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On the evolution of Thorstein Veblen's evolutionary economics

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This article addresses the origins of Veblen's evolutionary economics, as announced in his 1898 essay 'Why is economics not an evolutionary science?'. Before 1897, and partly under the influence of C. Lloyd Morgan, Veblen rejected biological reductionism. Veblen's 1897 endorsement of a critique of Marxism by Max Lorenz shows that he found Karl Marx's account of human action too limiting. By this time, Veblen had also rejected the idea of either the individual or society as exclusive foundations for social science. Instead, he embraced an evolutionary framework of explanation along Darwinian lines, involving multiple levels of explanation and emergent properties.

'Evolutionary economics' is a vague and often ill-defined term. Although it does not necessarily imply the adoption of evolutionary metaphors from biology, there is a renewed interest by contemporary social scientists in such conceptual borrowings from the science of life. Two pioneers of modern evolutionary economics, Richard Nelson and Sidney Winter (1982), explicitly embraced biological analogies and since then their example has been widely followed. In contrast, in Western social science from the First World War to the 1970s, biological metaphors were rarely highlighted and the links between the socio-economic and the biotic worlds were denied (Degler, 1991; Hodgson, forthcoming).

Prior to that, from the 1880s to the early 1900s, there was a widespread opinion that social and biological phenomena were closely related in some manner. The view was often voiced that socio-economic phenomena were explicable in purely biological terms. However, there was a prolonged and unresolved controversy on the mechanisms of selection. On the one hand, the Lamarckians—of whom Herbert Spencer was a prominent example—believed that the inheritance of acquired characters was a general phenomenon. Ranged against them were the Darwinians, whose position at that time was weakened for lack of a clear understanding of the precise mechanisms of replication and transmission.

It was in this context that Thorstein Veblen made a series of contributions that established the possibility of an economics that would break from the static, teleological and individualistic limitations of preceding doctrine. Veblen had a sophisticated understanding of biological theory. The theory of socio-economic evolution that Veblen developed in the 1896–99 period is one theme of this article. I shall argue that in these few

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years Veblen's thought underwent a theoretical revolution, stimulated by a number of debates in biology and social theory. The aim of this paper is to understand the development of Veblen's thought up to his 1898 essay. It is shown how the 1898 essay forms both a foundation for a 'post-Darwinian' evolutionary economics and a powerful critique of mainstream economic thought.

Veblen has always been a controversial figure and his work has yielded many contrasting interpretations. It is not the purpose of this paper to review or evaluate all these renditions because we are concerned here principally with the development of his thought up to 1898. A detailed examination of the early texts shows that Veblen rejected both the individual and society as the ultimate unit of explanation in social science. Further, this did not lead principally to the search for a balance between these two extremes. Instead, Veblen embraced an evolutionary framework of explanation along Darwinian lines.

Sections 1 and 2 of this essay discuss the genesis of Veblen's evolutionary economics. It is argued that his combined interest both in Marxism and in the principles of evolutionary biology provided a crucial impetus. Section 3 examines the critique of conventional economics in Veblen's 1898 article. Section 4 concludes the essay.

1. Veblen's evolutionary economics and the critique of Marx

Veblen's intellectual revolution is attributed below to the years 1896–98. Before we address the nature of that revolution it is necessary to outline in brief some of the debates and issues that impinged on Veblen's thinking up to 1896.[1] Darwin's *Origin of Species* was published in 1859 and had made a substantial impact. But in the 1870–1900 period, in both America and Europe, Charles Darwin was rivalled in standing by Herbert Spencer. Darwinism was itself in eclipse in the scientific community and in precise terms its principles had little influence on biology or on 'evolutionist' social science (Bowler, 1983, 1988; Sanderson, 1990, pp. 28–30). Trained in physics and mathematics, and a brilliant polymath and synthesiser, Spencer made a significant contribution to nineteenth-century biology. Spencer's development of a 'synthetic philosophy' led to a prolific series of volumes consisting of an ambitious and highly influential synthesis of philosophy, psychology, sociology and other disciplines.[2]

Along with many other nineteenth-century theorists, Spencer's notion of natural causation meant that explanations of social phenomena were reduced to individual and then to biological terms. His Lamarckian conception of evolution operated ultimately in terms of biological characteristics. Consequently, the speed of the underlying evolution of the human organism constrained the pace of socio-economic development. Above all, social evolution depended on 'the rate of organic modification in human beings' (Spencer, 1880, p. 366). 'Respecting the essential causes of this social transformation, it must suffice to say that it results from certain general traits in human beings, joined with the influences of their varying circumstances' (Spencer, 1898, p. 53). For Spencer, explanations of socio-economic evolution had to be reduced largely and ultimately to changes in the human organisms that composed the population.

Hence, in modern parlance, Spencer was a biological reductionist. However, Spencer's

[1] For an overview of several of Veblen's intellectual antecedents, including Kant, Darwin, Spencer, Sumner, Peirce, James, Bellamy, Marx, Schmoller, Tylor, Lewis Morgan and others, see Edgell and Tilman (1989).

