HAYEK'S EVOLUTIONISM

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ABSTRACT

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This thesis examines F.A. Hayek's evolutionary theory. Much of his work in this field can be seen as a rejection of the Austrian School of economics, of which he is a central contributor. This thesis begins with background on Austrian economics. Understanding the tenets of this school uncovers the controversy in Hayek's evolutionism. Three important contentions follow. First, Hayek's theory of cultural evolution is the extension of Lamarckism from the biological realm to the social arena. Lamarckian evolution is the 'inheritance of acquired characteristics.' Secondly, Hayek underestimates the contribution to evolutionary economics that is made by Charles Darwin. This thesis examines the reasoning for this underestimation, citing Hayek's alignment with the Scottish moral philosophers and Darwinian rejection of individual choice as the contributing factors. Finally, this thesis reconciles Hayek's group selection with methodological individualism and Austrian economics. This is done through Ulrich Witt's reductionist method.

To my wife Jen and our new baby girl Allie.

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"…it is probably no exaggeration to say that every important advance in economic theory during the last hundred years was a further step in the consistent application of subjectivism"

-F.A. Hayek 1955 p.31

INTRODUCTION

The motivation for this thesis is to uncover some popular misconceptions that have been written about the evolutionary work of F.A. Hayek. Some evolutionary economists view Hayek's theory of group selection as a rejection of methodological individualism. This negation of methodological individualism would leave his earlier defense of the free market vulnerable to dissolution. Hayek uses analysis at the individual level to point out the errors of socialism with respect to individual incentives and the problem of knowledge dispersal. In addition to this misconception, Hayek is viewed as being teleological. This is patiently untrue.

In order to understand much of Hayek's evolutionary theory and how it is still consistent with methodological individualism, the reader must have a requisite understanding of his commitment to Austrian economics. This study will begin with an analysis of Hayek's Austrian background to allow for the reader to appreciate the complexity of Hayek's evolutionary theory. While the expected audience of this work consists of those individuals that are interesting in evolutionary economics, it also serves as an introduction to Hayek's unique analysis of complex market phenomena.

Hayek's work evolved from a movement of opposition, the Austrian School, during the "Methodenstreit," and adapted into the strongest opposition to the dangers of communism and socialist ideal. Hayek's work did not stop evolving there. While continued to oppose socialism from *The Road to Serfdom* through *The Fatal Conceit*, he also pursued different passions, such as psychology, and eventually, evolution.

I wish to cast F.A. Hayek as an evolutionist. In accomplishing this endeavor, I will also show that he remained true to his Austrian roots, by not shunning subjectivism or even individualism in the process. Hayek's theory of cultural evolution involves group selection. On the surface this looks to be a rejection of methodological individualism. I will show that the selection mechanism in Hayek's evolution can be reduced to the individual.

By focusing heavily on the origins of Hayek's evolutionary thought, I contend that Hayek draws from the Scottish School and not Darwinism, and even that he claims the evolutionary process was not "imported" from biology and Darwin, rather, it had existed in economics long before.

Hayek's theory of cultural evolution draws on the evolutionary theory of Jean-Baptiste Lamarck. Lamarckian evolution relies on the passing on of acquired traits as opposed to genetics in Darwinian evolution. While Lamarckism is no longer accepted in the biological fields, learning, acquisition of knowledge, and inherited traditions are vital parts of cultural evolution. I contend that Hayek's theory is the extension of Lamarckism into the social sciences.

My final point of contention is that Hayek's theory of group selection can be reduced to the actions of individuals and therefore remain a methodological individualist. I will try to show, through an individualistic approach, he implicitly remained true to his Austrian roots. Hayek's theory of evolution points to selection at the group level. On the surface, this could be devastating to his individualist roots. However, many evolutionary economists find group selection to be less than satisfactory. Hayek does not give any definite selection or transmission process, nor does he give a convincing argument for efficient group choice. Ulrich Witt has developed a method to reduce group selection to the individual through imitation and innovation.

Using Witt's method, Hayek's theory of group selection can be reconciled with methodological individualism.

CHAPTER I. AUSTRIAN METHODOLOGICAL BACKGROUND

In order to properly understand Hayek's work, we must examine his background, Austrian Economics. Without an understanding of the nature of Austrian Thought, the implications of Hayek's evolution on his earlier arguments are lost to the reader. Through such an analysis we can see the framework through which Hayek viewed the economy which can be characterized as a focus on the market process. This is essential in interpreting Hayek's more controversial positions on cultural evolution and group dynamics.

Hayek solidified the Austrian position on methodological individualism using spontaneous order, and successfully defended their free-market stance against the lure of communism, bringing Austrian Thought out from the periphery and into the spotlight for a short time. His attack on communism focused on the inability to account for dispersed knowledge and the incentive problem by the central planner. He centered his defense of the free market on the individual. Any rejection of his methodological individualism would allow for a rejection of his defense of the market. Hayek's later work, some say a departure from his Austrian foundations, focuses on cultural evolution from group selection. Without a requisite understanding of Austrian Economics, one can easily misinterpret Hayek's writings on evolution.

The Austrian School of Thought began in 1871 with Carl Menger and Marginal Utility Theory. While this is the same beginning as neo-classical economic thought of such economists as Jevons, Walras, and later Marshall, two important Austrians: Eugen Boehm-Bawerk and Friedrich von Wieser took the marginal concept and applied it more broadly. At the same time Jevons and Walras were applying marginal utility to exchange, Boehm-Bawerk and Weiser spun out the wider implications for the Austrian theory of capital, interest, wages, and rent. This

distinctive twist was an emphasis on the broader aspects of the subjective approach, specifically the subjectivism of knowledge, perceptions, and intention from the point-of-view of the market actors (Ebeling 4). This broad focus set the Austrian School on a path that is quite different from neo-classical economics. The focus on the individual does not allow for any attempt at aggregation nor does it support much empirical analysis. This view of the subjectivism of knowledge paved the way for methodological individualism, and thus led to the Austrians' view of market processes tending toward equilibrium, rather than a mere specification of the conditions requisite for a state of equilibrium to exist, as was the view of neo-classical economists and an assumption upon which most of their models depended on.

Methodological individualism became the focus of Early Austrians and those to follow such as; Ludwig von Mises, Hayek, Oskar Morgenstern, Murray N. Rothbard, and Israel M. Kirzner. Methodological individualism became the catalyst for explanation of all social and economic phenomena. This is the view that any force that is exhibited in the market or social realm begins with, and is ultimately, a result of the actions and interactions of individuals. Furthermore, any theory of market phenomena that cannot trace its findings back to the logic of human choice and action is an incomplete and unsatisfactory theory (Ebeling, 1991: p.xii). This is why the Austrians are most critical of macroeconomics and the policies that have been advocated on its basis. Unless one can successfully trace the origins of statistical aggregates to the past actions of individuals in the individual markets that compromise the aggregate, little of value has been explained. Thus, for Austrians, individuals are at the center of the economic system.

