

**SCEPTICISM, EVOLUTION AND CONSERVATISM
IN THE THOUGHT OF
F. A. HAYEK**

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Abstract

This thesis examines the interrelationship between the concepts of evolution, scepticism and conservatism in the thought of Friedrich August von Hayek (1899-1992). It argues that the concept of evolution plays a vital role in Hayek's epistemology and social philosophy. It proposes that Hayek's understanding of the concept of evolution shaped his early writings on theoretical psychology and the formation of the mind. He subsequently developed his initial ideas in a more systematic way and discussed them in more depth in his writings on the epistemology and methodology of the social sciences. Hayek maintained that the underlying mechanism of the formation of mind and society is the mechanism of evolution. From Hayek's point of view, the human mind and human society have simultaneously evolved through the process of evolution over millions of years. Hayek offered his evolutionary approach as an alternative to 'constructive rationalism'. The thesis argues that Hayek's evolutionary approach led him to adopt a scepticism about the role of reason in society. Hayek maintained that reason itself is the result of human civilization, a civilization that became possible due to rules and traditions that cannot be justified *a priori*.

Hayek's scepticism about the role and capacity of abstract reason and his emphasis on social institutions and traditions had placed his position close to conservatism. Although Hayek rejected any relation between his ideas and conservatism, this thesis tries to show why such a reading of Hayek's political thought is plausible. After identifying three doctrines of conservatism, i.e. scepticism/pessimism, traditionalism and organicism, this thesis argues that there are some significant similarities between Hayek's political thought and conservatism.

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Chapter I: Introduction

1.1. Research Question and Significance

Friedrich August von Hayek (1899-1992) is arguably one of the most influential political thinkers of the twentieth century. Although there are some uncertainties about the originality of his thoughts, there is no doubt that his ideas effectively changed the ideological landscape of the last century. Part of this importance comes from his lifetime of engagement with and criticism of Marxism and socialism. In a century that almost half of the world's population was living under communist and socialist governments, Hayek's continuous and fervent attacks on socialism and social planning made him an intellectual hero amongst liberals, libertarians and conservatives. Hayek's influence was not only limited to the intellectual atmosphere, but from his early intellectual life, he was eagerly engaged in real politics and making suggestions and comments on different occasions. He had great influence on the right and particularly on some major figures of the British Conservative Party. Margaret Thatcher praised Hayek's *The Road to Serfdom* (1944/2007) for its 'powerful critique of socialist planning and the socialist state' (Thatcher, 1995: 50) and later on as a new Party leader, Thatcher interrupted one speaker's argument about the pragmatic importance of the 'middle way' for the Conservative party, by banging down Hayek's *The Constitution of Liberty* (1960/2011) on the table and saying sternly 'this is what we believe' (Ranelagh, 1991: ix).

Hayek was a polymath who wrote on different subjects ranging from economics and economic theory, social and political philosophy, and the methodology of the natural and social sciences to theoretical psychology, jurisprudence, history of ideas and the philosophy of law. Although it is not impossible to find a common ground or theme amongst all of Hayek's writings, it is more challenging, at least for me, to provide an account of Hayek's thought which does justice to all his interests. Moreover, Hayek's

life and thoughts have been under severe scrutiny since his own time. Over several decades, many scholars have paid attention to different aspects of Hayek's thought and provided a variety of interpretations on different issues. The most part of these interpretations have been focused on Hayek's social and political philosophy whereas other aspects of his thought have been neglected. Such mistreatment is to some extent understandable since before the collapse of the Soviet Union in 1991, what had mostly interested scholars and politicians were Hayek's ideas on socialism and social planning. Hayek's criticisms of social planning attracted both supporters and enemies of socialism to take his social and political ideas seriously into their accounts. After the collapse of the Soviet Union and its Satellite States, Hayek's political writings attracted the interest of intellectuals and scholars from both the left and right of the political spectrum. Some of the right thinkers went as far to consider Hayek a prophet who was able to see the difficulties of socialism right from the beginning and had given forewarnings before its collapse (Cassidy, 2000; McKnight, 2005: 63-66).

