

Department of Economics and Finance

Chair of History of Economic Thought

# THE ORIGINS OF EVOLUTIONARY ECONOMICS: THORSTEIN VEBLEN IN RETROSPECT

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ACADEMIC YEAR 2014/2015

I dedicate my efforts in conducting this dissertation work to my loving family and to my grandmother. Their sacrificial care made it possible for me to attend this prestigious university. But, most importantly, their love, encouragement and everyday affection supported me throughout the education process and made me feel grateful of getting involved in challenging tasks. I want to thank them and express my gratitude for all they have done for me.

#### **ACKNOWLEDGEMENTS**

Moreover, I wish to thank all my school and professors for what they conveyed each day of my academic career in economics. Special thanks to my dissertation supervisor, professor Luca Fiorito, for providing all the assistance requested and, more than this, for all the excitement and tenacity communicated during his lectures. He spread a special love for the subject, which made me feel particularly fascinated by it.

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#### Introduction

The aim of this paper is to trace the developments of the evolutionary economics due to the contribution of one of the founders, Thorstein Veblen, taking his programme and his post-Darwinian approach to economics as the focal and starting points, then going through the reinterpretations of his thought, making use of a comparative analysis. In particular, the authors and scholars that this work is going to take into consideration are those who tried to clarify Veblen's borrowings from biology.

Accordingly, in order to respond to the objective addressed, the shape of the work that follows is constructed as presented: in the first part it will represent an analysis of the historical background, shedding light on the key influences of Veblen's insights, his theories of both human nature and socio-institutional change, and the methodologies he chose to adopt, in building his final programme. That of Veblen, in fact, was a unique one: Geoffrey Hodgson (2008) considered Veblen to be one of the fathers of evolutionary economics, who applied the Darwinian framework to his analysis and, at the same time, generalized it to new spheres. Secondly, and most importantly, the second part of this work will be focused on the reinterpretations of Veblen's thought, taking into account both the critiques, and the theories developed by those who have followed his line, either dealt with the contents of his essays.

Veblen's work is considered to be so important because of its effects on modern economics, since many game-theoretical models were built up on the fundamentals of Veblen's evolutionary economics. During his early studies, he distinguished between a teleological and an evolutionary mode of thought, and argued that the distinctive characteristic which makes a science an evolutionary science is that to produce *dynamic theories of process*, as he reported "The

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<sup>&</sup>lt;sup>1</sup> Hédoin, C. Did Veblen Generalize Darwinism (and Why Does It Matter)? in Journal of Economic Issues, vol. 44, iss. 4, pp. 963-89, December 2010

prime postulate of evolutionary science...is the notion of a cumulative causal sequence"(Veblen 1919). Thereafter, the aim of his research programme was mainly to provide economics with the characteristics of a modern science, turning it into a theory of the genesis, growth and variation of institutions. He went from being a passionate supporter of the Darwinian way of approaching economics, to becoming conscious of the fact that it was impossible to defend completely the post-Darwinian economics when trying to meet more concrete requirements of research.

In the last two decades, more and more attention has been on the biological framework inspired to Darwinism and its application to the socio-economic phenomena; the biological notions of variety and natural selection, derived from this approach, have occupied a serious place in economic research, and not only: as Cyril Hédoin suggests in his article for the *Journal of Economic Issues*, there's a strong connection between the resulting *generalized Darwinism* and the modern study of evolution through game theory. In 2004, Villena claimed that "As a result of reviewing Evolution Game Theory with each of the key features of Veblen's evolutionary framework, we conclude that EGT is indeed consistent with Veblen's proposals and thus may be considered to be a Veblenian evolutionary approach". More than a century ago, in his famous article, "Why is Economics Not an Evolutionary Science?" Veblen already raised some of the questions which are still in discussion among researchers today, and in order to give answers, he began to develop his programme according to the postulates of a "post-Darwinian Economics".

These are the reasons why it is of great importance to understand the origins of the stream of thoughts in which economic research subjects are rooted, and the developments they went through, before getting to what economics is today

<sup>&</sup>lt;sup>2</sup> Hédoin, C. Did Veblen Generalize Darwinism (and Why Does It Matter)? in Journal of Economic Issues, vol. 44, iss. 4, pp. 963-89, December 2010

and what is analysed in class. Not only I was quite fascinated by the fact that some of the subjects of economic research, such as game theory, a strong tool of modern evolutionary economics, have their roots in biology and more precisely in the line of thought of Darwinism; I also chose this topic because I believe in the importance of contextualization and of tracing the history of what we study everyday of our academic career in economics.

## 1. The background for Veblen's revolution and the Darwinian turn in economics.

The scenario of the study of economics has significantly evolved across time, but one big change occurred together with Veblen's contribution to the analysis of social change and evolution of humankind: academics and researchers began to embrace a different conception of economics as a 'scientific' discipline. This first chapter is going to focus on the opponency between the dominant line of thought at the time of Veblen's developments, and the new approach to economics, which was becoming more and more widespread among theorists in the late 1880s. Along with this contextualization, the light will be on those authors who influenced in some way Veblen's work and especially his evolutionary theory.

#### 1.1 The context of economic thought: the Darwinians and the Lamarckians

Veblen himself recognized and reported that three were the main schools of economic thought that were historically subsequent to the classical and Marxian schools: the neoclassical school, dominated by Alfred Marshall in Britain and John Bates Clark in America, the Austrian school whose representatives were Eugene von Böhm-Bawerk and Carl Menger, and the German historical school of

Gustav Schmoller and others, which wasn't appreciated by Veblen, as he wrote '[N]o economics is farther from being an evolutionary science than the received economics of the Historical School...' Big authors previous to that time, like Adam Smith, Marx, Durkheim, Weber, Schumpeter and Polanyi, although in very different ways, were all concerned about historical macro-evolution facts which, in their view, could never go arm in arm with biology. From the 1880s to the early 1990s, a new question arose: "Could these macroeconomic contents be better explained, and the scientific objectives of these authors be better achieved by making use of a biology-based framework, or to say, a Darwinian science?"

In response to this issue, some scholars were very affirmative, and among them, George Hodgson(2004,2006) is one of the most well-known theorist for being a strong supporter of this big Darwinian turn in the study of economic systems. This is only one of the several reasons for which G. Hodgson is considered a Veblenian. Thereafter, there was a quite common opinion that economics should resemble biology rather than physics, and that, in fact, Darwinian tools could have been effective in the explanation of phenomena of social and human nature. New notions of this kind started to be used, such as variety and natural selection. The first allowed to take into account the variety that exists between all the subjects of economic facts: firms, individuals, small groups etc; whereas, from the the concept of natural selection, economists were inspired about competition as a dynamic, rather than stationary, process. These two were considered the more clear advantages of the new science called "Darwinian economics" with respect to the one that had been dominant over the 20th century. In this context, two opposing streams were coexistent: on one side, the Lamarckians headed by Spencer, who believed that "the inheritance of acquired characters was a general phenomenon"3 and on the other side the

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<sup>&</sup>lt;sup>3</sup> Hodgson, G. M. On the evolution of Thorstein Veblen's evolutionary economics, in Cambridge Journal

