Hayek adopted a form of functionalist reasoning. Having demonstrated how a custom or a rule can contribute to the maintenance of the group, Hayek often thought that he had explained why that rule existed (p. 171). This functionalist argument, which has a long history in biology and the social sciences, is justly criticized by Hodgson. Surely, Hayek had a responsibility to take the argument to the next step. Hayek must state the process by which such an advantageous rule or institution is sustained over time and not replaced by other rules. No such biological analysis ever appeared in Hayek's writings. Hayek got stuck.

Hodgson knows the reason why Hayek foundered in what started out to be a thoroughgoing organicist biology. Hayek got stuck because he could not let go of mechanism and methodological individualism and stubbornly adhered to these mainstream orthodoxies all his life. It is clear that Hayek considered the whole of economic theory to be nothing more than an "endeavor to reconstruct from regularities of the individual actions the character of the resulting order" (p. 161). Hayek's refusal to give up methodological individualism with its reductionist leaning explains why his shift into biology was such a failure (p. 166). To have successfully completed that shift - and Hayek came precisely close - he would have had to make the leap from atomistic individualism to group selection. The material on which evolutionary process operates must be the group and not the individual. According to Hodgson, Hayek failed because he could not follow his ideas to their inevitable logical consequence - organicism (18).

5. Organicism and the Future of Economics

Hodgson's mission is messianic. He wants to open economics to new patterns of explanation, including those now prevalent in biology, that adopt a non-atomistic ontology and reject reductionism (p. 251). Hodgson is convinced that a return to organicism in economics holds the promise of ending the B&K crisis. This reviewer is not so sure.
I have three arguments with Hodgson's proposal. First, I consider the purpose of economic reasoning to be that of making market phenomena intelligible in terms of human action. This view is consistent with at least one version of M-I that Hodgson may oppose. Hodgson considers only an extreme form of M-I, one that refuses to give any attention to organicist notions and insists that all terms be reduced to statements about human action before the terms can mount the stage of scientific explanation. Other forms are possible.

G. L. S. Shackle, one of the three economists to whom Hodgson's book is dedicated, may be of some relevance here (19). According to Shackle, the best economic reasoning can do is provide the scientist with some sense of "consistency, coherence (and) order" (20). An organicist approach that, for example, explained the different manner in which two societies handled the uncertainty associated with farming by referring to the cultural attitudes and ideas of each respective group seems to me a perfectly meaningful and interesting approach to aid in making sense of human action. If that approach were to demonstrate that one farming group would diminish in size while the other group would flourish, I would assume that one set of institutions is more able to provide for the future than the other. All of this seems perfectly intelligible to me because the individual decision maker is implicitly present in the explanation, that is, right behind the organicist curtain should I care to look. What is called organicist here is a rough short hand for a much broader explanation that could in principle be constructed about individuals, their plans, and their relative chances of success. A weaker version of methodological individualism - one that does not consist, always and for all terms and concepts in an explanation, only of statements about individuals and their actions and intentions - seems perfectly compatible with organicist notions (21). It is enough for this weaker version of M-I that such a translation be possible at least in principle for the explanation to be scientific.

Indeed, in Robert Boyd and Peter J. Richerson's Culture and the Evolutionary Process the non-economist authors relentlessly pursue a Darwinian approach (22). They combine the Darwinian evolution of cultural ideas with a version of M-I and ask whether some levels of explanation make any version of M-I destructive of scientific progress. Their answer rests on the proposition that any scientist wishing to analyze the distribution of cultural traits (habits perhaps) within a group or population of individuals must investigate "the forces of cultural evolution that act on members of the group" (23). "Culture", the authors point out, "is information capable of affecting individuals' phenotypes which they acquire from other conspecifics by teaching or imitation" (24). The study of culture does not rule out the study of individual action. Indeed, Boyd and Richerson adhere to the weaker form of M-I and do not see it as an obstacle at all to the study of Darwinian evolutionary processes. In their words:

One of our goals is to understand how the psychological processes that underlie both ordinary and social learning interact with other social processes to produce the observed distributions of cultural variants in groups. It should be kept in mind, however, that the theory presented in this book takes the cultural population (i.e., the group or society) as its fundamental unit. To understand the dynamics of the cultural evolution we must understand how interacting individuals affect the distribution of culturally transmitted variants in the population (25).