Because of such a politically charged atmosphere, the other aspects of Hayek's writings were overshadowed by his political and economic works. It should be noted, however, that to some extent, Hayek himself was guilty for the negligence of his other works. As Andrew Gamble has rightly suggested, in expressing his ideas, Hayek plays the role of the ideologue and the social scientist at the same time (Gamble, 1996: x). Such double role playing and especially the image of Hayek the ideologue has created two major obstacles for understanding his works. One is that by reading his political works, readers either agree with Hayek's claims or dismiss them depending on their political preferences without enquiring about the roots of his ideas. The second problem is that many writers on both sides of the political spectrum have ignored Hayek's more technical writings and only focus on the way in

which politicians (mostly Margaret Thatcher and Ronald Regan) used his ideas for their own political agendas (Jones, 2012; Monbiot, 2016; Metcalf, 2017). It is true that Hayek always wished to scientifically disprove socialism, but it is difficult to read some of his polemical essays and completely ignore his rhetoric.¹ In this thesis, however, I shall not discuss Hayek the ideologue, although I am quite aware that he sometimes intentionally played such role.

As I mentioned above, due to the particular political situation in the world, the scholars who study Hayek's more technical works haven't paid enough attention to his non-political and non-economic writings. Although they are aware of such works, they have only touched the subject matter of the other works whenever they wished to make a point in social or political issues. These aspects of Hayek's thought, until very recently, have been ignored by the mainstream interpretations. One of the key aspects of Hayek's thought which has widely been overlooked is his evolutionary epistemology and especially his philosophy of mind, which I shall discuss in this thesis.

In this thesis, I make two main claims; one negative and one positive. My negative claim is that the non-evolutionary interpretation of Hayek's epistemology is deeply flawed. I argue that the concept of evolution plays a far more important role in Hayek's thought than has been acknowledged. I provide a reconstruction of Hayek's theory of mind and also his epistemology based on the concept of evolution. I argue that the non-evolutionary interpretation of Hayek's epistemology has misunderstood some important aspects of his thought and, therefore, misjudged his intellectual relation to other thinkers such as Kant, Mises and Popper. Moreover, such a reading of

¹ I believe one the best examples of such rhetorical force can be seen in his essay 'Liberalism' which was originally written for the Italian *Enciclopedia del Novecento* (Hayek, 1973/1978).

Hayek is unable to take into account Hayek's scepticism towards the role of reason in human affairs. Hayek's scepticism plays a major role in his criticisms of 'constructive rationalists' (Hayek, 1965/2014) in general and socialism in particular. The non-evolutionary interpretation of Hayek's epistemology either fails to fully acknowledge the importance of the scepticism in his theory or finds it difficult to provide a reconciliation between Hayek's scepticism and the rest of his non-evolutionary epistemology.

As for my positive claim, I shall argue that a more coherent understanding of Hayek's epistemology and his scepticism towards abstract reasoning can be offered by considering his evolutionary approach. I will try to show that Hayek's evolutionary approach is not limited to his social and political thought as many scholars have assumed, but rather, it is at the very core of Hayek's epistemology. Hayek's social and political thought is in fact the extension of Hayek's evolutionary epistemology and philosophy of mind to the field of social sciences. The main source for understanding Hayek's evolutionary approach is his book on theoretical psychology, *The Sensory Order* (1952/1976). I shall argue that although the book was first published in 1952, the roots of Hayek's ideas can be found in a paper titled 'Contributions to A Theory of How Consciousness Develops' which Hayek wrote as a student in 1920.² Hayek's evolutionary approach is present both in the paper and the subsequent book. I will propose that Hayek became more and more vocal about his evolutionary view especially after the 1960s, but that does not mean that the concept is absent from his pre-1960s writings.