Bettina Bien Greaves does an excellent job outlining methodological individualism in her book, *Austrian Economics: An Anthology*:

> The great contribution of the Austrians is their methodology; they use logic to develop methodological individualism. They view man as a thinking, acting person, a person with a mind, subjective values, and many wants, who is always striving to improve his or her situation. Austrians place individuals at the center of the economic system. They realize that it is only by studying the conscious, purposive actions of individuals, which reveal their decisions, choice, preferences, and values, that one may understand the relationship of acting men to the physical world and to other men. (Bien Greaves, 1996: p.5)

The road to understanding such economic phenomena as prices, wages, costs, money, banking, business cycles, and so on *ad infinitum,* in her estimation, is through the subjective looking glass of the individual. Austrians then, through the individual, go on to reject positivism, empiricism, historicism, and what Hayek calls "scientism" or pseudo-scientific study.[1]

Parallel to methodological individualism in Austrian thought is methodological subjectivism. Each individual has only his experience, ideas, knowledge, his own pair of eyes, with which to view the world. Contrary to neo-classical assumptions of perfect competition and perfect knowledge, market actors do not come to the market "fully formed", acting as if they had perfect information and knowledge. In fact, "choice" would have little meaning in that framework. Choice implies selection among alternatives, but when knowledge is perfect there is no real choice. As a result, Austrians have tried to develop a theory of human action and the market process that focuses upon analysis from the actor's point-of-view, rather than to impose a set of hypothetical knowledge and informational assumptions upon the actor (Ebeling xv) It is true that those assumptions make conclusions about the market easier to reach, but they do not

[1] The goal of this thesis is not to defend the Austrian position, but to shed insight on the evolutionary foundations of Hayek's work. As such, a detailed composition involving all Austrian tenets would be exhaustive and wasteful. However, I must outline the main pillars in order to prepare the reader to understand Hayek's work. To receive a more detailed overview of Austrian tenets see; Bein Greaves 1996, or Caldwell 2004. I direct further analysis to *Human Action*, Mises 1949.

succeed in explaining how markets actually work, given that individuals are not endowed with such “perfect” knowledge as the theory would assume. Therefore, market phenomena must be analyzed within a framework constructed from the knowledge, intentions, and expectations of the actors themselves. This is a central contention of Austrian economists: methodological subjectivism is a theoretical framework starting from the actor’s or individual’s, point-of-view.

The development of the subjectivist nature of Austrian thought begins with Carl Menger. In addressing the nature of natural and social research, Menger addresses the validity of subjectivity among “social organisms”. Upon reading this essay, one can see the beginnings of the underpinnings of Hayek’s evolutionary thinking with will be discussed later.

> The exact understanding of natural organisms is not only desired in the natural sciences, but signifies an advance over the empirical-realistic understanding.-The exact understanding of social phenomena or of a part thereof can, accordingly, not be inadmissible because the phenomena concerned are viewed as so-called “social organisms.” (cited in Ebeling, 1991: p183)

The subjectivity of economic research introduced by Menger is a very important development at the time. The German Historical School was attempting to make economics purely empirical and therefore “objective” in their estimation. During this time period, the *Methodenstreit*, or battle over methods, the emergence and legitimacy of a priorist methodologies came into question. Unfortunately, Menger did not successfully defend subjectivism against the German Historical School. “Menger’s efforts were an utter failure,” (Caldwell, 2004: p74). The torch of the subjective was left for others to carry.

Max Weber and Friedrich von Wieser gladly took up the fight. Weber argued that the understanding of human interaction can only be properly understood through a subjective

valuation of individuals' means and ends. "…as from the norms for the concretely conditioned conduct of the individual, cultural values cannot be unambiguously derived as being normatively desirable; it can do so the less, the more inclusive are the values concerned" (cited in Caldwell, 2004: p.87). More precisely Weber says, "We cannot discover, however, what is meaningful to us by means of a 'presuppositionless' investigation of empirical data. Rather perception of its meaningfulness to us is the presupposition of its becoming an object of investigation" (cited in Caldwell, 2004: p.87). Just as the econometrician "decides" what is important to modeling certain economic phenomena, that "decision" is based on his or her own subjective theory about what is correlated, and therefore necessary, to the other variables involved. Weber attacked objectivity, and the German Historical School, out of necessity. At the time, the Austrian School did not have a strong following. In order for the survival of the school, a champion of subjectivism was needed to draw attention to the flaws of the German Historical School. The infinite complexity of the marketplace calls for a measure of subjectivity out of a sheer inability to account for all the phenomena that occur simultaneously.

Wieser, a student of Menger who made the fulfillment of Menger's teachings his life's work, was concerned with the methodological aspects of physical science being applied to economics.[2] Wieser formalized this argument against Joseph Schumpeter's notion that rejected the subjectivity of human action. "Schumpeter's procedure was to observe economic facts from the outside alone, just as natural scientists do with phenomena…" (Wieser, 1994: p.290). Wieser saw that individuals act based on their "store" of experience and empirical analysis could not achieve similar results as the physical scientists due to the assumptions needed to model the

[2] This dedication is mentioned of Wieser and Boehm-Bawerk in *The Fortunes of Liberalism: Essays on Austrian Economics and the Ideal Freedom*. F.A. Hayek 1992.

"rational man".[3] Wieser continued his defense of subjectivism by delving into the realm of psychology. There exist many other tenets of Austrian thought such as, a priori reasoning, rejection of "scientism", their theory of money and the business cycle, and their theories of capital formation and interest, that are both important and interesting. However, the subject matter at hand does not warrant an exposition of these topics.

[3] I think it is interesting to note the differences between Weber and Wieser's approach to subjectivism. It would be an aside and as such, not essential to the topic of this thesis. I do think it worthwhile to study the psychological assumptions made by Wieser, which were rejected as a course of study in Austrian Economics by Weber.

CHAPTER II. THE AUSTRIAN VIEW OF THE MARKET PROCESS

Understanding the Austrian view of the market process is a key aspect of understanding Hayek's evolutionary traits. We will see Hayek's focus on the process and not the end result. Hayek's process orientation becomes key in refuting any claim that he is teleological. Austrian Thought has three different views of the market process. The main embodiment of the market process can be analyzed through Israel Kirzner, Ludwig Lachmann, and Hayek. Kirzner focuses on eventual achievement of equilibrium. Lachmann's view of the market process emphasizes the subjectivity of the individual as perpetuating any disequilibrium as equally as any equilibrium. In Hayek' work we will see tendency for markets to equilibrate that deemphasizes the outcome.

The Kirznerian view of the market begins with the entrepreneur. "Entrepreneurship expresses itself through the quality of alertness. "An alert individual is able to find unexploited profit opportunities" (Gloria-Palermo, 1999: p.79). For Kirzner, competition arises from this entrepreneurship process, for Kirzner, "What is important about the market economy is that unexploited opportunities for reallocating resources from one (low-market-valued) use to another for higher value offer the opportunity for pure entrepreneurial gain" (cited in Ebeling, 1991: p.320). By "pure entrepreneurial gain," Kirzner is implying a profit motive. In a perfectly competitive world, economic profits are zero, the entrepreneur has no incentive to act, innovate, and create. However, through the dispersed knowledge of imperfect information that Hayek outlines, markets are not in equilibrium and there are profits to be made.

> For me the changes the entrepreneur initiates are always toward the hypothetical state of equilibrium; they are changes brought about in response to an existing pattern of mistaken decisions, a pattern characterized by missed opportunities. The entrepreneur, in

> my view, brings into mutual adjustment those discordant elements which resulted from prior market ignorance. (Kirzner, 1973: p.73)

We can see that Kirzner view his process of entrepreneurship as ending in equilibrium. This view is not adopted by other Austrians as we will see later. What is interesting to note is the process of coordination that occurs under this process. Any market that is not completely coordinated implies that unrealized profits exist, causing entrepreneurs to act. This action by alert agents results in a more efficient coordination of market activity. As a result, for Kirzner, the market has tended toward equilibrium. As this process iterates, the end product is equilibrium. Thus, entrepreneurship and the market process are a process of discovery; achieving higher ends through new information and more efficient coordination. This view, while recognized by the majority of Austrians, is not accepted by Ludwig Lachmann.

> The market process consists of a sequence of individual interactions, each denoting the encounter (and sometimes collision) of a number of plans, which, while coherent individually and reflecting the individual equilibrium, are incoherent as a group. The process would not go otherwise. (Lachmann, 1976: p.131)

Lachmann sees the plans of the individual as based on expectations of the future. These subjective expectations are manifested in the individual as plans. Individual plans can either serve to equilibrate the market or cause further disequilibrium.[4] This important distinction leads Lachmann to favor institutions over Hayek's spontaneous order. Furthermore, it also causes him to miss the implications of spontaneous order on the formation of institutions.