Hodgson is free to disagree with Boyd and Richerson but I doubt that he would deny their expert understanding of Darwinian biology. Indeed, Hodgson does make mention of the "dual inheritance" model of Boyd and Richerson but fails to recognize that they have reconciled cultural evolution (Veblen-style) with methodological individualism (p. 294).

My second argument with Hodgson concerns the deeper meaning of organicism. If by organicist explanation Hodgson means something entirely different from the general sense of the term, namely, explanations which contain references to culture and population characteristics but do not rule out human action, then I wonder if nonscientific concerns might indeed lie behind this indictment of mainstream economics. I am reminded of those distinctive "patterns of economic thought" that Karl Pribram identified in his remarkable History of Economic Reasoning. One of Pribram's patterns was termed the "organismic approach" (26).
Organismic explanations are those in which appeals are made to holistic notions such as national spirits, racial logic, and so on.

In 1853, Karl Knies rejected classical methods of reasoning in economics for an approach that held that each society could be understood as involving "a spirit of its own and [...] its specific social philosophy" (27). Knies was subsequently outdone by Gustav Schmoller, who defined a "national economy" as a real entity "which in spite of perpetual changes in its constituent parts has remained the same in its specific characteristic over years and centuries, and, as far as it has shown changes, has appeared as a 'developing organism'" (28). Schmoller and his students celebrated the fact that there was no "logical bridge" connecting collectives such as "the nation" or "the state" or the "national economy" with acting agents in market settings (29). These ideas - the ideas of the older organicist economists - led to the idea of the "world economy" as a collectivity of "mutually antagonistic economies" and the elaboration of protectionist policies consistent with this idea. According to Pribram, Othmar Spann's organicist theories attracted many adherents including Friedrich Gottl-Ottlilienfeld. Gottl-Ottlilienfeld explored the "fundamental principles of (the economy's) existence" and his approach, when elaborated by his disciples Joseph Back, Erich Egner, and Georg Weippert, was used to justify the totalitarian organization of the German Nazi economy (30).

Hodgson offers no reflections whatsoever on these organicist roots of the positions that he is presenting. Nor does he comment on the standard liberal criticism that organicist ideas, when cut loose of their moorings in individual action and calculation, have a tendency to lead their promoters away from political individualism and squarely into the arms of the political ideologues who espouse virulent nationalism and total war as the best method for "selecting out" inferior cultures (31).

Now I am quite aware that an important logical distinction needs to be made between ontological organicism and methodological organicism, on the one hand, and ontological individualism and methodological individualism on the other. Clearly, the fact that Hodgson advocates methodological organicism does not require that he support ontological organicism or organicism as a political system. Still, I suspect that, for sociological reasons that I do not fully understand, methodological organicism and a strong dislike for individualist political thought tend to be translated as "habits of thought". There is some evidence that Hodgson is not above making such simplifications and characterizations, and it manifests itself in his strong dislike for Hayek (32). It would not surprise me that such a political bias motivates research in economics and if my suspicion were true then Hodgson ends up, as did the proponents of the Germanic organicist tradition, a firm opponent of classical liberalism. Although Hodgson mentions not a word about these older traditions, I cannot ignore the totalitarian political traditions toward which such conceptions lead (33).

Finally, I am skeptical of Hodgson's conclusion. He promises that if economists accept the idea that natural selection occurs on different levels, and that whole societies can be selected for survival, including the entire market system, then the crisis in economics will pass. What Hodgson does not tell us is what traditional subfields of economics will look like if microeconomic theory goes "biological". Will the concept of efficiency have any role to play in the new economics once all notions of a final state of optimal allocation lose meaning? Will certain fiscal and redistributive policies be advocated because they promote cultural reproduction over ideas of individual fairness, or will notions of individual fairness be supported because they lead to reproductive success?