² The original German typescript of the paper had been kept in the Hoover Institution Archives until 2006 when it was published in German. I was lucky enough that an English translation of the paper came out in 2017 before finishing my thesis. The English translation of the paper can be found in: (Hayek, 1920/2017).

Although Hayek has been characterised by many scholars as a new-liberal thinker (Tebble, 2010; McNamara, 2013; Caldwell, 2013; Shearmur, 1996; Vernon, 1976; Connin, 1990; Steele, 2005; Arnhart, 2015; Wilhelm, 1972; Bholat, 2010), and I believe it is quite possible to read Hayek in that way, in this study I do not seek to read Hayek as a liberal (or neo-liberal) thinker. Rather, I shall propose a reading of Hayek as a conservative. I will argue that Hayek's evolutionary approach, in terms of social sciences, had brought him very close to the conservative way of thinking. Yet in his postscript to *The Constitution of Liberty* (1960/2011), Hayek famously rejected any links between his ideas and what he considered as conservatism. I will try to provide the reasons for such denial and conclude that although Hayek the scientist is a conservative, Hayek the ideologue is not. As some scholars have argued, and I share their conclusion, the tension between these two faces remained unresolved in Hayek's mind (Gamble, 1996: 1-3; Gissurarson, 1987: 10-16; Kukathas, 1989: vi-vii).

1.2. Methodology

The methodology used in the thesis is to some extent (but not completely) textualism. It is textualism in the sense that I shall try to reconstruct Hayek's philosophy on particular ideas and find the relations of those ideas to each other in his writings. Especially, I will be focusing on three major concepts; evolution, scepticism and conservatism, which I maintain are interconnected in Hayek's works. The textualist method which I am applying here, however, is not identical to the method practiced by John Plamenatz. The main expressions of Plamenatz's method regarding the purpose and method of canonical texts of political theory can be found in his article 'The Use of Political Theory' (1960) and then in the introduction to his book *Man and Society* (1965/1992). Plamenatz maintains that the major question that political theory seeks to answer is 'what government should aim at and how

it should be organized to achieve those aims?’ (Plamenatz, 1960: 38). So, for Plamenatz the chief concerns of political theory are normative in character ‘not explanatory, or linguistic, or historical’ (Philp, 2012: xi). Although Plamenatz repeatedly emphasises that he is aware of the importance of historical context, he argues that major political theories express some ‘ageless’ messages ‘issues and attitudes change less than they seem to, for the language used to express them changes more than they do. These theories are products of their age but are also ageless’ (Plamenatz, 1965/1992: xxix). In my treatment of Hayek’s works, I shall mainly focus on the texts and less on the historical context. I, like Plamenatz, am aware of the importance of historical context and believe that knowing about the context is crucial for understanding a text. Nevertheless, the centre of attention in this thesis will be on concepts understood in a more abstract way. What makes my approach different from Plamenatz’s is the fact that I am not particularly interested in what Hayek’s works can offer us today. The relations or the possibility of such relations between Hayek’s thoughts and current issues are not the focus of this thesis. Again, I am keen to introduce a new interpretation of Hayek’s thought on particular issues which is formed around the concepts of evolution and scepticism. The result of such an endeavour might be relevant or irrelevant to current issues, but I shall not discuss such applications. Such a lack of interest in current application has been associated with the Cambridge School of historiography and especially works of Quentin Skinner.