[4] Gloria-Palermo offers a more complete look at the implications of Lachmann's defection from traditional Austrian views in; *Discovery versus creation: implications of the Austrian view of the market process.*

CHAPTER III. HAYEK'S VIEW OF THE MARKET

Now that the foundation of understanding has been laid, we can focus more closely on Hayek's view of the market process.

> Competition is essentially a process of the formation of opinion: by spreading information, it creates the unity and coherence of the economic system which we presuppose when we think of it as one market. It creates views people have about what is best and cheapest, and because of it that people know at least as much about possibilities and opportunities as they in fact do. It is thus a process which involves a continuous change… (cited in Ebeling, 1991: p.279)

It is out of this focus on continual change that Hayek's view of the market process morphed into his much wider views on cultural evolution and spontaneous order.[5] It is also out of this same focus on the process that Hayek differs from Kirzner. "Unexpected change results from changes in exogenous variables; consequently, and unlike Kirzner, Hayek sees no use in focusing '…on a long-term equilibrium which in an ever changing world can never be reached'" (Gloria-Palermo, 1999: p.66). Hayek, in my estimation, more correctly, see the discovery process of market interaction as a constant process of uncovering new information. Kirzner sees the process as uncovering new information as well but, also views this as an immutable process, ending in equilibrium. For Hayek, we "tend" toward equilibrium, but never attain such a goal. Hayek's reasoning for the "tendency" is two-fold; subjectivity of data and the dispersal of knowledge.

> First, there is a difference in the subjective views of individuals and "objective facts": The new world which man thus creates in his mind, and which consists altogether of entities which cannot be perceived by our senses, is yet in a definite way related to the

[5] I will discuss this in greater detail later on.

> world of our senses. It serves indeed to explain the world of our senses. The world of Science might in fact be described as no more than a set of rules which enables us to trace the connections between different complexes of sense perceptions... [That] different men do perceive different things in a similar manner which does not correspond to any known relation between these things in the eternal world, must be regarded as a significant datum of experience which must form the starting point in any discussion of human behavior. (Hayek, 1942: pp.272-3)

Individuals, out of sheer perception, are not in attainment of the 'objective facts' of the external world. For Hayek, and most Austrians, this view of the subjectivity of data is the primary building block for their methodology. The role of the subjective is profound in economics. Subjectivity allows for individual perceptions to be wrong. Objective data, by its nature is infallible. Hayek shows that with perfect information, analysis of individual action is unnecessary:

> It suggests rather that there is something fundamentally wrong with an approach which habitually disregards an essential part of the phenomena with which we have to deal: the unavoidable imperfection of man's knowledge and the consequent need for a process by which knowledge is constantly communicated and acquired. Any approach, such as that of much of mathematical economics with its simultaneous equations, which in effect starts from the assumption that people's knowledge corresponds with the objective facts of the situation, systematically leaves out what is our main task to explain. (cited in Ebeling, 1991: pp.262-3)

Hayek systematically defends subjectivity in analysis, viewing assumptions about individual knowledge to be misguided and wrong. This is still not enough to refute Kirzner's view of a

single equilibrium in society. If subjectivity of data alone were the root cause of disequilibrium then, “true” Walrasian Equilibrium would exist. This would come about through the process of rational learning; subjective data would become ‘objective’ through a series of corrections and iterations, not unlike the method of undetermined coefficients, until final equilibrium is reached. However, the dispersal of knowledge and the revolutionary aspects of market transformation keep final equilibrium unattainable.

Dispersion of knowledge can be seen in *The Use of Knowledge in Society*, when Hayek outlines the difference between scientific knowledge and unorganized knowledge:

> But a little reflection will show that there is beyond question a body of very important but unorganized knowledge which cannot possibly be called scientific in the sense of knowledge of general rules: the knowledge of the particular circumstances of time and place. It is with respect to this that practically every individual has some advantage over all others because he possesses unique information of which beneficial use might be made, but of which use can be made only if the decisions depending on it are left to him or are made with is active co-operation. (cited in Ebeling, 1991: p.251)

An allusion to Smith’s returns to specialization can be made here, but Hayek is developing this idea into the knowledge of the particular.. References to ‘time and place’ and later in his exposition, the phrase ‘man-on-the-spot’, imply more than the knowledge acquired through active learning. This specific knowledge is extended to observance of one’s surroundings or events that transpire that are not known to everyone. It is in the observance of one’s surroundings that Kirzner’s role of the entrepreneur is so essential. It is the entrepreneur who notices these discrepancies in price, information, and areas of organization and then acts to “correct” these

inefficiencies out of a profit motive. For Hayek, this knowledge of the particular is essential for efficiency in the marketplace:

> Hayek noted that 'the economic problem of society is mainly one of rapid adaptation to changes in the particular circumstances of time and place' and concluded that the market can handle such changes effectively because 'the ultimate decisions must be left to the people familiar with these circumstances, who know directly of the relevant changes and of the resources immediately available to them. (Oakley, 1999: p.77)

Bruce Caldwell argues that, "But, when the dispersion of knowledge is also asserted, the key question is no longer that of a movement to equilibrium but that of the coordination of such knowledge" (Caldwell, 2004: p.213). Caldwell's contention is that knowledge dispersal is eternal. Thus, the focus is taken off fleeting equilibria and placed on solving the problem of coordination that arises as a result. This offers support for Hayek's process orientation, but also implies a need to efficiently solve the problem of knowledge dispersal. One possible solution to the problem of dispersed knowledge is the price mechanism.

"Hayek now pointed out that the market permitted an ever greater division of knowledge in society, while at the same time it coordinated that knowledge through prices, a system of signals that convey information" (Muller, 2002: p.364).[6] Prices in the market act as signals to the efficient use of a resource. Hayek says, "We must look at the price system as such a mechanism for communicating information…The most significant fact about this system is the economy of knowledge with which it operates, or how little the individual participants need to know in order to be able to take the right action" (cited in Ebeling, 1991: p.256). The market is the main economizer of information. Hayek saw great transaction costs to discovering all the pertinent

[6] Muller is using this point to make the connection of Hayek's dispersion of knowledge is related to Smith's division of labor, and how both processes lead to increasing human productivity.

information of production in order to efficiently use a resource. Through the market, the price system, many different individuals could coordinate their activities, without all the necessary information, but with the subjective knowledge given to each individual. The efficiency of the market depended on competition however. Hayek saw monopoly as a phenomenon of the beginning of evolution in a particular market.

"It is only in a market where adaptation is slow compared with the rate of change that the process of competition is in continuous operation. And though the reason why adaptation is slow may be that competition is weak, e.g., because there are special obstacles to entry into the trade…" (Hayek cited in Ebeling, 1991: p.276). Hayek, and most Austrians, would categorize the majority of unprotected monopolies as the 'first-mover' into a market. An entrepreneur, through his own subjective information of the particular, saw a market for a good, service, or process, and proceeded to open a business in that market. The adaptation process is then movement of competition into that market. With the presence of more and more competitors, the result is prices that more closely reflect 'equilibrium' price. Hayek, again, highlights the focus of the market process not on perfect competition, but on how the process evolved. "The practical lesson of all this, I think, is that we should worry much less about whether competition in a given case is perfect and worry much more whether there is competition at all" (cited in Ebeling, 1991: p.278). But why would the adaptation process be slow?