Darwinians, whose position at that time was still weak and lagging of some clarifications. Spencer was a brilliant scholar, well prepared in both physics and mathematics, and developed a 'synthetic philosophy' which was a great contribution to the biology of the nineteenth century, so that some big economists (Marshall for instance) followed him. Furthermore, Spencer introduced the notion of *natural causation* which implied that the explanation of social phenomena were reduced to the human organism and ultimately to the biological terms, namely he was a biological reductionist, in modern speaking. Subsequently, this later called 'Lamarckian conception' conquered a larger and larger number of supporters. In his Why Is Economics Not An Evolutionary Science? (1898A), Veblen, showing clear signs of the upcoming revolution of thought, condemned the "pre-Darwinian economics" of his times for two reasons: first, the attachment to the hedonist and utilitarian philosophy which regarded agents as characterized by 'passive and immutably given human nature', and secondly the approach to the economic analysis based on the conception that everything tends to an end, namely to an equilibrium. 4 Given this, although Marx's historical materialism and Spencer's evolutionary sociology were very close to Veblen's line of thought, he considered them to be 'pre-Darwinian' just because they presupposed the existence of a pattern of direction towards social progress in the course of human history. It could be said that he was largely attached to the constraints imposed by the position taken; nonetheless, when trying to define the factors playing in the process of institutional change, in his 'Theory of Leisure Class' of 1899 he admitted that the mechanisms which were possibly responsible of the process in question were two: one was a 'selection between stable types of temperament' and the other an 'adaptation of men's habits of thought to changing circumstances' (Veblen,

of Economics, vol. 22, iss. 4, pp. 415-31, July 1998

<sup>&</sup>lt;sup>4</sup> Liagouras, G. 2009. Socio-economic evolution and Darwinism in Thorstein Veblen: a critical appraisal, in Cambridge Journal of Economics, vol. 33, iss. 6, pp. 1047-64, November 2009

1899, p.190). In doing so, he positioned himself neutrally between Darwinism and Lamarckism.\_The reason, as George Liagouras explained in 2009, has to do with Veblen's turn from the philosophical approach towards the concrete study of the causes of institutional change, when he found it hard to support a purely post-Darwinian economics. In fact, later on in his work, he moved from the evolutionary programme to the analysis of human evolution and the Darwinian analogies were less and less pulled into question, and according to George Liagouras, "this is due to the incompatibility between the Darwinian conception of evolution and Veblen's main subject of inquiry" 5 Bowler, in 1988, argued that Darwin himself, during his career, had played with some Lamarckian theory of natural selection.<sup>6</sup> ideas, due to some gaps in the Later on in this paper we will examine to which extent and what shows clearly the reasons why Veblen was considered a Darwinian in his approach, and the issues raised by many subsequent thinkers.

#### 1.2 The origins of Veblen's evolutionary economics

As already remarked, it is fundamental to keep in mind that Veblen didn't adopt a mono-causal line of explanation, but instead he embraced an evolutionary framework on multiple levels of account. In his article on the *Cambridge Journal of Economics*, Geoffrey M. Hodgson traces some influences, namely some authors and streams of thought, which played an important role in the Veblenian revolution of the years 1896-98. When he was a student at Carleton College in the 1870s, Veblen read Spencer, and later during the 1880s while he was studying at Yale University, he received the influence of William Graham Sumner, a prominent supporter of the Lamarckian conception developed by

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<sup>&</sup>lt;sup>5</sup> Liagouras, G. 2009. Socio-economic evolution and Darwinism in Thorstein Veblen: a critical appraisal, in Cambridge Journal of Economics, vol. 33, iss. 6, pp. 1047-64, November 2009

<sup>&</sup>lt;sup>6</sup> Hodgson, G. M. On the evolution of Thorstein Veblen's evolutionary economics, in Cambridge Journal of Economics, vol. 22, iss. 4, pp. 415-31, July 1998

Spencer (Dorfman, 1934) and not surprisingly, Veblen was caught by a strong interest in their ideas of evolution. However, in 1892 Veblen published one early article in which he rejected some of Spencer's assessments, among which there was also the issue on the feasibility of socialism. Nonetheless, the most creative period of his life was when Veblen attended the University of Chicago, where he met his friend and biologist Jacques Loeb, who informed Veblen on up-to-date results in biology and stimulated him with his reductionist version of Darwinism. Loeb claimed that all living phenomena should ultimately be explained by their chemical constituents. Most importantly, 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 begin 'scientific'" (Riesman, 1963). Another collegue who inspired Veblen at that time was George Romanes, who instead was concerned about the fact that Darwinism firsty implied causal analysis. Later on, but still evident from his early writings, for instance in *The Principles of* Psychology (1890), Veblen showed an influence of the writings of William James, who was critical of Spencer and, by basing his thoughts on the concepts of habits and instincts, rejected Spencer's hedonistic utilitarianism. Quite the same was the view of Veblen's former teacher Charles Sanders Peirce, and both supported Darwin rather than Spencer. Although they rejected some Darwinian arguments, it is quite evident that they are favourable to the notions of natural selection and variation, and they influenced Veblen in that they made Darwinism not only a biological framework but a methodological and approach philosophical as well. In his later works, Veblen developed an important criticism of Marxism, which maintained a strong influence on his whole production, especially for what concerns issues on socialism. While editing the Chicago-based Journal of Political Economy, Veblen frequently reviewed works on socialism, and had the chance to analyse the defect in Marxian theory observed and presented by Max

Lorenz in 1896, and Veblen wrote: '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."<sup>7</sup> For what concerns the class position, what Veblen thought was that it does not determine ideology, but rather the machine process of modern industrial society creates and indoctrinates mechanical habits of thought. Another alleged influence to Veblen's production is that of the Darwinian C. Lloyd Morgan. As reported by Dorfman in 1896, the philosopher and zoologist Morgan conducted a lecture at the University of Chicago<sup>8</sup> and Veblen supposedly attended that lecture: even if there's no mention of that in what Dorfman reported, it is enough that he accounts for this in that precise context in order to understand that there has been a -probably- decisive influence. C. Lloyd Morgan later published the book *Habit and Instinct* (1896) on those issues that he discussed; he was a Professor of Geology and Zoology at the University College in Bristol, England, becoming, in his later career, a pioneer of the modern philosophical concept of emergence. He was an enthusiastic Darwinian and, in his work, he argued that habits are not rooted in genetic factors, and in his view of human evolution, the emergent level was the social environment, rather than the individual. After Morgan's intervention in the context of evolution and selection of institutions as emergent entities, the scene was set for Veblen's intellectual revolution. In 1896, Veblen mentioned Enrico Ferri referring to his argument 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' and Veblen, in contradiction to Morgan, thought that the institutional structure of society

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<sup>&</sup>lt;sup>7</sup> Hodgson, G. M. On the evolution of Thorstein Veblen's evolutionary economics, in Cambridge Journal of Economics, vol. 22, iss. 4, pp. 415-31, July 1998

<sup>&</sup>lt;sup>8</sup> Hodgson, G. M. On the evolution of Thorstein Veblen's evolutionary economics, in Cambridge Journal of Economics, vol. 22, iss. 4, pp. 415-31, July 1998

wasn't the 'environment' which were institutional elements subject themselves to evolutionary processes of selection. On the basis of this acknowledgement, Veblen produced and in 1899 published his main work, *The Theory of the Leisure Class*. The attachment to Darwinism and the appropriation of that methodological scheme led Veblen to many considerations, among which there's the strong critique raised against the mainstream economic theories of the time, especially on the issue of the structural determination of individual agency: since the agent is the subject of the evolutionary process, he cannot be taken as given. Moreover, thank to the contribution of Hodgson on the history of the Veblenian evolutionary programme, we know the relationship that he had with the historical schools of that period: he raised a strong critique against the Austrian and the German ones, based on the different conceptions of human nature, and he extended it to the neoclassical school as well.