In his massively influential article ‘Meaning and Understanding in the History of Ideas’ (1969), Skinner seeks to invalidate the textual method of historiography with a contextual one. Although Skinner has made some

changes to his original theory,³ his main argument can be expressed as follows. In order to understand a given text, Skinner argues, the interpreter needs to identify and situate the particular 'speech act' which performs by the text in response to other speech acts. By his method, Skinner initially seeks to 'analyse the nature of the conditions which are necessary and perhaps sufficient for an understanding of any one of these [classic] texts' (Skinner, 1974: 279) however, later he softens his claim by saying that 'if we succeed in identifying this [linguistic] context with sufficient accuracy, we can eventually hope to read off what the speaker or writer in whom we are interested was doing in saying what he or she said' (Skinner, 1988: 275). Skinner's method, as he himself acknowledged (Prokhovnik, 2012: 183), is hugely influenced by linguistic philosophy, especially that of Wittgenstein's *Philosophical Investigations* (1953/2009) and Austin's *How to Do Things with Words* (1962/1975). In order to understand a text, according to Skinner, we need to know what was the author's intention or to put it differently, what the author was doing in the text. Skinner focuses on Austin's idea which considers the way in which words are used and what can be done with them and like Austin, he also studies what the author is doing in expressing ideas. As Browning has rightly said the point of what authors are doing, 'the illocutionary force of their words, expresses their intentions, and these intentions cannot be grasped by a mere reading of their texts' (Browning, 2016: 75). By discovering the author's intention in this way, Skinner argues, we come to realise that what the author was doing in the text in question is 'a particular intention on a particular occasion, addressed to the solution of a particular problem, and is thus specific to its context in a way that it can only be naive to try to transcend' (Skinner, 1969: 50). Therefore, unlike Plamenatz, Skinner believes that political ideas are not 'ageless' but rather

³ Skinner's 'much abbreviated' and 'extensively revised version' of his original article is published in (Skinner, 1969/2002).

strongly connected to their linguistic context and it is a mistake in historiography to think otherwise.

Skinner's linguistic contextualism has been criticised by Mark Bevir for being too narrow in understanding the context (Bevir, 1992). In a review article, Bevir argues that the linguistic contextualism may be appropriate to the early modern era since the authors then happen to express their ideas using terms and arguments which were tightly-connected to their respective conventional languages. However, such a method is 'inappropriate to the Victorian age because so many nineteenth-century political theorists adopted either a characterless terminology associated with a self-evident reason or a unique idiom associated with their particular personality' (Bevir, 1996: 116). Bevir sees no reason to uniquely privilege the linguistic contexts as advocated by linguistic contextualists nor socio-economic contexts as favoured by Marxists. In order to understand a text, Bevir argues, we need to discern what an author believed. Bevir agrees with linguistic contextualists to situate the authors in their contexts, but he disagrees that such contexts are necessarily the linguistic ones. According to Bevir, such contexts include a broader web of belief which are not limited to only linguistic or socio-economic. 'All aspects of an occasion can influence the way authors understand the things they discuss' Bevir maintains 'None the less, no aspect of an occasion can ever be of more than indirect relevance to the hermeneutic meaning of an utterance' (Bevir, 1999/2004: 67).

Although I do not reject the importance and fruitfulness of contextualist studies, in this thesis, I shall not try to place Hayek in his linguistic context to see what Hayek was doing in each work. I will discuss Hayek's context in a broader sense, however, just in order to make sense of what he said on very limited topics, i.e. evolution, scepticism and his relation to conservatism. I am quite aware that these ideas did not take place in

vacuum and were deeply rooted in Hayek's social and linguistic contexts. Yet in this thesis I shall not write a history of his context(s), but rather deal with Hayek's thoughts in more abstract way. I discuss the context of Hayek's writings only when that helps to make an idea clearer.