Hayek answers that question: "I say advisedly 'where competition is deliberately suppressed' and not merely 'where it is absent', because its main effects are usually operating, even more slowly, so long as it is not outright suppressed with the assistance or the tolerance of the state" (cited in Ebeling, 1991: p.278). For Hayek, there are two reasons why competition in a market would be slow to adapt; an efficient monopoly and state assistance. He goes on to warn

that “imperfections” from governmentally protected monopolies are far worse than any “natural” monopoly:

> A monopoly based on superior efficiency…does comparatively little harm so long as it is assured that it will disappear as soon as anyone else becomes more efficient in providing satisfaction to the consumers. (cited in Ebeling, 1991: p.279)

Again, in this quote we see Hayek’s focus on the process of the market and not the equilibrating results of market interaction. We also see a the shadow of a warning that he will echo through is entire life; “…inevitable consequences of socialist planning create a state of affairs in which, if the policy is to be pursued, totalitarian forces will get the upper hand” (Hayek, 1944: p.xlii).[7]

We see in Hayek’s view of the market process a focus on the continual change, on the evolution of competition and the coordination of individuals possessing limited subjective knowledge. Hayek developed his approach of the evolutionary process of the market to envelop a theory of how groups and societies evolve out of this same spontaneity seen in market interaction. His ideas on evolution are, perhaps, his most controversial and they are definitely the most misunderstood.

[7] The focus of this thesis would be too broad if I were to devote any time to Hayek’s defense of Capitalism. I will spend the rest of this thesis on the evolutionary aspects of Hayek’s writing. If the reader is interested in Hayek’s defense of Capitalism, and has not read either *The Road to Serfdom* or *The Fatal Conceit*, I suggest that as a good start.

CHAPTER IV. HAYEK'S EVOLUTIONARY FOUNDATIONS

Evolutionary economics is a cross-disciplinary look at the process of change in society by the use of biological metaphors to explain change, adaptation, convention, rules, and other complex phenomena in economics. The use of these metaphors is most widely attributed to Charles Darwin and thusly, Darwin is commended as being the first evolutionist. In fact, Hayek has this to say about Darwin, "I have the greatest admiration for Charles Darwin as the first who succeeded in elaborating a consistent (if still incomplete) theory of evolution in any field" (Hayek, 1988: p.22). However, Hayek and others contend that evolution was present in the works of the Scottish School, long before Darwin. I will, in this section and those to follow, try to prove that Hayek saw his theories of evolution as stemming from the Scottish School and not from Darwin. Furthermore, I will also paint Hayek as an evolutionist in the Lamarckian tradition.

It is necessary to mention two important points to keep in mind while reading the rest of this thesis. First, evolution for Hayek is simply any attempt to explain the process of change through time. This is not the strict explanation of selection and transmission that prominently defines evolution in both the social and biological realms. Hodgson feels that Hayek misunderstands the concept of evolution entirely, "In fact, the most prominent idea of social evolution which was 'a commonplace in the social sciences of the nineteenth century long before Darwin' was not one of selection in the Darwinian sense but simply *evolvere*" (Hodgson, 1993: p. 160).[8] Hodgson uses this statement in an attempt to distinguish Hayek's notion of evolution from a process that strictly adheres to a selection mechanism. We will see later that Hayek's mode of transmission is explained, but selection among the group is not fully developed is his work. I will use the work of Ulrich Witt to flush out the selection criteria in Hayek's evolution.

[8] Evolvere means 'unfolding' or 'unwinding'.

Secondly, Hayek uses the term ‘Social Darwinism’ simply to mean the application of Darwinian selection and methods to explain social phenomena. This term has a specific meaning that describes a school of thought that, in my estimation, wrongly uses the ideas of fitness and selection to advocate fascist ideologies that promote reproduction in only the fittest of society. This is not what Hayek means when he uses the term. Any reference to the term ‘Social Darwinism’ used in the remainder of this thesis will take Hayek’s definition.

On the surface, it may be a little confounding that Hayek does not acknowledge the significance of Darwin’s theory. As will be shown, the spontaneous nature of Darwin’s evolution, not being guided by a ‘higher ordering’, but at the same time creating order out of chaos is corollary to Hayek’s view of spontaneous order. One would think that Hayek would rightly see the similarities and acknowledge Darwin’s work as offering a buttress of support for Hayek’s theories. Instead, Hayek tries to distance himself from Darwin and biological evolution. In my view this is unfortunate. Hayek takes great pains to show that evolution, at least his definition of evolution, was present in economics before Darwin. He tries to deemphasize Darwin’s importance to evolutionary economics. Hodgson, in *Economics and Evolution*, describes this as Hayek’s ‘underestimation’ of Darwin. The reasoning behind this ‘underestimation’ is two-fold. First, Hayek sees himself as an economist in the Scottish Tradition. He often cites and draws from Smith, Hume, and Mandeville. Hayek sees his ideas on spontaneous order and market formation as building on these earlier greats. As a result, he attempts to argue that Darwin’s evolution theory is on loan from these early economists. The second reason for Hayek’s disregard for Darwin has to do with the selection mechanism that leads to change. Hayek does not see the ‘gene’ as the impetus for change in the social arena, as it is in the biological field. Evolution at the gene level does not involve any choice from the

individual and as such is inconsistent with Hayek's theories of spontaneous order and group selection.[9]

For Hayek, the idea of the evolutionary process began long before Darwin, "Yet [Darwin's] painstaking efforts to illustrate how the process of evolution operated in living organisms convinced the scientific community of what had long been a commonplace in the humanities- at least since Sir William Jones in 1787…" (Hayek, 1988: p.23). Hayek goes even further to suggest that Darwin's evolutionary theory is "borrowed" from Smith, "I would even be prepared to argue that Darwin got the basic ideas of evolution from economics. As we learn from his notebooks, Darwin was reading Adam Smith just when in 1838, he was formulating his own theory…" (Hayek, 1988: p.24). Hayek goes on to point out that, "Even words like 'genetic' and 'genetics', which have today become technical expressions of biology, were by no means invented by biologists" (Hayek, 1988: p.24). He cites the German philosopher Herder, and later Wieland and Humboldt. All of this however, was preceded in *Volume I of Law, Legislation, and Liberty* first published in 1973 where Hayek outlines the precedence of evolution in the social sciences starting with this quote :

> The first is the erroneous belief that it [evolution] is a conception which the social sciences have borrowed from biology. It was in fact the other way round, and if Charles Darwin was able successfully to apply to biology a concept which he had largely learned from the social sciences, this does not make it less important in the field in which it originated. It was in the discussion of such social formations as language and morals, law and money, that in the eighteenth century the twin conceptions of evolution and the

[9] A third reason for Hayek's rejection of Darwin is the Austrian rejection of scientism; applying the methods of the natural sciences to the social science. This is only conjecture and as such does not belong in this paper. However, Caldwell seems to support this notion in *Hayek's Challenge.* For a more in depth look at scientism I will refer the reader to Hayek's 1942 article in *Economica* titled, "Scientism and the Study of Society".

> spontaneous formation of an order were at last clearly formulated, and provided the intellectual tools which Darwin and his contemporaries were able to apply to biological evolution…A nineteenth-century social theorist who needed Darwin to teach him the idea of evolution was not worth his salt. (Hayek, 1973: vol. I, p.22-3)

This biting criticism was in the style of Mises and very uncharacteristic of Hayek.[10] But why would Hayek so harshly critique Darwin? What was his motive? I offer two possible explanations; his downplay of Darwin stems from a rejection of scientism or it was Hayek's own effort to place himself in direct lineage of the Scottish School.