## 1.3 Veblen's Darwinism, rejection of biological reductionism and methodological individualism<sup>9</sup>

Thorstein Veblen occupies a unique positon in the history of economic thought, due to the fact that his approach to Darwinism wasn't exclusive, but instead he attempted to combine the Darwinian breakthrough in biology, with the study of the evolution of human societies creating its own original methodological pattern. Maintaining a quite flexible methodology of treating change and in analysing its main causes, the central subject of his evolutionary process is summarized in this brief passage: "the change is always in the last resort a change in habits of thought" (Veblen, 1898A, p.75). He interpreted Darwinism as the causal analysis of process and in 1906 he reported as follows: "an interpretation in terms of opaque cause and effect which might have led to a

<sup>&</sup>lt;sup>9</sup> The term "methodological individualism" is used in different ways in literature. Here it is referred to as the injuction that socio-economic phenomena must be explained *exclusively* in terms of individuals.

concept of evolution similar to the un-teleological Darwinian concept of natural selection" (Veblen,1919, p.416) Firstly, the main reason for which Veblen was attached to this emergent stream of thought was the rejection of teleology and religion, which implied the introduction of a scientific turn in the discipline of economics. In 1897, Veblen argued that explanations of socio-economic phenomena, and especially evolutions, involve not only agents but also institutions and structures; and together with this, he claimed that utilitarian and hedonistic explanations of human behaviour had to be rejected because they lacked of an evolutionary explanation. What distinguishes his evolutionary programme from neoclassical microeconomics, Marxian materialism and Spencerian evolutionism is mainly the introduction to the social sciences of the idea of human history as an evolving process of change with neither a predetermined end nor a specific pattern of development. Veblen was the first thinker to embrace this approach and to use it within the study of evolution and course of history. He adopted this framework of explanation along Darwinian lines, with a strong emphasis on the notions of natural selection and variety, which are 'used with conspicuous frequency' (Hodgson, 2004, p.190)<sup>10</sup>. This aspect of his evolutionary theory has been in part inherited by a Professor who influenced his thought in the last yeas of the 1880s, C. Lloyd Morgan, who was an enthusiastic Darwinian. 11 More in depth, the use of those concepts implied not only a large variety of species-institutions, but also the belief that humans fight in the struggle for existence imposed by 'the law of natural selection' and for Veblen, man is by nature a peaceful, social and productive animal. It can be supposed that this extensive use of the Darwinian concepts, and especially of the latter, exclusively reflects Veblen's interests of research in his early work, as also remarked by some of Veblen's students (Edgell and Tilman, 1989; Jennings

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<sup>&</sup>lt;sup>10</sup> Liagouras, G. 2009. Socio-economic evolution and Darwinism in Thorstein Veblen: a critical appraisal, in Cambridge Journal of Economics, vol. 33, iss. 6, pp. 1047-64, November 2009

<sup>&</sup>lt;sup>11</sup> Hodgson, G. M. On the evolution of Thorstein Veblen's evolutionary economics, in Cambridge Journal of Economics, vol. 22, iss. 4, pp. 415-31, July 1998

and Waller,1998; Lawson,2003A; Rutherford,1998). Later on in his studies, Veblen had the chance to develop the awareness that the 'law of natural selection' wasn't enough to explain the institutional and social change, and this happened precisely when he passed from the rejection of the 'homo economicus' to his own theory about the origins and functions of the leisure class. For instance, the concept of 'natural selection' became redundant in his book 'The Instinct of Workmanship and The State of the Industrial Arts' (1914) when he addressed his efforts towards the analysis of the humankind, and the response in terms of the whole life process wasn't explicable in the Darwinian perspective. For what concerns his approach to Darwinism, Veblen rejected any teleological and religious explanation of 'origin' and 'destiny' as Darwin did, at the same time leaving an obscure place for teleology in human behaviour. 12 Thus, he argued that the human behaviour is a complex result of only two components: inherited instinct and material and cultural environment which surrounds the individual. As mentioned above, he didn't use the Darwinian framework in an exclusive way, in that he rejected biological reductionism, and this itself doesn't mean that he explained phenomena in terms of individuals only. On the contrary, Veblen also refused to adopt a methodological individualism and Geoffrey Hodgson dedicates the last part of one of his articles for The Cambridge Journal of Economics to an analysis of this rejection. Even if at the time of Veblen's essays this term wasn't coined yet, we have to consider it with the meaning it assumes today: Elster expresses 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'. (Elster, 1982, p.453) Thus, being consistent with methodological individualism means pursuing the objective of explaining evolution and all the rest in terms of individuals, where the latters are considered to be given explanatory

<sup>&</sup>lt;sup>12</sup> Hodgson, G. M. On the evolution of Thorstein Veblen's evolutionary economics, in Cambridge Journal of Economics, vol. 22, iss. 4, pp. 415-31, July 1998

foundations. The evolutionary conception regarding this is that it isn't feasible to explain everything in terms of individuals, assuming that individuals themselves are explained in terms of something else; in fact, the 'evolutionary' explanation, also defined 'cumulative' by Hodgson, describes the individual as the binomial characteristics-behaviour, involving both natural and the social sciences. Accordingly, Veblen claimed: 'both the agent and his environment being at any point the outcome of the last process', and from this, it arises that Veblen makes phenomena derive not from the individual, but he goes more in depth to the components. To conclude this, Hodgson asserted that Veblen took distance from both the two extremes of methodological individualism, and methodological collectivism, and that Darwinism represented a way to escape the above mentioned methodologies and any kind of balance between the two, since he found the Darwinian framework to be an efficient tool which could useful avoiding the of reductionism. have been in traps But, generally, how valid were the results of the adoption of this line of thought? G. Liagouras claimed that apart from the abuses of the Darwinian perspective (Nelson, 2006; Vromen, 2007 and Witt, 2004) we could notice that in the microeconomic field, the results have been fairly positive. Moreover, G. Liagouras provides us for the two main tools derived to Veblen by Darwinism, which are:

- Human evolution as an impersonal and continuous sequence of cause and effect characterized by variety and natural selection,
- Human history as a continuous process with no predetermined, nor a unique pattern of direction.