Since one of the key concepts in this thesis is the concept of an ideology, i.e. conservatism, some explanation is needed in this regard. I shall discuss the different approaches to the study of political ideologies in chapter five and I will provide my own understanding of conservatism. Again, in writing about conservatism, I shall not endeavour to write the history of conservatism nor its genealogy as Skinner did for the concept of the modern state (Skinner, 2009). One of the sources of influence in my writing on ideology is Michael Freeden's works on ideology (1978/2011; 2002; 2013; 2003; 1996). In his morphological analysis of ideologies, Freeden maintains that they are composed of concepts which play different roles over the time. He identifies three kinds of concepts; core, adjacent and peripheral concepts. So, in the study of the different forms of liberalism, it might be established that 'liberty is situated within their core, that human rights, democracy, and equality are adjacent to liberty, and that nationalism is to be found on their periphery' (Freeden, 1996: 77). Freeden argues that the relation between the adjacent concepts to the core is vital for the formation of an ideology and their interrelationships at the same time defines and limits their particular meaning. In the case of liberalisms, 'it would be evident that liberty may be given a particular meaning- self-determination - because of its close association with democracy, while conversely, democracy may be given a particular meaning limited popular government—because of its structural interlinkage with liberty' (Freeden, 1996: 78). In my discussion of conservatism, I shall provide a reading of conservatism that places epistemological scepticism at the core of my

understanding. Although this aspect of conservatism has been discussed by many scholars, I believe, it has not been given its due right. Likewise, my reading of Hayek's writings and discussion on conservatism will be reaming on the abstract level and I will not try to discuss historical events.

1.3. Literature Review

Although in this thesis I will mainly engage with relevant literatures in different chapters separately, I would like to make some preliminary observations on what I consider a gap in the scholarly literature on Hayek. There is a consensus among Hayek's scholars that epistemology plays a crucial role in his writings. Walter Weimer has suggested that Hayek is primarily an epistemologist 'usually mistaken for either an economist or political philosopher' (Weimer, 2011: xxv). Although Weimer's claim may seem an exaggeration, it rightly captures the importance of epistemology in Hayek's thought. The disagreement arises, however, when scholars wish to characterise the nature of Hayek's epistemology. Some have argued that Hayek's epistemology is Kantian in nature (Hunt, 2007: 53-54; Horwitz, 2000: 25; Marsh, 2010: 136; Gamble, 2006: 119; Aarons, 2009: 176-178; Ebenstein, 2003: 127-131; Gamble, 1996: 11-12; Petsoulas, 2001: 24). I shall discuss in detail this Kantian interpretation of Hayek's epistemology in the next chapter. However, the essence of their argument can be put in this way. They have argued that Hayek, like Kant, believes in *a priori* concepts and the fact that we categorise the world through these concepts. Hayek, like Kant, though using different terms, maintains that there are noumenal and phenomenal worlds and what we can know is only the phenomenal world. Nevertheless, when it comes to the definition of *a priori* concepts in Hayek's theory, crucial differences between him and Kant can be seen. In order to conciliate these differences, some scholars have tried to identify Hayek's position in epistemology as 'Kantian scepticism' (Gray, 1986/1998:

4; Gray, 1988: 251; Tomlinson, 1990: 12) or 'soft Kantianism' (Marsh, 2010: 136). I shall argue that neither of these approaches do justice to Hayek's epistemology nor to Kant's. I will argue that it is not possible to interpret Hayek's position in epistemology in Kantian terms without losing the major components of either Hayek's or Kant's theories.

Some scholars, however, have noticed that the Kantian reading of Hayek's epistemology is not convincing. Chiaki Nishiyama, for example, has rightly pointed out that the 'order of the apparatus of classification' in Hayek's epistemology is not fixed but changeable (Nishiyama, 1984: xl). It seems that Nishiyama is aware of the problem here but he doesn't attempt to develop his insight in more detail. The same can be said about Gerald Steele, Susumu Egashira and Chor-yung Cheung's positions. They have rightly recognised the problem associated with a Kantian reading and are conscious of Hayek's epistemology (Cheung, 2011: 229-230; Egashira, 2010: 227; Steele, 1993/2007: 31) but they do not endeavour to provide any alternative interpretation of Hayek's position. Kukathas and Gissurarson have managed to recognise the problem and provide an alternative interpretation (Kukathas, 1989; Gissurarson, 1987). Although there are some differences between their interpretations, they both agree that Hayek's epistemology is rooted in two different and somehow inconsistent sources. They have argued that Hayek merged some elements of Hume's epistemology in a Kantian one and created a new epistemology which does not entirely enjoy appropriate consistency. Because of this unhappy amalgamation of two different epistemologies, they maintain, Hayek's epistemology and consequently his political philosophy is not always consistent. I share the view that Hayek's political philosophy is not always consistent. However, I do not see the problem in his epistemology. I shall argue that Hayek's epistemology is not an amalgamation of two different