[2] Another leading economist who came under Spencer's spell was Marshall (1975, Vol. I, p. 109) who recollected how 'a saying of Spencer sent the blood rushing through the veins of those who a generation ago looked eagerly for each volume of his as it issued from the press'.

acceptance of the Lamarckian principle of acquired characteristics, meant to some degree that acquired habits could be passed on *biologically* through genetic inheritance to the next generation. In the Lamarckian scheme a more rapid evolution of the human organism was thus presumed to be possible.

Veblen first read Spencer in the 1870s when he was a student at Carleton College (Dorfman, 1934, p. 30). During the 1880s, and especially during his years at Yale University, Veblen came under the influence of William Graham Sumner, a prominent advocate of Spencerian evolutionary principles in the social sciences (Dorfman, 1934, pp. 43–6; Riesman, 1963, p. 19). Like many others, Veblen was absorbed by Spencer's and Sumner's ideas of socio-economic evolution (Edgell, 1975; Edgell and Tilman, 1989; Eff, 1989; Murphree, 1959).

To some degree, Veblen stood aloof from the technical controversies in biology over the possibilities or otherwise of Lamarckian-type inheritance. Initially, it was Spencer's anti-socialist politics that drew critical ink from his pen. Significantly, an early article published by Veblen in 1892 addressed Spencer, and was 'offered in the spirit of the disciple' (Veblen, 1919, p. 387). However, in this work Veblen began to reject many of Spencer's arguments, including that on the question of the feasibility of socialism.[1]

Veblen took up a post at the newly formed University of Chicago in 1892 and remained there 14 years, for what was the most creative period of his life. There he was influenced by sympathetic and stimulating colleagues, including the friend and leading biologist Jacques Loeb, by whom Veblen was informed of many up-to-date developments in biology. Loeb advocated a particularly mechanistic and reductionist version of Darwinian theory, arguing that all living phenomena could and should be ultimately explained in terms of their physical and chemical constituents. Crucially, Loeb 'appears to have helped give Veblen his life-long credo that only a social science shaped in the image of post-Darwinian biology could lay claim to being "scientific"' (Riesman, 1963, p. 19). At the same time, the influential biologist George Romanes insisted that Darwinism above all meant causal analysis. Instead of taxonomy and the accumulation of facts, 'causes or principles are the ultimate objects of scientific quest' (Romanes, 1893, Vol. I, p. 5).

Veblen had earlier been introduced to the writings of William James. The *Principles of Psychology* (1890) proved to be a permanent influence on Veblen and on a great number of thinkers at that time. Like Veblen's former teacher Charles Sanders Peirce, James was critical of Spencer, rejecting his perceived hedonistic utilitarianism in favour of an activist and reconstructive conception of human agency, founded on habits and instincts. Overall, Peirce and James sided with Darwin rather than Spencer, in part because of the deterministic and mechanistic aspects of Spencer's thought (Peirce, 1923, pp. 162–3; 1935, pp. 15–16; James, 1880). Although Peirce expressed reservations about some aspects of Darwinism, he looked favourably upon its central principles of variation and natural selection. For him, these were matters of ontology and logic. By contrast, Peirce rejected Spencer's mechanical philosophy for its failure to accommodate novelty and chance. Similarly, James saw the Darwinian principle of variation as support for a belief in the indeterminacy of the universe and the reality of human initiative. Both James and Peirce 'made use of Darwin to uncover spontaneity in nature' (Russett, 1976, p. 77). Although Veblen did not embrace all the radical consequences of these philosophical arguments, there is no doubt that the ideas of James and Peirce had a formative and

[1] In later writings Veblen went further in his critique of Spencer. For instance, he noted the incompatibility between Spencer's atomistic individualism and a genuinely evolutionary and post-Darwinian conception of socio-economic change (Veblen [1908], 1919, p. 192n). See Hodgson (1993, pp. 127–8).

fundamental influence upon him, establishing Darwinism not merely as a biological but also as a philosophical and methodological creed.[1]

Several related ideas coalesced together in Veblen's examination of Marxism. While editing the Chicago-based *Journal of Political Economy*, Veblen frequently reviewed works on socialism.[2] He was fluent in French and German and thus open to major Continental European influences and developments. In a review of Max Lorenz's *Die Marxistische Socialdemokratie*, Veblen noted that its author (Lorenz, 1896, p. 50) had found a crucial defect in Marxian theory. Veblen (1897B, p. 137) wrote:

> While the materialistic interpretation of history points out how social development goes on—by a class struggle that proceeds from maladjustment between economic structure and economic function—it is nowhere pointed out what is the operative force at work in the process. It denies that human discretion and effort seeking a better adjustment can furnish such a force, since it makes man the creature of circumstances. This defect reduces itself...to a misconception of human nature and of man's place in the social development. The materialistic theory conceives of man as exclusively a social being, who counts in the process solely as a medium for the transmission and expression of social laws and changes; whereas he is, in fact, also an individual, acting out his own life as such. Hereby is indicated not only the weakness of the materialistic theory, but also the means of remedying the defect pointed out. With the amendment so indicated, it becomes not only a theory of the method of social and economic change, but a theory of social process considered as a substantial unfolding of life as well.