Even though Veblen gave proof to be flexible in the application of this new framework in the history of economic thought, this led to diverse contradictions and failures in consistency, going from the confusion between the genetic causes and the theoretical analysis of socio-economic systems, the inappropriateness of the concept of natural selection for the macro-social level, to the conflation between social structures and habits of thought. <sup>13</sup> First of all, as many students of Veblen's work have noticed, the Darwinian approach together with the concept of 'natural selection' not only didn't last long in the evolution of his thought, but also weren't all-embracing. As soon as Veblen had to provide for clear and concrete responses on the dynamics and process of the evolution of both societies and humankind, he admitted that it was hard to be faithful to the concepts that Darwinism brought with itself. Moreover in his late works, many contradictions have been remarked by scholars, which are intimately associated with his use (sometimes abuse) of the biological framework; for instance G. Liagouras links the failure in the development of an elaborated analysis of capitalism in part to the Darwinian approach, and not only that. Also the twofold reductionism, derived from the framework of cultural and social evolution, is due to the inappropriate use of the notion of 'natural selection' which gave reason of a focused study on the so-called institutional complementarity, mainly treated by Crouch et al.

# 2. The voice of others on Veblen's theories and approaches: the main reinterpretations.

Even though his attempt to apply the Darwinian breakthrough to the study of socio-economic systems is the primacy recognized to Thorstein Veblen, this tool has been twofold in results: some institutionalist scholars like Anne Mayhew (1998), Malcolm Rutherford (1998), Hodgson and others claimed in the 'Cambridge Journal of Economics' that Veblen's evolutionary programme

<sup>&</sup>lt;sup>13</sup> Liagouras, G. 2009. Socio-economic evolution and Darwinism in Thorstein Veblen: a critical appraisal, in Cambridge Journal of Economics, vol. 33, iss. 6, pp. 1047-64, November 2009

remained basically void, and some of them associated this failure to the same reason: his approach to Darwinism. Hereafter, the content of this work will converge on the analysis of Veblen's essays, on the contradictions and on the critiques raised by other scholars and theorists on different subjects of Veblen's inquiry, from Darwinism to the approach to institutional change.

#### 2.1 George Liagouras' Critique on Veblen's Darwinism

In his article on the Cambridge Journal of Economics, published in 2009, the economist George Liagouras conducts a deep analysis on the resulting points of Veblen's position, showing to what extent Veblen is actually a Darwinian and to what extent he is not. The aim of this inquiry on Veblen's work is mainly to show that Veblen failed in his evolutionary programme because the ontology of socioeconomic systems is foreign to the biological interpretation of the social and human evolution. According to Liagouras, Veblen's approach to Darwinism led him to build an evolutionary programme which ended up to be unfulfilled, so he attempted to present all the contradictions linked to this choice, summarized in this way: the inappropriateness of natural selection, the lack of an elaborated analysis of capitalism, and the conflation between social structures and habits of thought, namely culture. 14 When searching for the touch of Darwinism in Veblen's assembly, it may seem enough to give a look to his manifesto about evolutionary economics (Veblen, 1898A) or to his Theory of The Leisure Class (Veblen, 1899) but it is not, and a more careful investigation is needed. First of all, what G. Liagouras did first is to look for the concrete results of the Darwinian way of thinking, within the social sciences, and he found it in three main concepts: firstly, derived from the Darwinian materialistic position, the conception of human history as a continuous evolving

<sup>&</sup>lt;sup>14</sup> Liagouras, G. 2009. Socio-economic evolution and Darwinism in Thorstein Veblen: a critical appraisal, in Cambridge Journal of Economics, vol. 33, iss. 6, pp. 1047-64, November 2009

process with no predetermined end nor a unique pattern of direction; secondly, outcome of the Darwinian population thinking, the view of human evolution as an impersonal and continuous sequence of cause and effect, characterized by the notions of variation and natural selection; an last but not least, a simultaneous study of the evolution of institutions and human intentionality. After this, Liagouras showed that in Veblen's assertions, only the first and the second above-mentioned points are present.

Veblen as "an original synthesis between Bellamy, Darwin and Lamarck" After an analysis of his theory of human nature, Liagouras considered Veblen's work to be "An original synthesis between Bellamy, Darwin and Lamarck" and in the article published on the 'Cambridge Journal of Economics' he presented all the arguments that Veblen borrowed from others, together with a scrutiny of some of the main topics of the Veblenian contribution and linked contradictions. First of all, Liagouras explained the similarity between Veblen and Marx in the following assessment: Veblen argued that the actions of agents are purposeful and moved by their desires, which are ultimately given by 'circumstances of temperament', but still he recognized that, from the scientific perspective, those were not considered as ultimate reasons. What he calls circumstances of temperament are linked to the socio-economic environment and subject to a never-ending process of change. The main players introduced by Veblen and subjects of his evolutionary programme are habits of thought, conventions, and institutions. Because of this, Veblen has been considered very close to Marx with respect to their view. But it's not all: they both saw human activity as a permanent process that implies nature and human beings, and also Veblen distinguished among four different stages of human history and the passage from one to another has clearly a lot do with Marx, in that it is explained through the dialectical schema and motivated by the fact that the system becomes victim of technological progress. The difference between the

two, as observed by the author, consists of the different view on the pattern of development: Marxian philosophy of history implied a unique one, whereas Veblen argued that there was no unique pattern, nor a predetermined end.

On the other side, far from Marx, Veblen has been compeered to the American philosophy of his time, in that he introduced the concept of instincts as stable but fundamental factors of human nature in determining the differences among societies. Along with this, he asserted that the evolution of habits of thought and institutions cannot prescind human nature, since those are dependent upon instincts. More in depth, instincts, as classified by Veblen himself, are of four types: parental bent, predation, workmanship and idle curiosity. For what concerns Veblen's position with respect to the issue of capitalism, it is the predatory instinct that provided for an inspiration and reason for his strong attack to the wild individualism of the capitalistic system, whereas workmanship served as the umpteenth reasoning of his position against that system. But, what mostly makes Liagouras associate Veblen's heritage to the utopian socialist Edward Bellamy (1887) is that both of them supported the existence of some contradictions characterizing the capitalistic system, and concerning the centrally-organized production, competition, conspicuous consumption, and so on.

Moreover, for what concerns the Darwinian side of this synthesis, even if Veblen in his work as a whole, has successfully followed the Darwinian assumption of a continuous evolution without a predetermined end, there are some points in which his arguments differ from the biological framework provided by Darwin. For instance, G. Liagouras claimed that, as soon as Veblen moved from mainly philosophical methodology and objectives of inquiry, towards a more concrete approach, with the aim of responding to questions regarding institutional change, he could not completely support the arguments of the Post-Darwinian economics any more. In addition to this, another aspect

that collocates Veblen distant from the pure Darwinism is highlighted by the author, and it is represented by his account of human intentionality, which is an issue deemed by Veblen himself, foreign to the field of the Darwinian science. G. Liagouras remarks two main contradictions resulted to Veblen from the use of this methodology: one concerns the operativity of the programme, and the other concerns the analysis of the stages of 'life history', such as the capitalist economy, and society. The first one was analyzed by Rutherford in 1998, who claimed that it was difficult to stay consistent with the Darwinian conception, and later by Wesley Mitchell who argued that problems of cumulative change in 'life history' cannot be treat with any method of measurement. The second problem instead finds clear response in the fact that Veblen failed to provide for a complete theory of capitalism, as Hodgson observed: "Compared with the integrated theoretical constructions of, say, Marx or Marshall, there is not a systematic theory of industry, technology or the macro-economy in Veblen's work" (Hodgson, 1993, p. 136). For what concerns Veblen's evolutionism and instinct of workmanship, the author compares his approach to the study of institutional change, to what Dugger called 'truncated dialectic': dialectic because of the occasional turn of institutions, and truncated because of thesis-antithesis contradiction that leads inevitably to a second higher synthesis.