As mentioned before, Austrians are very critical of applying the scientific methods of the physical sciences to the social arena. Hayek called this *scientism.* It is possible that in order to keep his evolutionary concepts of spontaneous order and group selection consistent with Austrian methodology, Hayek had to distance these ideas from a biological metaphor. We see this distance in Hayek's criticism of Bonner, "It is wrong for Bonner to claim that culture is 'as biological as any other function of an organism'…To label 'biological' the formation of the tradition of language, morals, law, money, even of the mind, abuses language and misunderstands theory" (Hayek, 1988: p.25). He goes on to say 'what is not transmitted by genes is not a biological phenomenon'. This distancing from the physical sciences was important to Hayek if he were to maintain his Austrian roots. He also reminds us of this distance when answering the question whether his theory is biological or not. "Finally, cultural evolution operates largely through group selection; whether group selection also operates in biological evolution remains an open question- one on which my argument does not depend" (Hayek, 1988:

[10] Ludwig von Mises, a mentor to Hayek, was often relentless, unyielding, and harsh in criticisms of other "fallible" arguments. Caldwell points out that Hayek was often more reserved and "academic" in his critiques.

p.25). To follow this logic: Hayek's attack of Darwinian evolution is necessary to distance his own evolution from the realm of the biological.

In order to add validity to Hayek's 'twin ideas of spontaneous order and evolution', he needed to show that his ideas stemmed from economists that were respected by the orthodoxy of the time.[11] That connection to the Scottish School seems to have paid dividends, "For instance, he repeatedly and proudly displays his own intellectual genealogy through Carl Menger, back to Adam Smith, David Hume and Bernard Mandeville" (Hodgson, 1993: p.152). Caldwell shows that, "Hayek claims that the roots of "individualism true' may be traced to various writers in the seventeenth and eighteenth century, and in particular to such thinkers as Bernard Mandeville, David Hume, Josiah Tucker, Adam Ferguson and Adam Smith" (Caldwell, 2000: p.7).[12] Richard N. Langlois and Muefit M. Sabooglu also recognize this connection in their paper titled, *Knowledge and Meliorism in the Evolutionary theory of F.A. Hayek*. In an explanation of Hayek's approach to categorizing change that is neither natural nor artificial we see:

> Hayek wants to use this concept [spontaneous order] to create an intermediate space between what is the result of a human design and what is not. This space will be "occupied" by objects that are neither organizations nor products of nature. Unlike organizations, these objects are, following Ferguson's formula, "the result of human action but not the result of human design"…Looking at the social sciences in this way, Hayek follows not only the tradition of Smith, Mandeville and Hume, but that of the Austrians. (cited in Dopfer, 2001: pg.234)

[11] At the time of Hayek's work, the Austrian position on economics was largely relegated to the periphery in the field, and still is. I believe that Hayek thought that if he could connect his ideas of evolution to that of the great Scottish moral philosophers, then orthodox economists would validate his work.

[12] 'Individualism true' is Hayek's phrase to describe any theory of the individual that is consistent with spontaneous order. 'Individualism false' is precisely the opposite.

We also see in Ulrich Witt this harkening back to the Scottish School, "Originally, however, the idea goes back to the Scottish moral philosophers David Hume, Adam Smith, Adam Ferguson and their forerunner, Bernard Mandeville, who first conceived of the division of labor and a system of multilateral, anonymous markets as a spontaneous order" (cited in Caldwell/Boehm, 1992: p.226). In order for Hayek to set his theory apart from Darwin, and thus the biological, and validate his evolutionary roots, it was necessary for Hayek to downplay Darwin. As a result, Hayek believes his evolutionary theory is placed in the lineage of the Scottish moral philosophers and validated.

Not everyone saw Hayek's connection to the Scottish moral philosophers as offering authority to Hayek's work. Geoffrey M. Hodgson believes in fact that, "However, [Hayek] does not seem to realize that their work is not equivalent to Darwinian evolution or natural selection in a fully specified sense" (Hodgson, 1993: p.152). Hodgson's true critique lies in Hayek's definition of evolution and in that sense, trying to discredit any "Darwinians before Darwin". Hayek would see the definition of evolution as Sir Frederick Pollock sees it, "The doctrine of evolution is nothing else than the historical method applied to nature (Pollock, 1890: pp. 41-2). Accordingly for Hodgson, the Darwinian idea of natural selection is not found in any of the so-called antecedents of Darwin and therefore the evolutionary concepts written about by the Scottish moral philosophers are merely, *evolvere.* "Hayek slurs over the fact that the typical story of the emergence of 'spontaneous orders', as found in the works of the Scottish School, is ontogenetic in character, and is not strictly analogous to a Darwinian process of natural selection…" (Hodgson, 1993: p.160).[13] Later, Hodgson rejects the Scottish development of evolutionary theory. "Furthermore, in tracing his own intellectual pedigree from Hume and

[13] As a definition, ontogenetic; dealing with or describing the origin and the development of an organism and **phylogeny** (or phylogenesis) is the origin and evolution of a set of organisms, usually a set of species.

Smith, Hayek fails to notice the rarity of the idea of natural selection in their works…" (Hodgson, 1993: pp.160-1). Hodgson is trying to show that these antecedents are merely speaking of the process of evolution without any specific selection process. Hayek's work attempts to add the process of selection at the group level and therefore, Hodgson states that Hayek incorrectly underestimates Darwin. I do agree that Hayek's downplaying of Darwin is unwarranted and not necessary to establishing his own theory. However, Hodgson does not recognize that biological natural selection is not evident in cultural evolution. Furthermore, Hayek is speaking of the broad-brush evolution that Hodgson calls *evolvere*. If the strict definition of evolution is used than one must agree with Hodgson and evolution is not present before Darwin. The moral philosophers of the Scottish School saw a process of transmission that Hayek recognized to be evolutionary but did not have a method of selection. The absence of a selection mechanism in these earlier economists is what Hodgson is challenging Hayek on. To the point that Darwin offers an explanation of the development of organisms that needs not be guided or planned, Hayek, in my estimation, could have acknowledged the parallels between the two theories. However, for reasons that we will see, Hayek's underestimation of Darwin is well-founded due to the fallibility of "Social Darwinism'.

Another possible refutation of Darwin is in the direct application of Darwin's 'survival of the fittest' to the realm of the social. Hayek saw that; in the social realm, the claim that evolution through adaptation led to 'survival of the fittest' may well be an example of 'naturalist fallacy'. "The naturalist fallacy would, in this context, be the assertion that whatever social practices emerge from the evolutionary process do so because they are in some way optimal, efficient, 'the best', and so forth" (Caldwell, 2004: p.356). Evolutionary selection in 'Social Darwinism' would choose those rules, conventions, and institutions that result in the 'best' outcome. Hayek says, "I

have no intention to commit what is often called the *genetic* or naturalistic fallacy" (Hayek, 1988: p.27).

Cultural evolution, on the other hand, did not *necessarily* result in the 'best' outcome as will be shown. Due to the naturalist fallacy, Hayek recognized that evolutionary theory was largely discredited among economists of his time, "No one who takes an evolutionary approach to the study of culture can, however, fail to be aware of the hostility often shown towards such approaches" (Hayek, 1988: pg.27).

His most convincing critique of this application of genetic selection to cultural evolution states, "The error of 'Social Darwinism' was that it concentrated on the selection of individuals rather than on that of institutions and practices, and on the selection of the innate rather than on culturally transmitted capacities of the individuals" (Hayek, 1973: vol. I, p.23). Imagine the development of a cooperation gene within a group. Through the genetic process of evolution individuals in this group gradually become more cooperative (assuming that cooperation is essential for survival). First, the development of this gene will take more than a few generations. According to Hayek, these results are too slow and inefficient. Transmission of cooperation through institutions and convention can happen at a much accelerated rate. Also, individual choice makes a significant difference in the outcome. Individuals in this group may choose to free ride and not cooperate, depending on the enforcement of the rules, making the outcome unknown and possibly inefficient. Choice is not present in Darwinian evolution. Traits and characteristics are not learned or chosen, they are acquired without individual action. This is inconsistent with the basic tenets of Austrian thought. If selection happens at the gene level, adherence to methodological individualism is wrong. If individualism is an error, the body of Austrian thought is 'on its head'. Hayek had no choice but to discredit Darwin's contribution to

cultural evolution. Acknowledgement could be seen as denying his Austrian roots, methodological individualism, and much of his prior work.[14]

[14] Hayek took great steps to cover any fallibility in his arguments. I am merely suggesting that Hayek would recognize that the acceptance of Darwin would allow for others to attack his liberal roots and critiques on socialism (a topic of major importance in his work).