Although the critical remarks of Lorenz and Veblen apply most of all to the less sophisticated Marxism prominent at around the end of the nineteenth century, Marx himself still lacked an adequate theory of human agency (Hodgson, 1996, 1999). Veblen developed his criticism of Marxism in later works, albeit retaining a strong Marxian influence in his thought (Veblen [1901A], 1919, pp. 313–4; [1906], 1919, p. 416; [1907], 1919, pp. 441–2).[3] Veblen rightly argued that the mere class position of an individual as a wage labourer or a capitalist tells us very little about the specific conceptions or habits of thought, and thereby the likely actions, of the individuals involved.[4] Individual interests, whatever they are, do not necessarily lead to accordant individual actions. As Veblen

[1] Note that the significant influence on Veblen of the psychologist and philosopher William McDougall came later, after the publication of his classic work (McDougall, 1908).

[2] The nature and subject matter of Veblen's publications in the period betray his preoccupation with socialist literature. According to the bibliographical list in Dorfman (1934, pp. 519ff.), Veblen published a total of 21 items in the years 1893–1897 inclusive. No less than 17 of these were book reviews. In turn, 11 of these 17 were reviews of books concerned primarily with socialism or Marxism. For details, see the Appendix. Incidentally, it is very doubtful if an output of this nature, preoccupation and orientation would be sufficient for Veblen to gain tenure in any department of any research-oriented university in the late twentieth century, despite the fact that Veblen's work in those five years led directly to a tremendous intellectual revolution in economics and social science.

[3] The later articles modify the argument slightly, first by recognising (in 1901) that the theory of human motivation in Marxism is largely one of rational appraisal of class interest. In 1906 and 1907 Veblen elaborates the point that the rationalistic conception of action does not itself explain how people acquire particular objectives, and also insists that what animates people is as much, or more, an outcome of habit and native propensity as of calculated material interest (Veblen, 1919, p. 441).

[4] Although Veblen did not see class position as determining ideology, he did suggest that the machine process of modern industrial society would help to inculcate mechanical habits of life and thought. Neverthless, this proposition was generally qualified. For instance, Veblen wrote: 'Of course, in no case and with no class does the discipline of the machine process mould the habits of life and thought fully into its own image. There is present in the human nature of all classes too large a residue of the propensities and aptitudes carried over from the past and working to a different result. The machine's régime has been of too short duration, strict as its discipline may be, and the body of inherited traits and traditions is too comprehensive and consistent to admit of anything more than a remote approach to such a consummation' (Veblen, 1904, pp. 309–10). This is far short of the technological determinism sometimes misleadingly attributed to Veblen.

(1919, p. 442) pointed out, and as sophisticated Marxists such as Antonio Gramsci (1971, pp. 163–5) later emphasised, the members of the working class could perceive their own salvation just as much in terms of patriotism or nationalism as in socialist revolution. The class position of an agent—exploiter or exploited—does not imply that that person will be impelled towards any particular view of reality or any particular pattern of action. Abram Harris (1932, p. 743) later suggested that what had been identified in Marx's writings was 'the weakest link in his chain of reasoning'.

Veblen's aforementioned 1897 'amendment' to Marxism had a number of remarkable features. In this short passage, some crucial and innovative elements of his reasoning can be detected. First, Veblen rejected the proposition that the individual is '*exclusively* a social being, who counts in the process *solely* as a medium for the transmission and expression of social laws and changes' (emphasis added). In other words, Veblen dismissed the idea that the individual's actions are explicable entirely in terms of socio-economic circumstances. Note, however, that while Veblen rejected explanations exclusively in terms of systemic wholes, he did not replace this doctrine with methodological individualism, and thereby attempt to explain socio-economic phenomena exclusively in terms of individuals.[1] In his review, Veblen did not deny that a human is 'a social being' or 'a medium for the transmission of social laws and changes'. He simply rejected an *exclusive* stress on social determination, and asserted that the human agent is '*also* an individual, acting out his own life as such' (emphasis added). This suggests that humans mould their circumstances just as they are moulded by them.

Second, Veblen emphasised the 'causes and principles' which Romanes and others had earlier seen as central to Darwinism. The 'materialistic' interpretation of history lacked an explanation of 'the operative force at work in the process'. It did not explain how social forces impel individual actors to think and act. Addressing this hiatus in his subsequent work, and in line with his criticisms of both neoclassical economics and Marxism, Veblen followed James and saw Darwinism as implying that 'habit and native propensity', rather than rational calculation of material interest, motivated human beings (e.g., Veblen, 1919, p. 441).

Third, for Veblen in 1897, explanations of socio-economic evolution must involve individual agents as well as institutions and structures. However, the evolution of individuality must itself be explained: 'a theory of social process considered as a substantial unfolding of life as well'. In subsequent articles, Veblen thus argued that utilitarian and hedonistic explanations of human behaviour had to be rejected, in part because they did not contain an evolutionary explanation of the origin of the assumed behavioural characteristics. For example, the neoclassical assumption of given preference functions side-steps an explanation of the origin and initial acquisition of those preferences. The assumption that individuals are selfish requires an explanation of the evolution of selfishness. In general, postulates about human behaviour at the socio-economic level themselves require explanation in evolutionary terms (Argyrous and Sethi, 1996). As Veblen ([1898B], 1934, p. 79) wrote with characteristic irony in a derogatory passage on rational 'economic man':

[1] See below for an elaboration of this point. Veblen's consistent critique of the notion that individuals should be taken as given in social science undermines the precept of methodological individualism: that the analysis of all socio-economic phenomena must ultimately be based on individuals. Methodological individualism, strictly interpreted, ultimately requires the assumption that individuals are given (Hodgson, 1988). Note that, in describing Veblen as a methodological individualist, Rutherford (1984) uses a different definition of the term.