#### 'The Veblenian dichotomy of capitalism'

"But when it came to analysing capitalism, he was like a Darwinian biologist who was suddenly redeployed to the science of medicine" (G. Liagouras, 2009). The latter in his article remarked some of the contradictions of Veblen's analysis on the capitalistic structure, which he deemed to be a failure in consistency and coherence.

Clarence Ayres (1944) and his followers have studied and dealt with Veblen's thought on the dynamics of capitalism (what he calls 'business system') via the so-called Veblenian dichotomy because Veblen interpreted capitalism as the contradictory combination of machine processes and business principles. The industrial revolution was seen as a source of new habits of thought, resulting in a change of mind of people working in machine industry, and Veblen hoped that those developments could produce a cultural revolution capable of freeing humanity from ignorance of institutions. The central argument of the dynamics of capitalism in Veblen is the fact that business principles were lagging behind the new machine age, when they have been developed under the handicraft and petty trade, and subsequently reported other developments thanks to capitalism. Later on, in his work "The Instinct of Workmanship" he enlarged the already radical mismatch between technology and institutions, in which the former was still obsolete and the latter was to dominate the scene. At the end of a description of Veblen's analysis of capitalism, G. Liagouras concludes by saying that it is far from convincing, and one of the reasons is that "it is presented as a transitory phase of human evolution rather than a relatively coherent socio-economic stage." <sup>15</sup>Moreover, Veblen wrongly claimed that the western economics grew so amazingly not because of capitalist institutions, which were impediments to growth instead, but because of the knowledge accumulated time after time by the community.

Another determinant factor in this failure is the inconsistency between the technological determinism and the evolutionary programme Furthermore, he observed that there's no place for mono-causal explanation of the process of change in Veblen, neither for technological determinism. Even if in some cases technology assumes a strong importance from one era to another, the dialectic

<sup>&</sup>lt;sup>15</sup> Liagouras, G. 2009. Socio-economic evolution and Darwinism in Thorstein Veblen: a critical appraisal, in Cambridge Journal of Economics, vol. 33, iss. 6, pp. 1047-64, November 2009

schema is used in this and Veblen's conception is that existing institutional structures build new technologies, which in turn do not fit the old systems which are replaced with new ones.

The last observation by Liagouras is addressed to the issue of Darwinian cognitivism. The first among Veblen's subjects of interest is the concept of 'habits of thought', so the question raised by Liagouras is how to combine in one single framework both the cultural (habits of thought) and the socioinstitutional evolution. What Veblen presented in his 'Theory of the Leisure Class' is a process in which the social structures are determined by institutions and the latter are determined by habits of thought, that's to say everything is ultimately brought back to cultural evolution. According to the author, this framework makes Veblen fall into reductionism for two reasons; one is the underestimation of institutions with respect to habits of thought, namely few consideration of the 'artificial selection'. The other reason is the inappropriate use of the notion of 'natural selection' making it explain all types of institutional structures, and this has been a highly debated issue under the name of institutional complementarity on which many scholars focused together with modern capitalism, especially Crouch et al. in 2005. The author concludes this assessment by claiming that the above-mentioned contradictions derived from the Darwinian approach to the analytics of capitalism could never be overcome by the developments and adjustments to the discipline up to today, namely by modern evolutionary microeconomics.

## 2.2 An analysis of the development of Veblen's programme: Geoffrey M. Hodgson.

Starting from the diffusion of the idea of Darwinism in contrast with the Lamarckians from the 1880s to the early 1990s, George Hodgson in his article

for The Cambridge Journal of Economics traces the main influent factors stimulating the Veblenian revolution, and how his thought was built time after time from his essay of 1898. After a synthetic analysis of Veblen's early influencial figures, met during his academic years between 1870s and 1880s, Hodgson run through the criticism of Marxism with respect to socialism, made by Veblen in his later works. Here is that Hodgson explains how Veblen rejected both the utilitarian and hedonistic explanation and every kind of exclusive determination, either the social determination and the methodological individualism: therefore, he recognized that socio-economic phenomena cannot be ultimately explained on the basis of the individual, but social structures and institutions are involved as well. After a brief testimony of Veblen's account of Marxism and socialism, Hodgson describes another figure which played an important role in the architecture of Veblen's theory of socio-economic evolution, C. Lloyd Morgan, a philosopher and zoologist in Briston, England, who used to teach in Chicago at the time when Veblen attended that city. He was an enthusiastic Darwinian and, in his work, he argued that habits are not rooted in genetic factors. This position gave birth to a strong paradox which Hodgson described accurately in his article: in the nineteenth century humans got to great achievements in technology and developed advanced tools in many fields, but genetically, they have changed very little. Lamarckians believed in the possibility that these new acquired habits could be passed on genetically from generation to generation. In contradiction with Lamarckism, Morgan responded with "This is that evolution has been transferred from the organism to the environment..." In referring to Morgan's view of human evolution, Hodgson introduces the concept of ontogeny, namely the development and growth of a single organism without genetic changes. After this, Hodgson passed through the relationship between Veblen and the main schools of economic thought at

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<sup>&</sup>lt;sup>16</sup> Hodgson, G. M. On the evolution of Thorstein Veblen's evolutionary economics, in Cambridge Journal of Economics, vol. 22, iss. 4, pp. 415-31, July 1998

that time; for instance he testified that, in 1898 essay, Veblen devoted strong consideration to both the neoclassical and the Austrian school and developed significant criticisms; Veblen's appraisal of the Austrian school is similar to that against the school of the German historicists; he argued that 'the Austrians on the whole showed themselves unable to break with the classical tradition that economics is a taxonomic science. The reason for the Austrians failure seems to lie in a faulty conception of human nature' (ibid.,p.73). Indeed, the critique raised against the neoclassical school is described by this passage: 'In all received formulations of economic theory, whether at the hands of the 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 given human nature' (ibid.,p. 73). Finally, Hodgson concludes this review with Veblen's critique of the 'hedonistic' aspect of mainstream economics, and reports a passage written by Veblen in a satiric way in order to conceal his strong critique towards the concept of agent: '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...He has neither antecedents nor consequent. He is an isolated, definitive human datum, in stable equilibrium...' (ibid.,p. 73). Veblen indeed saw instincts and habits as the dynamic forces moving the actions of agents, which are themselves dynamic and not in stable equilibrium. In concluding, Hodgson recognizes that, despite some contradictions and limitations due to some of Veblen's choices, his writings represent the first case of an evolutionary economics along Darwinian lines, and calls him the first 'evolutionary economist'.