epistemologies, but rather, it is a unified evolutionary explanation about the formation of mind and knowledge. What Kukathas and Gissurarson have seen as conflicting elements in Hayek's epistemology are in fact two levels of explanation and can be understood properly when we consider his evolutionary approach and make a distinction between ontogenetic and phylogenetic processes.

By understanding the evolutionary roots of Hayek's epistemology, not only can the use of odd phrases such as 'Kantian scepticism' or 'soft Kantianism' be set aside but also Hayek's criticisms of 'constructive rationalism' and his notion of 'spontaneous order' can be seen from a different and, I hope, more fruitful perspective. The dominance of the Kantian reading of Hayek has either limited some scholars' understanding of Hayek and made them constantly seek to interpret Hayek in the Kantian framework (see for example: Barry, 1979: 135-137) or to state a view which is not consistent with the rest of Hayek's philosophy. One example of the latter position can be found in Donald Livingston's article 'Hayek as Humean' (1991). Although I agree with Livingston's suggestion that Hayek's social theory has a lot in common with Hume's (Livingston, 1991: 161), he does not explain how such a reading of Hayek can be reconciled with Hayek's epistemology and psychology where 'linkages' play such an important role. Neither the Humean reading nor the Kantian one are able to provide a comprehensive understanding of Hayek's epistemology and social philosophy since they both have ignored the concept of evolution which plays a vital role in Hayek's epistemology and social philosophy. Although there is an agreement among almost all Hayek's scholars about the evolutionary nature of his social theory, there has not been much success in associating that position with his epistemology and philosophy of mind.

One important exception to the above claim is the writings of Paul Lewis on the concept of 'emergence' (Lewis, 2016; Harper and Lewis, 2012; Lewis, 2012a; Lewis, 2017b; Lewis, 2013; Lewis, 2015). In his writings, Lewis tries to make a connection between Hayek's philosophy of mind and his social philosophy. He argues that the underlying process in both fields is the concept of emergence. According to Lewis, emergence refers to the possibility that 'when certain elements or parts stand in particular relations to one another, the whole that is formed has properties (including causal powers) that are not possessed by its constituent elements taken in isolation' (2012a: 369). I shall discuss the concept of emergence and its twin, 'downward causation' in chapter three. For now, however, I would like to make it clear that I have found Lewis' discussion on this issue quite illuminating. The difference between my reading of Hayek and Lewis on this particular matter is not substantial. The difference, I believe, lies in the fact that we study the case from different perspectives. Lewis is keen to consider the consequences of his reading of Hayek in terms of economics, whereas my reading focuses more on philosophical and political significance.

1.4. Structure

As in the first chapter, I have already discussed the importance of the topic and the aim of the thesis, I start my discussion of Hayek's philosophy in chapter two. There, I offer my reading of Hayek's major work on theoretical psychology, *The Sensory Order* (1952/1976). After providing a background about the reason why Hayek decided to write the book, I turn my attention to the main issues discussed in the book. I propose an outline of Hayek's theory about the formation and function of the mind. I assert that Hayek's theory of the mind is an evolutionary one. He not only studies the formation of the mind in an individual, but also, his theory offers an explanation about the formation of the mind in of the human species. Hayek is cautious not to