But if this economic man is to serve as a lay figure upon which to fit the garment of economic doctrines, it is incumbent upon the science to explain what are his limitations and how he has achieved his emancipation from the law of natural selection.[1]

Fourth, the methodological injunction that a processual explanation of origin is required led Veblen to conceive the individual in *both* biological and socio-economic terms. Humans are biotic as well as social beings, so their biology cannot be ignored. A viable social science must be linked with biology. This is another implication of Veblen's imperative that socio-economic evolution must be regarded 'as a substantial unfolding of life as well'. However, in contrast to Spencer's grand synthesis, socio-economic phenomena were not seen as reducible to the biotic substratum. The 'theory of the social process' had to be compatible with, but also *more* than, the theory of the evolution of human life.

2. The emergence of emergent properties

This leads us to another—probably decisive—influence on Veblen. In 1896, according to Dorfman (1934, p. 139), the zoologist and philosopher C. Lloyd Morgan delivered a lecture at the University of Chicago, key points of which were later published in his book *Habit and Instinct* (1896).[2] Morgan was Professor of Geology and Zoology at the University College, Bristol, in England.[3] Dorfman does not tell us whether Veblen attended this lecture or was even apprised of its content, but the mention of Morgan in this context must be for no other reason than to suggest a significant direct or indirect influence. Arguably, Morgan's presence in Chicago provided a keystone in the architecture of Veblen's theory of socio-economic evolution. Although it was some years later that Veblen first referred to Morgan, it was with definite approval, showing that Veblen was familiar with Morgan's 1896 book (Veblen, 1914, p. 30n.).[4]

Lloyd Morgan was a vigorous Darwinian. In opposition to Spencer and other Lamarckians, he contended that acquired habits are not passed on by genetic inheritance. Previously, because of gaps in the theory of natural selection, Darwin himself had flirted with Lamarckian ideas (Bowler, 1988, p. 98). However, Morgan and many other

[1] Strikingly, modern evolutionary psychology confirms and elaborates this argument. The literature in this area (Cosmides and Tooby, 1994A, 1993B; Plotkin, 1994; Reber, 1993) gives strong support to the ideas of James, Veblen and others concerning the primacy of habits. The key argument in this modern literature is that postulates concerning the rational capacities of the human brain must give an explanation of their evolution according to established Darwinian principles of evolutionary biology.

[2] Lloyd Morgan should not be confused with Lewis Henry Morgan, the famous nineteenth-century anthropologist who greatly influenced both Veblen and Frederick Engels.

[3] University College, Bristol became the University of Bristol in 1909, and Lloyd Morgan remained a fixture of that institution for his entire life. In his later career, Morgan turned increasingly to philosophical issues and was a pioneer of the modern philosophical concept of emergence (Morgan, 1927, 1933). In fact, it was Morgan who coined the term 'emergent property'. For this reason he is remembered by modern philosophers of biology such as Mayr (1985). His work also influenced, among others, Whitehead (1926, p. xxiii) and McDougall (1929, pp. 240–8).

[4] The likely influence of Morgan on Veblen in the late 1890s may be detected in several passages from Veblen's *Theory of the Leisure Class*, the soon-to-be famous book that Veblen was writing at the time (Veblen, 1899, pp. 188, 190–2, 220). See also Veblen (1914, p. 18). These should be compared with Morgan (1896, p. 340) quoted below. However, without any explicit mention of Morgan by Veblen in the 1890s, this evidence is not decisive. What is clear is that from 1897—in his review of Labriola's book quoted below—and in subsequent writings, Veblen made institutions the objects of selection in socio-economic evolution. This dating is consistent with the presumed effect of Morgan's pronouncements in Chicago in 1896. One of the few scholars to notice the strong influence of Morgan's writings on Veblen is Tilman (1996, pp. 73–5, 79–83).

Darwinians had become more resolute in denying the possibility of such inheritance, especially after the publication of August Weismann's (1893) influential work.

This Darwinian stance created an apparent paradox: despite tremendous advances in civilisation and technology in the last few millennia, in *biotic and genetic terms* humankind had evolved only to a very slight degree. Genetically, humans had changed very little in the centuries that had witnessed enormous advances in science, technology and civilisation. To nineteenth-century intellectuals infused with ideas of biological determination, how could such a mismatch be explained?

In contrast, Lamarckian thinking denied this genetic conservatism and thus escaped the problem, by insisting on the possibility that newly acquired habits and other characteristics could readily be passed on genetically from generation to generation. Lamarckians thus saw the development of civilisation as paralleled by the rapid development of the human genotype or organism. As we have seen, Lamarckism permitted a reductionist explanation of socio-economic development in biological terms, as exemplified in Spencer's work.