#### 2.3 Thesis of the Generalized Darwinism<sup>17</sup>: Cyril Hédoin

After the works of two authors Donald T. Campbell (1965) and Richard Dawkins (1983) a new concept was introduced to the context of Darwinism: Generalized Darwinism, associated to the idea that this line of thought could efficiently be enlarged to adapt phenomena well beyond the natural realm. Few years ago, also Christian Cordes talked about 'Continuity Hypothesis' in one of his articles, referring to the same idea as above, and Witt (2003) offered another interpretation of Veblen's evolutionary economics, through his interest in the concept of conspicuous consumption. There's an ongoing discussion about whether Veblen generalized the Darwinian framework or not, and Geoffrey Hodgson (2008) arguing that Veblen is the first representative of the evolutionary economics, responded to that question, claiming that Veblen did clearly expanded the Darwinian framework, making use of the three principles of retention, variation and selection in the explanation of the evolution of institutions and habits of thought. 18 In 2010, Cyril Hédoin wrote an article, published on the Journal of Economic Issues, with the aim of making an accurate analysis on this argument, supporting Hodgson's claim that Veblen made use of the Generalized Darwinism, and at the same time the article will try to pursue the objective of showing that the evolution of institutions can be explained through game theory. The article is very well structured in three parts which basically follow the pattern of the objectives of the article itself; the first part represents an analysis of the concept of generalized Darwinism, summarized in three clear points that ensue:

•Both the natural and the social realms are described by the existence of complex population systems which have features in common, such as being

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<sup>&</sup>lt;sup>17</sup> The inception of term is due to Campbell (1965) and it refers to a 'Conceptual evolutionary framework able to make sense of a large range of phenomena in both the natural and the social realms' Hédoin, C. Did Veblen Generalize Darwinism (and Why Does It Matter)? in Journal of Economic Issues, vol. 44, iss. 4, pp. 963-89, December 2010

composed of entities which have to bear scarcity, and so they need energy and resources in order to survive adaptation to circumstances. Only in this way they may have 'offsprings' who, in turn, tend to be more similar to their belonging entity than to the others. (Aldrich et al. 2008, 582-583; Hodgson 2007, 266)

- •The evolution of these systems tend to follow three principles: retention, variation and selection. Retention, also 'continuity', is the principle according to which entities pass on to their offsprings useful information for solving the adaptive problems they have to deal with in order to survive. The principle of variation, indeed, consists in the fact that entities must not be identical in order to save the variety among populations. Finally, selection implies that, time after time, populations of entities change in order to adapt better to the everchanging external environment, getting an higher and higher survival rate, and more offsprings than the previous generation. As Knudsen observed in 2004, the principles of retention and variation are necessary in order for the principle of selection to be coherent and efficient in realm. This tells us that in the explanation of the evolution, one must take into account the variety that exists among populations, the information that are transmitted generation after generation, and the process through which populations solve the adaptive problems towards the environment which surrounds them.
- •Nonetheless, there are some contradictions and problems which are interposed in this complex process of adaptation, an incompleteness of the three principles, giving reason to the fact that the framework provided for by the generalized Darwinism is not enough and not properly elaborated in order to give response to the questions about the evolution of all the different population systems (Aldrich et al. 2008, Hodgson and Knudsen 2006a) and by the way, Cordes dealt with the difficulties implied by the specification of the criterion to be used and of the traits of the environment. In fact, the main issue which raised in explaining evolution, is that the processes do ont only differ

when we compare phenomena of different spheres (e.g. social and biological sciences), but also when we are dealing with different entities both belonging to the biological field of study. Thus, according to the author, the way to overcome this problem is by integrate the three principles of the framework of the generalized Darwinism, with additional assumptions, which take into account the specificity of the processes in question.

Hédoin calls it an ontological construct based on philosophical realism, so a philosophical framework which, as such, should be only deemed accordingly to its efficiency to provide tools for explaining evolution. He also provides for an alternative ontological framework, the Lamarckian or 'Continuity Hypothesis'.

More than this, an analysis of the relationship between generalized Darwinism and the idea of multilevel selection is made. There are basically two ways of grasping evolutionary phenomena. One is proceeding by reduction, arguing that all phenomena of interest can be explained by the selection process; the other way is memetics (Richard Dawkins is the creator of memetics and the one who established its fundamentals, and he is also one of the precursors of generalized Darwinism), or in other words, the approach of multilevel selection. The assumption of memetics (Blackmore 1999; Dawkins 1975; Dennett 1995) is that there's an association between the genes in biology and an analogous entity at the cultural level: the meme<sup>19</sup>. Just like genes, memes are characterized by different rates of replication in the selection process, but also many contradictions concerning this analogy have been observed, for instance the fact that both the process of transmission of memes, and the physical stratum in which information is stored, haven't been identified yet. What generalized Darwinism basically does is to accept multilevel selection, that's to say the concept that there's one level for genes and another for memes, which are not

<sup>&</sup>lt;sup>19</sup> Set of ideas that have the ability to replicate themselves and to be transmitted between individuals.

independent from each other . In 2004, Hodgson and Knudsen made a clear example: "For example, at the biological level, habits could be interpreted as interactors carrying genes or other replicators. But, at the social level, it could be argued that they play the role of replicators." According to this multilevel selection perspective, socio-biologists claim that we can entirely reduce social phenomena to biological ones, and they recently revisited the multilevel selection theory, introducing a new one: the group selection theory. (Wilson, 2007)

The above-described stream of thought hasn't produced any hostility; Among the strongest oppositions against the *generalized Darwinism* there are Cordes and Nelson in 2006, and Vromen in 2007. The latter made a criticism about the three principles of retention, variation and selection, which he deemed to be at the same time product of a highly abstract biological analogy, since these principles were firstly used in the study of the evolution of species, and an ontological generalization, because they can be adapted to a large range of phenomena. There are other two strong appraisals; one was made by Atran (2001), Cordes (2007) and Sperber (1996) and concerns the existence of replicators at the social level: they claimed that they do not exist, and in the eventuality that they do, they cannot be transmitted directly without the inference of individuals copying models. The other criticism was made by Cordes alone in 2009 and concerned the fact that the selection force is a minor force, due to the instability to whom it is subject.