CHAPTER V. HAYEK'S LAMARCKISM

Is it possible that cultures, norms, institutions, and conventions evolve out of a process of biological evolution, the view of 'Social Darwinism'? To this Hayek says, "Finally, cultural evolution operates largely through group selection; whether group selection *also* operates in biological evolution remains an open question- one on which my argument does not depend" (Hayek, 1988: p.25). Hayek has already downplayed the role of Darwin in his formation of evolutionary thought, but does not close the door on biological evolution in the cultural realm. In fact, he argues for a process of cultural evolution that closely resembles that of Jean-Baptiste Lamarck. We see from Lamarck's 1809 work *Philosophie Zoologique*:

> The acquisitions or losses wrought by nature on individuals, through the influence of the environment in which their race has long been placed, and hence through the influence of the predominant use or permanent disuse of any organ; all these are preserved by reproduction to the new individuals which arise, provided that the acquired modifications are common to both sexes, or at least to the individuals which produce the young. (Lamarck, translated in 1963: p. 9)

In the biological world, this theory is debunked.[15] However, when applied to the "inheritance of acquired characteristics" in the *social* realm, Lamarckian evolution becomes more plausible than 'Social Darwinism'. I am arguing that Hayek has seen the similarity between Lamarckism and his own theory. I am not advocating the direct use of Lamarckism in Hayek's evolution. Lamarck's method of transmission is biological. Hayek's is imitation and rational learning.

[15] When this Lamarckian process is applied to the transmission of immunities from mother to child during breastfeeding, this "holds more water".

Learning and imitation can easily be seen as 'the inheritance of acquired characteristics'.[16] For the remainder of this section it will be shown that Hayek was aware of Lamarckism and thought that his theory mirrored Lamarck's with one important exception: Lamarckian evolution is teleological and therefore 'Panglossian'. Hayek's evolutionary theory leaves open the possibility of failure and even though he advocates evolution as tending toward equilibrium, that equilibrium is not known ahead of time nor can it be said to be perfect.

> Cultural evolution is, as Julian Huxley justly stated, 'a process differing radically from biological evolution, with its own laws and mechanisms and modalities, and not capable of explanation on purely biological grounds'. Just to mention several important differences: although biological theory now excludes the inheritance of acquired characteristics, all cultural development rests on such inheritance- characteristics in the form of rules guiding the mutual relations among individuals which are not innate but learnt. (Hayek, 1988: p.25)

In this quote, we see Hayek further distancing cultural from biological evolution. More importantly, we see Hayek use the Lamarckian phrase 'inheritance of acquired characteristics'. Hayek viewed the creation of rules and conventions as an instance of this Lamarckian tradition of rational learning. To go further, "To refer to terms now used in biological discussion, cultural evolution *simulates* Lamarckism" (Hayek, 1988: p.25). While it has been shown that Hayek has painstakingly created distance between his view of cultural evolution and that of Darwin, we have also seen his efforts to align himself with the Scottish tradition. It can be argued that he would not make such a similarity, nor would he allow for the similarity to be drawn so readily if he did not view Lamarckian evolution as consistent with his own. Hayek will distance himself

[16] The only difference between Lamarckism and Hayek's evolution is the meaning of the word 'inheritance'. Obviously, Hayek views inheritance as imitation and learning.

from the teleological conclusions that Lamarck makes, but this will be shown later on. Hayek writes:

> Moreover, cultural evolution is brought about through transmission of habits and information not merely from the individual's physical parents, but from an indefinite number of 'ancestors'. The process furthering the transmission and spreading of cultural properties by learning also… make cultural evolution incomparably faster than biological evolution. (Hayek, 1988: p.25)

This idea of cultural evolution is patently consistent with the Lamarckian view. Bruce Caldwell also sees this distinction, "Because acquired characteristics may be passed on, cultural evolution resembles Lamarckian rather than Darwinian evolution…" (Caldwell, 2000: p.2).

I would like to emphasize the process-oriented view of society that Hayek presents. He has explicitly downplayed the resulting equilibria in market activity to focus on the coordination process of the market. I believe this is also true with regards to his evolutionary theory:

> Despite such differences, all evolution, cultural as well as biological, is a process of continuous adaptation to unforeseeable events…All it can do is to show how complex structures carry within themselves a means of correction that leads to further evolutionary developments which are, however, in accordance with their very nature, themselves unavoidably unpredictable. (Hayek, 1988: p.25)

We see here the focus on the process, possibly from a belief that the end process is unknowable. If that is the case, Hayek is not teleological, and therefore not 'Panglossian'. Caldwell patently believes, "[Hayek's] evolutionary thought had no teleology attached to it. It is therefore, remarkable that people would choose to simply ignore his repeated denials that the evolutionary process that he had described would necessarily lead to a particular "approved" outcome"

(Caldwell, 2004: p.357). I surmise that people see in Hayek a normative nature to his attack on the errors socialism. He often regards the market with a view that it will tend to the most efficient outcome. I have shown that he cites the use of knowledge in society as the reason for his favoring of the market process. It is this 'misreading' of Hayek that leads critics to view his theory as teleological with regards to efficiency in society. However, the uncertainty of the ends and the possibility of inefficiency are recognized by Hayek in many contexts:

> Though progress consists in part in achieving things we have been striving for, this does not mean we shall like all its results or that all will be gainers. (Hayek, 1960: p.41)
>
> It would be wrong to conclude, strictly from such evolutionary premises, that whatever rules have evolved are always or necessarily conducive to the survival and increase of the populations following them…Recognizing that rules generally tend to be selected, via competition, on the basis of their human survival-value certainly does not protect those rules from critical scrutiny. (Hayek, 1988: p.20)
>
> These considerations, of course, do not prove that all sets of moral beliefs which have grown up in a society will be beneficial. Just as a group may owe its rise to the morals which its members obey…so may a group or nation destroy itself by the moral beliefs to which it adheres. (Hayek, 1960: p.67)
>
> The fact that law that has evolved in this way has certain desirable properties does not prove that it will always be good law or even that some of its rules may not be very bad. It therefore does not mean that we can altogether dispense with legislation. (Hayek, 1973: p.88)

For Douglas Whitman, statements like these found in Hayek's work offer a point blank refutation of his alleged 'Panglossian' nature. In addition to support for Hayek's non-teleological

views, these quotes also further advance his process-over-ends orientation. Whitman states, "Hayek's theory can be faulted in a variety of ways, but Panglossianism is not one of them" (Whitman, 1998: 2).

Why do others, namely Hodgson, continue to regard Hayek as a utopian? In Hodgson's, *Economics and Evolution*, he compares Hayek's work to that of Herbert Spencer:

> Both propose a 'Great Society' emanating from the strong traditions of classical liberalism, manifest in a set of political and social institutions involving supposedly minimal government and maximum individual liberty, and resting squarely on a constitution protecting well-defined property rights and extensive free markets. (Hodgson, 1993: p.492)

He goes on to imply that Hayek is suggesting an 'alternative utopia based on private property and markets'. Yes, it is true that Austrian's think that the market is the best system for the efficient allocation of resources, but no one thinks that it is perfect.[17] Nor does Hayek think that in an unimpeded evolutionary structure the end result would be a 'Great Liberal Society'. To attack a methodology is one thing, but for Hodgson to attack Hayek and brand him utopian when Hayek even says, "I do not claim that the results of group selection of traditions are necessarily 'good'- any more than I claim that other things that have long survived in the course of evolution, such as cockroaches, have moral value" (Hayek, 1988: p.27). A utopian would argue that if the course of evolution does result in the most 'best' outcome, then 'cockroaches' would be portrayed as 'good'.