Rejecting Lamarckism, Morgan then asked: If human beings had evolved only slightly in genetic terms, then *what* had evolved in the last millennium or so of human society? In this period, human achievements have been transformed beyond measure. His answer to the puzzle was as follows:

> This is that evolution *has been transferred from the organism to the environment.* There must be increment somewhere, otherwise evolution is impossible. In social evolution on this view, the increment is by storage in the social environment to which each new generation adapts itself, with no increased native power of adaptation. In the written record, in social traditions, in the manifold inventions which make scientific and industrial progress possible, in the products of art, and the recorded examples of noble lives, we have an environment which is at the same time the product of mental evolution, and affords the condition of the development of each individual mind to-day. No one is likely to question the fact that this environment is undergoing steady and progressive evolution. It is not perhaps so obvious that this transference of evolution from the individual to the environment may leave the *faculty* of the race at a standstill, while the *achievements* of the race are progressing by leaps and bounds. (Morgan, 1896, p. 340)

Morgan denied the Lamarckian view that socio-economic evolution proceeded by the acquisition of new habits, which could then be passed on by human genetic inheritance, as well as by imitation or learning. Morgan's Darwinian understanding of evolution led him to promote the idea of an *emergent level* of socio-economic evolution that was not explicable exclusively in terms of the biological characteristics of the individuals involved. Evolution occurred at this emergent level as well, and without any necessary change in human biotic characteristics. Accordingly, the crucial concepts of emergence and emergent properties were liberated by the Darwinian insistence of a barrier between acquired habit and biotic inheritance. The biological and the social spheres became partially autonomous, but linked, levels of analysis. In later works, the philosophical concept of emergence was developed by Morgan and others influenced by him.

In Morgan's view of human evolution, the emergent level was the social environment. As this environment itself evolved, the Darwinian process of natural selection brought about slight changes in the human organism. Slow, phylogenetic evolution (involving changes in the genetic material) was thus possible. However, these phylogenetic changes were too gradual to play any significant influence on social evolution itself. Nevertheless, the rapid changes in the social environment were a moving target for the *ontogenetic* development of each human individual. (Ontogeny is the development and growth of a

single organism, without genetic changes.) Significantly, the actual ('phenotypic') development of any particular organism depends, additionally, on the stimulation and nutrition it receives from its environment.

For example, if a society condemned a segment of the population to strenuous labour then their physique would alter accordingly. If a society provided higher standards of education, nutrition or health care then the development or lifespan of individuals could be improved. However, none of these acquired characteristics would be transmitted to human progeny by genetic inheritance. Primarily, the reproduction and survival of the relevant 'environmental' features of the socio-economic system would ensure the replication or enhancement of well-developed muscles, educated minds or healthy bodies into the next generation. It is primarily the social system that would preserve or develop the capacity for change, not significantly the human genotype (see Veblen, 1914, p. 18).

However, Morgan did not make the objects and mechanisms of socio-economic evolution clear. He did not specify what the social 'environment' consisted of. He did not identify the units of selection, the sources of variation and the nature of the selective process. He simply indicated the possibility of 'storage in the social environment' through the written record, in social traditions, technology and art. This was, nevertheless, a highly significant point. Morgan's conception of 'environmental' evolution implied that, despite change, some degree of inertia and continuity in environmental conditions was necessary, so that appropriate ontogenetic development could occur. In short, the means of preservation of information were necessary for learning. It was left to Veblen to make the crucial next step: institutions rather than individuals became the objects of selection in socio-economic evolution.[1]

What was crucial for his contemporaries was that Veblen ([1909], 1934, p. 143) did not accept that institutions or culture could be, or had to be, explained in biological terms. He suggested that if socio-economic phenomena were determined exclusively by biological factors—such as a biologically given 'human nature'—then the concepts of institution and culture would be redundant. He rejected both this premise and its conclusion.[2]

Not being himself a biologist, and despite his extensive knowledge of biology, Veblen was too careful to commit himself in the ongoing debate over Lamarckism. Whether acquired characters could be inherited or not was in part an empirical question, to be answered by the biologists. These issues were far from resolution in the biology of the 1890s; too little was understood of the mechanisms of genetic inheritance. Veblen did not wish to build his theory on what might be shifting scientific sands, and he took from Darwin what he regarded to be most decisive and enduring: above all, his methodological approach.

Morgan's argument directed attention to the phenomenon of socio-economic evolution, and gave it a degree of autonomy from the question of biological inheritance. With Morgan's intervention, the scene was set for Veblen's intellectual revolution: the concept of the evolution and selection of institutions as emergent entities in the socio-economic sphere. It is thus perhaps no accident that at about the time of Morgan's visit to Chicago the idea of an evolutionary process of selection of institutions began to develop in Veblen's work. In yet another book review, Veblen (1896) noted Enrico Ferri's argument

[1] Note the similarity here with modern 'dual inheritance' theories of evolution, involving transmission at both the genetic and cultural levels (Boyd and Richerson, 1985; Durham, 1991).

[2] It is useful to contrast Veblen's position on this point with that of his English contemporary, Marshall, who insisted: 'Economic institutions are the products of human nature and cannot change much faster than human nature changes' (Marshall, 1923, p. 260). Unlike Veblen and like Spencer, Marshall saw the development of human institutions as strictly constrained by the rate of evolution of human nature.

that the 'struggle for existence, as applied within the field of social evolution, is a struggle between groups and institutions rather than a competition...between the individuals of the group'. Even more poignantly, in another review, Veblen (1897A, p. 390) saw in Antonio Labriola's evolutionist Marxism the doctrine that the 'economic exigencies' of the industrial process 'afford the definitive test of fitness in the adaptation of all human institutions by a process of selective elimination of the economically unfit'.