Perhaps it is too much to demand that Hodgson reinvent contemporary economics because his point is ultimately a methodological point. His book is simply about the fact that economists behave inconsistently when they acknowledge the importance of custom and habit and then insist that all economic explanations be tied to an understanding of how economizing agents conduct their affairs. As I explained, I am not convinced that the combination of the two is neither inconsistent nor destructive of traditional explanation in economics. For my own part I'll wait and see what Hodgson and others come up with by the
way of positive economic analysis, in the meanwhile enjoying the challenge of figuring out how any relationships that institutionalists discover can be made more comprehensible by relating holistic notions to individual behavior.

5. Conclusion

*Economics and Evolution* is challenging and worth reading. It demonstrates a rich but somewhat selective understanding of the history of economic thought, especially those sources that address the same concerns as the author does. As I remarked, I was especially disappointed that Hodgson did not take notice of Loasby's excellent discussion of essentially the same problems. Loasby's gloss on Marshall's notion of long-period equilibrium is worth noticing. It is in Loasby's words a form of "population equilibrium, which is sustained by continued change in the membership of that population (and includes a) tendency to variation (as) not only a chief cause of progress (but) an aid to stability in a changing environment (34). Loasby's neo-Marshallian construct seems every bit as Darwinian as Hodgson wants these concepts to be, while at the same time his analysis moves economics forward without repudiating the entire corpus of mainstream economics and without pushing us toward holistic romanticism the extremes of a revised Veblenian institutionalism. Unfortunately, as I have remarked earlier, Hodgson appears to be unaware of this literature.

The book is well written and contains an excellent index and large bibliography. For those mortgaging their neoclassical libraries to make that triumphant pilgrimage to the Mecca of economic biology, then Hodgson's book is a must read. For those reluctant to discard the entire legacy of economic theory and analysis, then Loasby's neo-Marshallian discussion is both shorter and more reassuring.

Notes


3. This and further citations to Hodgson's book will be given in the text as page references in parentheses.

4. I base this attribution on the fact that Geoffrey M. Hodgson is one of three editors (along with Warren J. SAMUELS and Marc R. TOOL) who developed the two-volume *Elgar Companion to Institutional and Evolutionary Economics* (Aldershot, England: Edward Elgar, 1994). Also Hodgson is quite prolific with entries appearing in journals and edited volumes with institutionalist themes restating one or more aspects of his thesis as summarized in this review; see for example, Richard W. ENGLAND, ed., *Evolutionary Concepts in Economics* (Ann Arbor, MI.: University of Michigan Press, 1994), 9-35.

5. Hodgson's book actually bears more than a family resemblance to Philip MIROWSKI's *Against Mechanism: Protecting Economics from Science* (Totowa, New Jersey: Rowman and Littlefield, I988). The two authors share a similar polemical zeal for exposing professional intransigence and stubborn pride. Mirowski's volume takes up the crusading of the earlier institutionalist economists against the mechanistic structure of economics that had been blithely appropriated from the physicists of the nineteenth century and turned into an orthodoxy
of scientific economics. Hodgson, like Mirowski, is at war against the pseudo-scientific character of mainstream economics, but whereas Mirowski finds salvation in modern anthropology, Hodgson prefers Darwinian biology.

6. According to Peter F. Drucker, "The present 'crisis in economics' is a failure of the basic assumptions of the paradigm, of the 'system,' rather than of this or that theory"; in Daniel BELL and Irving KRISTOL, eds., *The Crisis in Economic Theory* (New York: Basic Books, 1981), p. 9. Unfortunately, I cannot stop to ask how or in what ways the Hodgson proposals will address the several apparently unrelated descriptions of a "crisis" that can be located in the different essays.

7. *Ibid.*; other authors include Daniel Bell, Israel M. Kirzner, Frank Hahn, and Paul Davidson.