[17] Hayek argues that the most efficient outcome of a market process is the outcome the uses all the knowledge available at the time. Perfect coordination would require perfect knowledge. Hayek and the Austrian School would argue that the free market "best" coordinates the necessary information at the lowest cost and is therefore better than central planning.

CHAPTER VI. SPONTANEOUS ORDER

Spontaneous order is, "orderly structures which are the product of the action of many men but are not the result of human design" (Hayek, 1973: vol. I, p.37). Spontaneous order is of an evolutionary nature; it evolves in a process of human action and cultural transmission. For Hayek; "Spontaneous orders are not necessarily complex, but unlike deliberate human arrangements, they may achieve any degree of complexity" (Hayek, 1973: vol I, p.38). He uses this complexity to argue that no one planner or human mind can 'correctly' set prices in the market. Prices in the market are set through the evolutionary process of competition for resources.

Christina Petsoulas, in *Hayek's Liberalism and its Origins*, describes spontaneous order as an 'invisible-hand' account. Petsoulas saw that Smith's 'invisible hand', describing the unintended consequences of many independent individual's actions, is very similar to Hayek's spontaneous order. Thus, Hayek's unintended consequences, which can be positive or negative, stem from the spontaneous ordering of the *catallaxy*.[18]

Spontaneous order in and of itself is not all that interesting when just applied to the equilibrium adjustments in the market. The most fascinating and controversial functioning of this kind of order are in the evolution of culture and norms. Spontaneous order is the vessel for the process of variation and for Hayek's process of group selection.

Viktor Vanberg defines the process of variation is simply, "a process in which continuously new transmittable variants is generated" (cited in Witt, 1993: 488). For Hayek, this was competition, "Variation, adaptation, and competition are essentially the same kind of

[18] This is Hayek's word for the market. He points out that, in the Greek, economics means 'home economics'. He finds the English definition lacking. Catallaxy stems from Mises' Catallactics, the praxeological way that markets come upon exchange and price ratios.

process…Not only does all evolution rest on competition; continuing competition is necessary even to preserve existing achievements" (Hayek, 1988: p.26). Competition, instrumentally, gives us new products, services, and ways of organization. Competition is not just a market phenomenon. In Frank's *Luxury Fever*, he talks of the subjective competition between neighbors. The competition for superiority also leads to 'preserving existing achievements'.

For Hayek and Austrians in general, spontaneous order is the process of the formation of conventions, institutions, and norms.[19] This is the vessel for evolution in society, but not the selection process. Hayek saw selection at the group level as the mode of transmission in society. At face value, group selection is inconsistent with methodological individualism and the majority of Hayek's work. If he were to remain a methodological individualist, how could he advocate a process that does not reduce to the individual level? The remainder of this thesis will focus on Hayek's apparent departure from methodological individualism in his theory of group selection. I will contend that Hayek remained a methodological individualist until the end. I will use Ulrich Witt's technique that reduces the group to the individual. Selection amidst the group can be seen as innovation or novelty, and transmission becomes imitation.

[19] For an extension of spontaneous order in a 'relaxed rationality' setting, may I suggest Robert Sugden's, The *Economics of Rights, Cooperation, and Welfare*. Originally, I had planned to incorporate his work as an extension of Hayek's theory. For empirical reasons, I am not including this subject. Upon a re-read of Hayek, game theory, even in a relaxed setting, would still be 'mental gymnastics' in his eyes. While I do think Hayek would very much agree with the conclusions and Sugden's theory, he would also point to the impossibility of knowing the end results of evolution, something that game theory is very much worried about.

CHAPTER VII. GROUP SELECTION AND THE INDIVIDUAL

Group selection is the mode of transmission for the spontaneous development of institutions, norms, and conventions. Group selection, for Hayek, happens spontaneously:

> The other view, which has slowly and gradually advanced since antiquity but for a time was almost entirely overwhelmed by the more glamorous constructionist view, was that orderliness of society which greatly increased the effectiveness of individual action was not due solely to institutions and practices which had been invented or designed for that purpose, but largely due to a process described first as 'growth' and later as 'evolution', a process in which practices which had at first been adopted for other reasons, or even purely accidentally, were preserved because they enabled the group in which they had arisen to prevail over others. (Hayek, 1973: p.9)

Hayek does not offer any explanation of group selection. How were these practices adopted? What about the free-rider problem? What if most of the members of the group are not cooperative? Hayek is silent on all these questions. In order to make sense of Hayek's group selection we must look to the individual. We need a theory of evolution that accounts for Hayek's group selection and is also consistent with individualism. Under this theory of evolution the process of variation becomes *individual innovation* and selection occurs when members of the group *imitate* successful institutions and habits.[20] The notion of group selection in the work of Hayek can be elusive and confounding. On the surface it looks to be a patent rejection of methodological individualism. In fact, many see it as such, and to a certain extent their arguments have validity. What follows are attempts to clarify this apparent contradiction.

[20] This view of variation and selection is crucial to my defense of Hayek's methodological individualism. It is accepted by Vanberg (1986), Witt (1995), Petsoulas (2001), and Caldwell (2004).

It would be completely rational for any individual reading Hayek to suggest that individual innovation and imitation is not a part of group selection and therefore, Hayek gives two competing ideas of cultural evolution. I believe that this can be reconciled through an example and the work of Ulrich Witt to follow.

Imagine that an individual comes up with a new rule, say, private property. In order for this rule to be established, most individuals in this group need to imitate and adopt the respect for private property. Each individual recognizes the gains, and possible losses, from the selection of this rule and chooses to adopt or defect. The establishment of this rule requires the group's adoption of private property as a rule. Group success depends on the adoption of beneficial rules that requires individual novelty and imitation. We will see that this process is restricted due to free rider and prisoners' dilemma problems.

Ulrich Witt attempts to reconcile group selection and methodological individualism; "Even though Hayek relies on the criterion of group success without even trying to relate it to the level of the individual, this does not necessarily mean, of course, that his theory is incompatible with an individualistic approach" (cited in Caldwell/Boehm, 1992: p.228). This reconciliation is dependent on the intra-group modes of transmission and selection. While the group may be responsible for the final selection or rejection of a rule, this selection is dependent on the choices of the individuals in the group. Witt states that attempts to explain individual innovation and imitation are consistent with methodological individualism but:

> Yet for the logic of Hayek's cultural selection process, such considerations appear irrelevant. Whatever underlying beliefs and motives may be, a variation of rules is successful and survives if, and only if, it helps to improve (or is at least not detrimental to) the economic performance of the group. (cited in Caldwell/Boehm, 1992: p.228)

In this case, it would not matter if the action undertaken by an individual in the group is purposeful, self-serving, altruistic, or even unintended. “The competing groups’ relative success explains where the entire process ends up and which of the individual innovative rule variations…eventually become socially successful and which are doomed to fail” (cited in Caldwell/Boehm, 1992: p.228).

More importantly, Witt states that innovation and the dissemination of innovation is a result of individual action. This shows the ability for group selection to be reduced to the individual. The adoption of a new rule that allows for a competing group to thrive over another happens at an individual level. The new rule emerges from individual innovation in the sub-group and successive imitation among the other group members. Subsequently, if perceived as successful, this new rule is then adopted by other groups.