For Veblen, the institutional structure of society was not merely 'the environment', as Morgan had put it. Veblen indicated that 'the environment' consisted of institutional elements that were themselves, like organisms, subject to evolutionary processes of selection. It is at this time that Veblen began to produce and publish a remarkable series of articles.[1] He also published, in 1899, his classic work *The Theory of the Leisure Class*.

3. Veblen's 1898 critique of orthodox economics

Veblen grappled with the problem of the relationship between actor and structure. As we have seen, Veblen's critique of Marxism was prompted by its apparent over-emphasis on the structural determination of individual agency. Veblen's attempted solution to this problem was to conceive of both agency and structure as a result of an evolutionary process. Thus he wrote in another article published in 1898: 'By selective necessity he [the human agent] is endowed with a proclivity for purposeful action... He acts under the guidance of propensities which have been imposed upon him by the process of selection to which he owes his differentiation from other species' (Veblen [1898B], 1934, pp. 80–5). Human purposeful behaviour was thus a result of evolution itself.

Darwin rejected religious and teleological explanations of origin or destiny. Veblen rejected them too, while attempting to leave an obscure place for 'teleology' in human purposeful behaviour.[2] He interpreted Darwinism as essentially a causal analysis of process, referring in 1906 to 'an interpretation in terms of opaque cause and effect' which 'might have led to a concept of evolution similar to the unteleological Darwinian concept of natural selection' (Veblen, 1919, p. 416). As he wrote in the subsequent year: '[I]n the Darwinian scheme of thought, the continuity sought in and imputed to the facts is a continuity of cause and effect' (Veblen, 1919, p. 436).

Although an advance on both structural determinism and on conventional Marxism, Veblen's solution was incomplete. As discussed elsewhere (Campbell, 1985; Hodgson, 1993, ch. 14), the question of agency remains problematic within a conventional evolutionary framework. Nevertheless, a more complete answer must be able to address the question of the evolution of agency, as Veblen had suggested. Veblen's own attempt to resolve the problem was to see agency and purpose as real, and somehow the result of the causal processes of evolution itself. Veblen argued that purposeful behaviour was the result of both inherited instinct and the material and cultural environment within which

[1] These essays are collected together in two volumes (Veblen, 1919, 1934).

[2] While Veblen consistently regarded the human agent as purposeful, he never reconciled the notion of purposeful behaviour with mechanical causality. The separation between the Aristotelian final and efficient types of cause remained, but Veblen was disposed to the latter notion of causality. While 'vitalists' such as McDougall (1908) pulled in one direction and resisted the reduction of all causality to mechanism alone, the close and persistent influence of the materialistic scientist Loeb pulled on Veblen in the other direction, towards mechanistic reductionism. It is thus with some justice that Seckler (1975, p. 56) argues that Veblen 'teeters between free will and determinism'. However, it would be a mistake to suggest that Veblen denied the reality of purposeful behaviour. On the contrary, he emphasised it repeatedly.

the individual is situated. However, this evolutionary argument failed to instate purpose as a category distinct from mechanical causality.

Despite this limitation, Veblen's appropriation of Darwinian methodological injunctions led to a powerful critique of the mainstream economic theories of his time. Essentially, because the agent was a subject of an evolutionary process, he or she could not be taken as fixed or given. Neither could the opposite error be committed: of subsuming agency under the heading of mysterious social forces. A causal account of interaction had to be given.

Veblen recognised three main schools of economic thought that were historically subsequent to the classical and Marxian schools: (i) the neoclassical school,[1] dominated by Alfred Marshall in Britain and John Bates Clark in America; (ii) the Austrian school, including Eugene Böhm-Bawerk and Carl Menger; and (iii) the German historical school of Gustav Schmoller and others. Of the German historical school, Veblen ([1898A], 1919, p. 58) wrote:

> [N]o economics is farther from being an evolutionary science than the received economics of the Historical School...they have contented themselves with an enumeration of data and a narrative account of industrial development, and have not presumed to offer a theory of anything or to elaborate their results into a consistent body of knowledge. Any evolutionary science, on the other hand, is a close-knit body of theory. It is a theory of process, of an unfolding sequence.

Notably, this quotation contrasts with the judgement of Joseph Schumpeter (1991, p. 292) that '[i]nstitutionalism is nothing but the methodological errors of German historians'; or of Oliver Williamson (1996, p. 1792) and others who have persistently alleged that 'older style institutional economics was content with description'. Veblen's quotation also emphasises the importance of a theory of process.