#### **Veblen's Theory of Evolution and Generalized Darwinism**

In order to define the ultimate reasons of Veblen's choice of generalizing Darwinism, Hèdoin analyses his Theory of Cultural Evolution. The author mainly focused his consideration on Veblen's perception of the role of instincts. First of all, despite Veblen recognized that instints, or "innate propensities" are the

consequence of the genetic endowment of the human natural selection, he has never reduced human behaviour to a mere expression of instincts. Veblen deemed habits to be a kind of human cognitive device capable of helping individuals to pursue their objectives and satisfy their physical needs; and habits themselves depend upon instincts in two ways: the positive one makes humans act for the community's benefit, and the negative one is expressed in the egoistic and invidious comparisons they make with fellows. Veblen introduced the concept of cultural matrices, generated as habits grow, which take shape of institutions. Namely, institutions come from habits and are culturally autonomous; an expression of habits generated by the institutions of the leisure class are conspicuous leisure and consumption. Veblen often specified in his writings that institutions are both factors and unit of selection. In 2008, Hodgson analysed this same facet of Veblen's approach: he observed that Veblen repeatedly used Darwinian terms and this reflects Veblen's conception of evolutionary economics, which he described as the science, which deals with the evolution, the growth of institutions and culture. In a passage, Veblen wrote that "the evolution of society is substantially a process of mental adaptation on the part of individuals under the stress of circumstances which will no longer tolerate habits of thought formed under and conforming to a different set of circumstances in the past" and that "...social evolution is a process of selective adaptation of temperament and habits of thought under the stress of circumstances of associated life. The adaptation of habits of thought is the growth of institutions".(Veblen, 1899). 20 The two sources of this change in institutions are identified into the search of novelty given by the instinct of idle curiosity, and the pressure of the material environment, especially technology. When wondering about the mechanisms through which technology could affect people's minds, Veblen responded with the important process

Hédoin, C. Did Veblen Generalize Darwinism (and Why Does It Matter)? in Journal of Economic Issues, vol. 44, iss. 4, pp. 963-89, December 2010

rationalization, induced by a selection of institutions, and through which matter-of-fact preconceptions displace animistic ones. The author Cyril Hédoin agrees with Malcolm Rutherford in that Veblen makes two evolutionary processes emerge from his writings: one is a process of selection of stable types of behaviour, whereas the other is the slow process of adaptation of habits of thought.

To sum up, Veblen did actually generalize Darwinism, but some contradictions, concerning the different levels of selection, remain. In order to provide for a possible solution to this, the author Cyril Hédoin proposes *An Evolutionary Game-Theoretic Perspective*, in which institutions may be both the outcome of the game or the game itself with all its characteristics.

### 2.4 Endogenous analysis of Veblen's theory of institutional change: Olivier Brette

Olivier Brette, winner of the AFEE-EAEPE Veblen 150 Prize Competition, organized in 2007 to celebrate the 150th anniversary of the birth of Thorstein Veblen, is one of the main scholar of Veblen. In 2003, he wrote an article for the *Euro J. History of Economic Thought* where he proposed an analysis on one of the most controversial content of Veblen's works: institutional change. Brette took an argument already previously discussed by Rutherford, which is the thesis of technological determinism which admits that institutional change exclusively lies in technological progress. Brette presented his analysis as a discredit to this thesis, and as a support to an other interpretation to the whole Veblenian programme, suggesting an endogenous analysis of Veblen's theory of institutional change, where change is an effect of mutual influences among several factors, such as instincts, institutions, and the environment.

Contrary to what Rutherford did, Brette did not put all the emphasis on the component of instincts, but gave them equal weight compared to institutions and the environment in the process of institutional change; whereas, similarly to Rutherford, Brette thought that 'it is doubtful that Veblen attempted to model his theory of institutional evolution on Darwinian notions of natural selection in any very close or exact manner' (Rutherford 1998:465; Jennings and Waller 1998:212-5). <sup>21</sup>

The interpretation made by Brette is aimed at clarifying the interrelation between the above-mentioned variables highlighted by Veblen in the process of evolution: instincts, institutions and material and technical conditions. Moreover, his analysis is based on the concept of emergent effect, supported by the fact that it has recently been argued that 'Veblen appears thoroughly consistent with OS [open-systems] methodology' (Mearman 2002). This notion found an explanation in 1998 when Hodgson defined it as the idea that socioeconomic phenomena cannot be entirely explained by the biological characteristics of the agents concerned; nonetheless, the meaning that Brette assigns to it, is quite different. He identified a mutual causation, that's to say that socio-economic evolution can itself lead to unpredictable outcomes, namely emergent effects. The author found Veblen to be Darwinian in that he identified 'modern science' with 'evolutionary science' and 'post-Darwinian science' and that this different connotations arose from the strong impact of machine developments, namely with technology improvements. On the other hand, with his framework, Veblen raised many objections to the orthodox political economy which mainly focused its work on the notion of 'equilibrium'. Whereas, differently, Veblen aimed at building up a non-teleological theory of institutional evolution, shedding light on the institutional dynamics as such.

<sup>&</sup>lt;sup>21</sup> Brette, O. Thorstein Veblen's theory of institutional change: beyond technological determinism, in European Journal of the History of Economic Thought, vol. 10, iss. 3, pp. 455-77, Autumn 2003

After a short overview of Veblen's concept of institutional change and his main objectives, Brette observed that the most important explanatory variable in the process explained by Veblen's theory is economic, and more generally human behaviour, accordingly to this passage, where he defines human being as 'a coherent structure of propensities and habits which seeks realisation and expression in an unfolding activity'. By referring to 'propensities' here in this sentence, Veblen meant instincts, of which he identified four: the instinct of workmanship, the parental bent, the bent of idle curiosity, and partly the predatory instinct. Thus, concerning human behaviour, he argued that it is the result of two main factors: firstly the above-mentioned instinctive impulses, and secondly, habits of thought, to which behaviour adapts. Nonetheless, differently from what one could think, instincts here are not intended as mechanical determinants of behaviour, but they 'leave a more open field for adaptation of behaviour to the circumstances of the case<sup>22</sup> (Veblen 1990 [1914]: 3, 30)

#### Technological determinism in Veblen's theory

Veblen's research programme follows a precise pattern and, more in depth, the part referring to the institutional change, takes into account four stages applied to the history of the Western countries: "the savage and peaceable era", "the barbarian or predatory era", and "the era of handicraft" which finally was displaced by the industrial revolution, namely last but not least, "the era of machine industry". Similarly, Veblen described the processes of human behaviour and adaptation as gradual ones; under the impulse of instincts, and influenced by the surrounding societal and technical environment, humans start developing habits of action, which are the fundamental determinants of the personality of an individual and of the way he will behave both individually and collectively. Thus, Veblen defines institutions as 'settled habits of thought

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<sup>&</sup>lt;sup>22</sup> Brette, O. Thorstein Veblen's theory of institutional change: beyond technological determinism, in European Journal of the History of Economic Thought, vol. 10, iss. 3, pp. 455-77, Autumn 2003

common to the generality of men' (Veblen 1990 [1919, 1909]: 239) and from this passage emerges a clear materialistic determinism: institutions are seen as the product of the material conditions of the society, which Veblen itself called 'the state of the industrial arts.' Mechanical processes strongly transform the organization of production, imposing their knowledge on the habits of thought of laborers, redefining also the way of making research and defining the objectives of science and technical studies. Veblen wrote that 'in the modern culture, industry, industrial processes and industrial products [...] have become the chief force in shaping men's daily life, and therefore the chief force in shaping men's habits of thought' (Veblen 1990 [1919, 1906]: 17). Therefore Veblen's theory of institutional evolution is characterized by this facet of materialistic determinism, which is subject to diverse interpretations; for instance, Walker summarized Veblen's theory with the idea that institutional change is exclusively determined by the dynamic impact of technology' and then he also argued that whereas, according to Veblen, basic human instincts are the prime force, which lead man to improve his knowledges and capabilities. In other words, the role of instincts here would be that of giving an impulse for technology, being the true driving factor of changes in institutions. This aspect of Veblen's theory had a lot of critics, among which the most important are Coats and Walker, who both agree on the fact that 'the truly dynamic factor in Veblen's system is technological change; yet Veblen provided no adequate theory of how technology changed' (Coats, 1954:533).<sup>23</sup> Afterwards, also Rosenberg made a reference to Marx and Veblen, deeming them both technological determinists. Next in his career, precisely in 1990, Veblen left apart technological determinism, and asserted that even the mechanical changes derive from changes in the human factor and his behaviour. To sum up, the aim of Brette's paper is that of demonstrating Veblen's failure in