Witt makes one necessary assumption, “Whenever the individual innovative and imitative activities are not perfectly independent, the evolutionary process cannot be entirely reduced to the level of the individual. Some population-bound criteria remains” (cited in Caldwell/Boehm, 1992: p.228). Witt goes on to explain that the independency restriction is often violated and some form of ‘frequency dependency’ is required. This is most commonly seen as groups that consist of two types of individuals. The outcome depends on the frequency of one type of individual to the other. Witt offers this application of frequency dependent group success:

> A new rule of conduct is retained…if it enhances the success of a subgroup obeying it. The rule tends to propagate in the population, whether for the subgroup’s growth or for an imitation of the new rule by other subgroups. If this is interpreted as the outcome of a sequential adoption process, in which each member of the population decides on whether

> or not to follow the new rule, the explanatory task can be reduced to explaining the individual adoption behavior. (cited in Caldwell/Boehm, 1992: pp. 228-9)

Thus, "The implications of this individualistic model are consistent with Hayek's conjecture if the 'group success' is composed of a positive net advantage that each individual can internalize by adopting, rather than not adopting the new rule" (cited in Caldwell/Boehm, 1992: p.229).

Witt has, in my estimation, reduced group selection to the individual. The individual becomes the unit of selection and his choice to imitate or not becomes crucial. This is still group selection because adoption is necessary across the majority of the individuals in the group to achieve 'success'. Institutions such as banking, private property, and stock markets require group conformity in order to function. Witt has given a plausible explanation of Hayek's selection and transmission mechanisms that underlie group selection. We can see that Hayek implies this process in *The Fatal Conceit*:

> It was not always even those who first initiated new practices (saving, private property, and such like) whose physical offspring thus gained better chances of surviving. For these practices do not preserve particular lives but rather increase the chances (or prospects or probabilities) of more rapid propagation of the group. (Hayek, 1988: p.131)

Here we see that Hayek is referring to the creation of individual innovations being imitated and therefore, 'selected' by the group. I would argue that Hayek realized that creation of institutions and norms are very important to the fabric of society and their formation is dependent not only on the decisions of one individual but all the individuals in the group. The important point here is that one individual can innovate, but he cannot mandate that the group to adopt the rule. His innovation must be imitated by a majority of the other individuals in the group to be selected. The formation and selection of rules and conventions require the innovator *and* the imitators.

Christina Petsoulas in, *Hayek's Liberalism and its Origins*, argues:

> The idea that cultural evolution operates at a collective level directly conflicts with Hayek's methodological individualism. Moreover, even if we accept group selection as a sufficient explanation when referring to competition between groups, it is impossible to show how, when self-sacrificial behavior is required, the *problem of free-riding* within the group could be overcome spontaneously" (Petsoulas, 2001, p.64, emphasis added).

I would argue that Petsoulas' first argument has been unraveled by Witt, but she has a valid argument with regards to the free-rider problem. There is a p*risoner's dilemma* and free-rider problem among individuals in the group. This argument is the same as Witt's frequency dependency. Largely, without the state, a credible threat, or some enforcement of the newly established rules, the free-rider problem would persist and negate any ability for group success. However, in a situation where the gains from imitation outweigh the opportunity cost to free-riding, rational individuals will choose to imitate.

Returning to Witt, his answer to the free-rider problem is an exercise in utilitarianism. Innovation is met with a choice to imitate, further innovate, or disregard the new. That choice is decided at the individual level in the group. For the group to adopt and imitate, most of the members must *choose* to adopt or imitate. Yes, the possibility of free-riding exists but, "If a sufficiently large number of members of the population have adopted the collectively advantageous new rule, the individual gain from following the new rule may outweigh the mean loss caused by the remaining free-riders" (Witt, 1995, p.94). Those individuals who free-ride are better off than those you do not, however, Witt is pointing out the possibility for the collectively advantageous rule to persist in the presence of free-riding depending on the number of individuals who do free-ride. I would argue that this explanation depends on the ability to free-

ride. When the opportunity or gain to free-riding is great, the probability of adopting a collectively advantageous rule is small.

Viktor Vanberg echoes Petsoulas' statement with, "Hence, despite the between-group advantage from practicing 'appropriate' rules, there would be a within-group disadvantage for those who actually practice them compared to those who free ride" (Vanberg, 1986, p.87). In fact, Vanberg goes on to suggest that the only way to solve the free-rider problem would have to allow for the role of the political, negating any room for spontaneous order. I would argue that the political is one possible realm for solving this problem, but then I would ask: How did political institutions arise in the first place? At some early stage of modern civilization individuals in one group had to adopt successful rules of governance and adhere to them.

Bruce Caldwell sees Hayek's group selection as completely inconsistent with methodological individualism. He offers this explanation of Hayek's movement from the individual in *Hayek's Challenge*:

> Those who have made it this far in the book will anticipate that I do not feel this is a real problem. Hayek was never a doctrinaire methodological individualist. He was willing to seek explanations on many different levels, depending on the question at hand. (Caldwell, 2004, p.356)

Caldwell is referring to Hayek's emergence into psychology with, *Sensory Order*. He sees Hayek as an opportunist, using any mode of supporting his ideas, or attacking others, as useful. For example, it served Hayek to use individualism to attack socialism and using group selection to create distance from the biological realm. Caldwell has studied Hayek's work for almost his entire career. I respect his opinion greatly. That being said, I disagree vehemently.

Hayek's identified himself with the Scottish tradition merely to gain an argumentative advantage, theScottish School is steeped in analysis from the perspective of the individual. Hayek deliberately aligns himself with that school out of a belief that his thought flows from them through Menger and is directly applicable to his own view of the market process. I believe the following statement Hayek represents his true feelings on methodological individualism, "There is no other way toward an understanding of social phenomena but through our understanding of individual actions" (Hayek, 1948, p.6).

CHAPTER VIII. CONCLUSION

The popular misconceptions that surrounded the Hayek's work have been identified and discounted. Hayek's group selection can be seen at still consistent with methodological individualism. His evolutionary theory and view of the market process have been shown to be non-teleological in nature and it was shown that Hayek even chastised the application of Darwinism to the social arena as committing the naturalist fallacy. At the very least, perhaps this work has caused a re-examination of Hayek's evolutionary theory by his opponents.

This thesis has shown three important aspects of Hayek's thought: The origin of Hayek's theory of cultural evolution stems from the Scottish School, this evolution is in fact Lamarckian in nature, and Hayek did not abandon his Austrian and individualistic roots in his theory of group selection.

Through Hayek's attack on and underestimation of Darwin on the ground that genetic transmission forecloses the possibility of individual choice and action, we can see Hayek views himself as an evolutionist in the Scottish tradition. In fact, Hayek asserts the existence of evolutionary thought in the social sciences before Darwin. Hayek even goes so far as to claim Smith's direct influence on Darwin.

Hayek acknowledges the similarity between Lamarckism and his own theory of cultural evolution. It is important to note that individual choice and action are very much active and relevant in Lamarckian evolution. Hayek's theory of evolution is not Panglossian in nature. In fact, Hayek attacks 'Social Darwinism' on that very position.

The most difficult and controversial defense was that of Hayek's commitment to individualism in his evolutionary theory. While not explicit in Hayek's work, Witt rationalizes

Hayek's idea of group selection and reduces the process of selection and transmission to the individual level. Through individual choice, imitation at the group level is paramount for the adoption of the new rule. This reductionist method is not completely satisfactory with respect to the free-rider problem of group dynamics. It is possible that Vanberg and Petsoulas are correct in calling for the necessity of the state to solve the problem. However, it is also entirely possible that, at least in some situations, these rules can come about spontaneously through the choices of self-interested individuals. More importantly, it can be seen that Hayek did not abandon methodological individualism.

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