In the 1898 essay Veblen devoted critical attention to both the neoclassical and Austrian schools. In the case of Menger and the other Austrians, they 'struck out on a theory of process, but presently came to a full stop because the process about which they busied themselves was not, in their apprehension of it, a cumulative or unfolding sequence' (Veblen [1898A], 1919, p. 70). Like the German historicists, 'the Austrians on the whole showed themselves unable to break with the classical tradition that economics is a taxonomic science. The reason for the Austrian failure seems to lie in a faulty conception of human nature' (*ibid.*, p. 73). This criticism is also applied to the neoclassical school: 'In all received formulations of economic theory, whether at the hands of English economists or those of the Continent, the human material with which the inquiry is concerned is conceived in hedonistic terms; that is to say, in terms of a passive and substantially inert and immutably given human nature' (*ibid.*, p. 73). Then follows Veblen's famous and often quoted critique of the 'hedonistic' assumptions of mainstream economics:

> The hedonistic conception of man is that of a lightning calculator of pleasures and pains, who oscillates like a homogeneous globule of desire of happiness under the impulse of stimuli that shift him about the area, but leave him intact. He has neither antecedent nor consequent. He is an isolated, definitive human datum, in stable equilibrium except for the buffets of the impinging forces that displace him in one direction or another. Self-imposed in elemental space, he spins symmetrically about his own spiritual axis until the parallelogram of forces bears down upon him, whereupon he follows the line of the resultant. When the force of the impact is spent, he comes to rest, a self-contained globule of desire as before. (*Ibid.*, p. 73)

[1] In his 1898 essay, Veblen refers to this group as the later or recent classical school. Two years later, Veblen (1919, pp. 171) himself coins and uses the term 'neoclassical' to refer to such economists. See Aspromourgos (1986).

Veblen's heavily satiric phraseology has been an excuse for the rebuttal of this critique, especially in that it ignores the less mechanistic conceptions of human agency found in Austrian writings (Jaffé, 1976). To some extent, Veblen's statement is a caricature, but this should not allow us to overlook its decisive critical import.

First, the ironic phrase 'lightning calculator' clearly suggests that there is a problem with the assumption that agents have rapid and unlimited computational abilities. With this passage and others, a case can thus be made that institutional economics was the direct or indirect inspiration for Herbert Simon's behaviouralism.[1] Second, the point that 'economic man' has 'neither antecedent nor consequent' should also not pass unnoticed. It connects directly with Veblen's argument that the requirement of an evolutionary explanation of origin obliges us to abandon the assumption of the given individual:

> The economic life history of the individual is a cumulative process of adaptation of means to ends that cumulatively change as the process goes on, both the agent and his environment being at any point the outcome of the last process. (Veblen [1898A], 1919, pp. 74–5)

In place of 'a passive and substantially inert and immutably given human nature', Veblen (*ibid.*, p. 73) saw instincts and habits as the dynamic bases of intention and action. Following James and others, they were seen as the prime movers, and explicable in terms of both biological and socio-economic processes of evolution. Veblen (*ibid.*, p. 77) then nailed his own theses to the church door:

> [A]n evolutionary economics must be a theory of a process of cultural growth as determined by the economic interest, a theory of a cumulative sequence of economic institutions stated in terms of the process itself.

Accordingly, Veblen rejected not only biological reductionism but also methodological individualism. This latter rejection is worthy of elaboration. In 1898 the term methodological individualism had not yet been coined, but consider Veblen's position in the context of modern definitions of that term. Elster (1982, p. 453) defines it as 'the doctrine that all social phenomena (their structure and their change) are in principle explicable only in terms of individuals—their properties, goals, and beliefs'.

The suggestion that 'all social phenomena' have to be explained 'only in terms of individuals' is untenable if individuals themselves are then to be explained in terms other than individuals alone. Yet such an 'evolutionary' and 'cumulative' explanation of individual characteristics and behaviour—involving natural as well as social science—is precisely what Veblen is urging upon economists: 'both the agent and his environment being at any point the outcome of the last process'. Advocates of methodological individualism will sometimes admit that individual purposes and preferences are moulded by the—social or natural—environment. To be consistent with methodological individualism, however, they have ultimately to reach a point where *all* is explained in terms of individuals. The analysis would have to stop somewhere and individuals would then have to be taken as a given, explanatory foundation. Accordingly, and contrary to frequent denials, methodological individualism depends upon the assumption of given individuals (Nozick, 1977; Hodgson, 1988). Veblen's consistent critique of this notion

[1] Two decades later the institutional economist John Maurice Clark (1918, p. 25) wrote that 'a good hedonist would stop calculating when it seemed likely to involve more trouble than it was worth'. Although identifying Commons rather than Veblen or Clark, Simon (1979, p. 499) himself clearly acknowledges his debt to American institutionalism.

thus undermines a precept of methodological individualism. Veblen recognised multiple influences of the social whole upon the individual. In this respect, at least, his criticisms of both neoclassical and Austrian economics retain their force to this day.

Despite their internal limitations and problems, and as argued elsewhere (Hodgson, 1992; 1993, ch. 9), Veblen's writings constitute the first case of an evolutionary economics along Darwinian lines.[1] In writings appearing within a year or two of the 1898 work, Veblen further clarified what he meant by an 'evolutionary' or 'post-Darwinian' approach. 'The prime postulate of evolutionary science...is the notion of a cumulative causal sequence', he wrote in 1900.[2] In addition, such a science must address 'the conditions of variational growth' (Veblen [1900], 1919, pp. 176–7). He saw a 'Darwinistic account' in economics as addressing 'the origin, growth, persistence, and variation of institutions' (Veblen [1901B], 1919, p. 265). Veblen, it seems, was the first genuinely evolutionary economist, at least in such terms.