8. The shift in demand raised the equilibrium price and there was an upward movement along the "new" demand schedule. This movement corresponds to individuals substituting out of the relatively more expensive commodity. Substitutions often require the acquisition of new knowledge about those substitutions, making it questionable if not entirely illogical to assume that when the shift in demand reverses, individuals will return to their earlier consumption patterns. Stated this way, the problem is obviously one that Marshall would have felt quite comfortable discussing with his curves. One interpretation of the crisis in economic theory is that economists suddenly have become concerned about their inability to encompass learning and knowledge into their notions of static equilibrium. I do not believe that the problem was entirely unknown to those who originally propounded the use of the equilibrium approach, but again this is neither the time nor place for my thoughts on this interesting subject.


10. Hodgson effort to describe Spencer's contribution and trace its enormous influence on thinkers such as Marshall and Hayek is one of the specific and excellent treatments offered by this book.


12. Admittedly, Hodgson exhumes a flash or two of Darwinian-style biology in Marshall's writings. He points to Marshall's remarks about the special races of men that survive in the long run by promoting self-sacrifice on the part of individuals for the good of the group. Marshall's welcomed leap into organicism does not last, however, as he fails to explain what holds the free-riding non-altruistic agents in check in these societies (p. 104). There is a brief mention of custom, one that suggests a mechanism closer to Darwinian biology and that Hodgson approves of but not much is done with this insight. Hodgson, as I have mentioned, erroneously insisted that later Marshallians abandoned Marshallian biology for mechanism.


14. The Schumpeter Society was formed in 1986 and now boasts a half-dozen international meetings, four or five conference volumes, and several hundred members. Indeed, the August 1996 meeting is planned for Stockholm under the direction of President G. Eliasson, who is another economist familiar with evolutionary modeling techniques. All the members of the Schumpeter Society look to Schumpeter for ideas about "selectionist evolutionary modelling in economics" (p. 150). Pioneer investigators Richard R. Nelson and Sidney G. Winter, who have started a veritable subdiscipline modeling evolutionary economic change, credit their fundamental insights to none other than Schumpeter himself. So impressive is this commitment to Darwinian evolutionary modeling that Nelson's name appears as one of the
three economists (along with G-R and G.L. Shackle) to whom Hodgson's book is dedicated.


18. Viktor J. VANBERG has also considered the meaning and significance of "cultural evolution" in Hayek's writings and has reached results that contrast quite sharply with Hodgson's account; see *Rules and Choice in Economics* (London: Routledge, 1994), pp. 95-106.

19. The book is dedicated as follows, "To Nicholas Georgescu-Roegen and Richard R. Nelson, and to the memory of George L. S. Shackle, who moved us from equilibrium and showed us the way to evolution".


32. Hodgson goes to great lengths in his text to "slay the Hayek dragon" with excellent criticisms, but every so often along the way we encounter a few "cheap shots". For example, Hodgson claims that just about no economist got Darwinian biology straight. Despite his discovery of numerous alleged misunderstandings uncovered in thinker after thinker, only Hayek is accused of demonstrating a "casual attitude to sources and scholarship" (p. 160). Really? Why does Hayek have a "casual attitude" and not Schumpeter or Marshall? Could it be that Hayek's traditional methodological individualism leads in some way emotionally if not logically to a political individualism which Hodgson dislikes for personal or emotional
33. G. Schmoller is mentioned once in Hodgson's book (p. 291) and Knies, Gottl-Ottlilienfeld, et al., are not mentioned at all. According to Liah Greenfeld, "[...] when the collectivity is seen in unitary terms, it tends to assume the character of a collective individual possessed of a single will, and someone is bound to be its interpreter. The reification of a community introduces (or preserves) fundamental inequality between those of its few members who are qualified to interpret the collective will and the many who have no such qualifications; the select few dictate to the masses who must obey" Nationalism: Five Roads to Modernity (Cambridge, MA.: Harvard U. Press, 1992), p. 11.

34. Loasby, Equilibrium and Evolution, p. 57.