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<sup>&</sup>lt;sup>23</sup> Brette, O. Thorstein Veblen's theory of institutional change: beyond technological determinism, in European Journal of the History of Economic Thought, vol. 10, iss. 3, pp. 455-77, Autumn 2003

building up a theory of institutional evolution 'stated in terms of the process itself' as Veblen himself wrote before. This is due to the fact that he makes changes in institutions stem from exogenous technological progress. An analysis of consumer behaviour in *The Theory of the Leisure Class* suggests us that beside technological determinism, another concept lies: once established, institutions gain autonomy and fall into a coherent system of values, which in turn affect individual and social behaviour; Veblen refers to this as 'cultural scheme' or 'cultural complex', and this is what we mean by *cultural determinism*.

#### Veblen's theory of institutional evolution

The process of the *genesis* or *growth* of institutions can be described in two stages, implying both technological and cultural determinisms: the first is 'a process of selective adaptation' through which instincts and institutions adapts to the material and technical environment. Nonetheless, Brette agrees with Rutherford (1998: 467) and Jennings and Waller (1998: 212-13) on the fact that Veblen attributed different meanings to this expression. Anyway, this stage is followed by the process of institutional self-reinforcement, through which the selected institutions transmits knowledge and capabilities to instincts and new institutions. Brette described this second process with the following scheme in Figure 1.

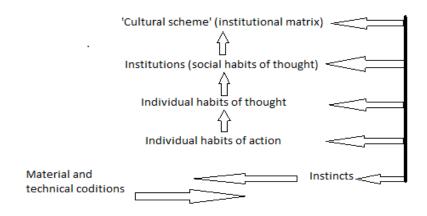


Figure 1: Veblen's process of institutional self-reinforcement by Olivier Brette.

What Brette wanted to show is that Veblen's theory cannot be reduced to technological determinism, but institutional change appears to be an unpredictable outcome of the interaction between technical, instinctive and institutional factors.

#### 2.5 Malcolm Rutherford's analysis of Veblen's institutional change

Since Malcolm Rutherford is one of the main commentator of the content of Veblen's works, it is worthwhile examining his paper on the processes of institutional change. He wrote it for the *Duke University Press*, and it begins with a reference to one of the passages by Walker, who argued that 'Veblen's central thesis is that new habits of thought result from the emergence of new ways of making a living, which are in turn the result of technological change. Institutions

are static and resist change; new institutions are formed as the result of the dynamic impact of technology'.24 Even if Rutherford admits that technology plays an important role in the dynamics of institutional change, he deemed Walker's definition to be strongly misleading, since it ignores other elements playing a role in Veblen's theory. The first part of the paper deals with the role of instincts in Veblen's system; Rutherford observed that they do not have major importance, except in the earliest phase of cultural evolution, then the use of instinctive drivers declined significantly in his later works. Nonetheless, Veblen assigned a precise function to the use of the concept of instincts; they provided a non-institutional and non-relativistic criterion, according to which institutions are valued. Afterwards, once institutions are established, their principles act as determinants of human behaviour, replacing instincts. One important tool which can let us understand the internal development of an institutional system is the comparison with Veblen's treatment of the business system. In The Theory of the Leisure Class, Veblen deals with the impact of values and institutionalized criterion on matters like taste and fashion. Also, another debate is opened concerning the causal relationship between institutions and habits of thought; some scholars have argued that Veblen's system is characterized by institutions that affect habits of life, and this could be deemed to be contradictory with his main point of technological determinism, which focuses instead on technical progresses leading to different habits of action and livelihood. Rutherford summarizes this mechanism as 'a sequence of change which involves institutions affecting technology and technology affecting institutions'. 25 In giving such importance to technological progress, Veblen introduced the new issue of innovation; this can proceed through

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<sup>&</sup>lt;sup>24</sup> D. A. Walker, 'Thorstein Veblen's economic system', Economic Inquiry 15 (1977): 217-22

<sup>&</sup>lt;sup>25</sup> Rutherford, M. Thorstein Veblen and the processes of institutional change, in History of Political Economy, vol. 16, iss. 3, pp. 331-48, Fall 1984

domestic generation of new technology, otherwise through the borrowings from somewhere else. Dealing with this, Veblen made a great appraisal on different countries and an analysis of *predatory cultures* built around the principles of mastery and obedience. Technological change gives birth to new conditions and opportunities, so that already existing organizational structures and principles are affected and, this shift in institutions is perfectly well-matched with the logic of business; in fact, the institutional base remain business and the pursuit of private pecuniary gain. To sum up, what Rutherford meant in this paper was to show that the causal links between institutions and technology actually run in both directions.

#### Conclusion

In highlighting Veblen's borrowings from biology in order to develop a post-Darwinian scheme, afterwards representing the fundaments of evolutionary economics, this paper provides several hints for the understanding of what was and what is economics, going through the developments that this discipline witnessed over time. It can be argued that it went from being a merely social science, to the acquisition of diverse connotations. In particular, we identified the connotation assigned by Thorstein Veblen who was dealing with the explanation of social and human change. Actually, this also was the ultimate objective of his research programme: providing economics with the postulates of a modern science, which meant turning it into a science producing dynamic theories of evolution and growth.

What emerges from this analysis is that Veblen contributed in diverse ways to the expansion of what is today called evolutionary economics, implying a strong effect on game theory models. Due to his original and complex Darwinian approach to the study of social sciences, he introduced a new way of interpreting social and cultural change; and what we mean by Darwinian approach to the economic science is well summarized by one key statement, "the evolution of social structures has been a process of natural selection of institutions" (Veblen, 1899). To sum up, this paper attempted to run through the history of our discipline from Veblen's work, not only providing insights on a facet of economics which is very debated and still growing today, but also suggesting that Veblen's results can be actualized; in fact in 2000, Jean-Jacques Gislain argued that Veblen offered an account of American capitalism by showing how the institutions of the leisure class are products of the private property and then how it generates its own secondary and reinforcing institutions, such as fashion.

We got to the conclusion that Darwinism and modern evolutionary game-theory are complementary, namely there's a strong relation between the developments of economics under a Darwinian perspective, the contributions made by Veblen in this context and what we study in economics courses today under the name of Game Theory. Thorstein Veblen wasn't the only one to suggest this methodology, but also several scholars in evolutionary anthropology recently argued that social evolution has at its root a selection and adaptation process. Despite the focus on the specificity of cultural transmission, their study led them to the acknowledgement that selection does actually plays a role. (Boyd and Richerson 1985; Heinrich and Boyd 2002).

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