4. Conclusion

It is argued here that Veblen's essay was the result of a revolution that took place in his thinking in the years 1896–98. It is possible to trace several key influences. Despite the pre-eminent influence of Spencer at the time, Veblen became increasingly disenchanted with Spencerian and other forms of biological determinism and reductionism. For Veblen, the Darwinian rejection of teleology became the basis of a scientific and 'post-Darwinian' approach to economics and social science. Like the later German historical school of Gustav Schmoller and others, ideas of historical laws of development and progress were rejected. The exclusion of teleology meant not only the rejection of Spencerian and other notions of mechanical progress towards perfection, but also the displacement of both neoclassical equilibrium theorising and Marxian historicism.

Veblen became increasingly disenchanted also with the Marxian treatment of the problem of human agency. His 1897 review of a book on Marxism by Lorenz shows a novel line of thinking. First, Veblen rejected the idea that the actions of an individual can be explained entirely in terms of social, economic, cultural or other related circumstances. Second, he emphasised the need to have a detailed explanation of the causal processes behind human action. Third, he held that such explanations of socio-economic evolution must involve individual agents as well as institutions and structures. However, the evolution of individuality had itself to be explained. Accordingly, utilitarian and hedonistic models of human behaviour were rejected, in part because they lacked an evolutionary explanation of the origin of such behaviours.

In rejecting both the individual and society as the ultimate unit of explanation, Veblen thus distanced himself from both the extremes of methodological individualism and of methodological collectivism. For Veblen this did not simply nor principally lead to the search for a balance between these two extremes. Instead, he embraced an evolutionary framework of explanation along Darwinian lines. Darwinism was his chosen mode of

[1] Several possible prior claimants are considered and rejected in Hodgson (1993).

[2] This seems to be the first appearance in Veblen's works of a phrase similar to 'cumulative causation', although the cumulative implications of Darwinism are emphasised earlier, including in the 1898 article. As far as this author is aware, Darwin himself did not use the phrase 'cumulative causation'. James, however, wrote in 1880 (1897, p. 227), '[it] is only following the common-sense method of a Lyell, a Darwin, and a Whitney to interpret the unknown by the known, and reckon up cumulatively the only causes of social change we can directly observe'. For a brief discussion of the relationship between the idea of cumulative causation in Veblen and in the subsequent writings of Young, Myrdal and Kaldor, see Hodgson (1992; 1993, ch. 9).

escape from the dichotomy.[1] What Veblen needed at that stage was a framework of concepts that would support his attempt to build a social theory that did not fall into the traps of biological, individualistic, structural or any other form of reductionism.

There is strong circumstantial evidence that the crucial—but hitherto unacknowledged—influence came during or immediately after the visit to Chicago by the British biologist and philosopher C. Lloyd Morgan. Significantly, one year after Morgan's visit to Chicago, the idea of an evolutionary process of selection of institutions first appeared in Veblen's (1897A, p. 390) work. It is also at this time that Veblen switched from mainly reading and reviewing books, to the creation of a remarkable series of original academic works. He became much less a commentator and more an innovator. Institutional economics was thus born.

Two final points concerning subsequent developments should be noted. First, Veblen never abandoned the idea that biotic factors may have some significant influence on human behaviour, unlike the many social scientists who attempted in the first half of the twentieth century, and with increasing vigour, to sever all links between biology and social science (Degler, 1991). Second, Veblen never developed the philosophical concept of emergence sufficiently. This task was left to a group of philosophers writing mainly in the 1920s and 1930s (Alexander, 1920; McDougall, 1929; Morgan, 1927, 1933; Whitehead, 1926). Not only was this a tragedy for Veblen—who died in 1929 and was unable fully to address these philosophical developments—but it was also a disaster for American institutionalism as a whole. Despite the theoretical efforts of John Commons (1934) and others, it failed to develop an adequate understanding of the relationship between the biotic and the socio-economic worlds and was thus impelled by the 1930s to join the majority of social scientists who were for severing all links between biology and social science. It thus still had to face the unavoidable analytical dilemma that results from such free-standing notions of the socio-economic system: of the atomistic assumption of the given, abstract individual, on the one hand, and the tyranny of cultural forces, on the other. The efforts of Frank Knight to reconcile institutional economics with individualism were at the margins of the institutionalist movement, and American institutionalism eventually took the road of cultural determinism (Samuels, 1977). Under the resolute leadership of Clarence Ayres (1944), its evolutionism was severed from biology, and its socio-economic theory downplayed the role of individual agency. But all that is another story.

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[1] It must be emphasised that terms such as 'holism' and 'methodological individualism' are used in different ways in the literature. Methodological individualism has been defined here as the injunction that socio-economic phenomena must be explained *exclusively* in terms of individuals. Methodological collectivism is symmetrically defined here as the injunction that socio-economic phenomena must be explained *exclusively* in terms of socio-economic wholes, structures, institutions or cultures. In these terms, Veblen was neither a methodological individualist nor a methodological collectivist. Whether Veblen was a 'holist' depends crucially on the definition of that term.

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