offer a total explanation, but rather he proposes an 'explanation of principles' or 'pattern prediction' (Hayek, 1964/2014: 257). He is well aware that the human mind cannot provide a total explanation of his/her own mind since we need a brain more complex than ours to fully explain the operations of our mind. I maintain that this is the pillar of all Hayek's criticisms against 'constructive rationalism', psychologism, behaviourism, physicalism, logical positivism and all other 'isms' that claim the possibility of total knowledge about the human mind. At the end of my discussion of *The Sensory Order*, I argue against the Kantian interpretation of Hayek's epistemology. I suggest that the Kantian interpretation fails to understand the main characteristics and also the novelty of Hayek's theory and do justice neither to Hayek nor to Kant. Hayek's scepticism towards the possibility of acquiring 'complete knowledge' about the human mind, is not Kantian, but rather anti-Kantian. I continue the chapter by considering Hayek's abuse of reason project. Grounded on what he has said in his theory of mind, Hayek argues that 'constructive rationalists' and especially socialists have a distorted and mistaken view about the capacity of reason in running a society. They believe, Hayek argues, that all morals and every social and cultural institutions should be judged by pure and abstract reason. According to Hayek, it is their aspiration to destroy all social institutions and 'construct' a new society based on reason alone. He maintains that this view of reason which he traces back to the writings of Descartes and August Comte, is mistaken. Hayek believes that it is possible to 'scientifically prove' why 'constructive rationalism' and socialism are wrong. He offers his 'evolutionary rationalism' which is an alternative to the constructive one.

In chapter three, I seek to provide an account of Hayek's evolutionary epistemology. I open the chapter with some preliminary comments on evolutionary theory and pay especially close attention to Darwin's theory of

evolution. The point of this preliminary discussion is to illustrate how the mechanism of evolution works and what its core components are. I explain the three principles of evolution i.e. variation, selection and inheritance in detail. The principles of evolution are followed by my discussion about the unit of selection; in this section, I make it clear that for Darwin and even for the 'Darwinians before Darwin' (Bernard Mandeville, David Hume and Adam Smith), as Hayek called them, the unit of selection is always the individual. This is an important issue since in his theory of cultural evolution, Hayek deviates from both the Darwinian theory of evolution and his own methodological individualism. I move on from this to Hayek's evolutionary epistemology. I argue that one important insight of Hayek's evolutionary epistemology is that he sees both the mechanism of genetic evolution and cultural evolution at work in shaping our knowledge about the world. This aspect of Hayek's theory was far ahead of its time and only in the late 1980s came to be known as 'dual inheritance' (Richerson and Boyd, 2005: 237). By accepting Michael Bradie's distinction between the evolution of epistemic mechanism and evolution of epistemic theories, I maintain that Hayek wrote about both aspects of evolutionary epistemology. In *The Sensory Order* and his other writings on theoretical psychology, Hayek mainly focuses on the evolution of the epistemic mechanism, yet he also wrote about the evolution of epistemic theories. I believe Hayek is less original in the latter task since he usually made the points that had been made by his contemporary evolutionary epistemologists. It has been argued that in terms of evolutionary epistemology, Hayek was under the influence of Popper (Connin, 1990: 315; Rodrigues, 2013: 1009; Pleasants, 1997: 43). Although I do not deny the influence of Popper on Hayek, I believe the influence is exaggerated. The origin of Hayek's influence, I propose, can be found in the writings of Konrad Lorenz, one of Hayek's close friends. I show how Hayek was influenced by Lorenz's writings and especially his article 'Kant's Doctrine

of the A Priori in the Light of Contemporary Biology' (1941/2009). To a large extent, Hayek accepted Lorenz's argument in that article and gave it more rigor and sophistication. I argue that Hayek's stance in this regard places his epistemology in contrast to Kant's and also to Ludwig von Mises' *a priorism*. I finish the chapter with a discussion of the concepts of 'emergence' and 'downward causation'. Although Hayek never used these terms, I argue that they capture Hayek's position in epistemology very well.

In chapter four, I show the implications of Hayek's epistemology and philosophy of mind in his social theory. I start the chapter with a discussion of Hayek's methodological individualism. Hayek's methodological individualism has its own characteristics which make it different from other advocates of methodological individualism. Hayek's methodological individualism, as Gregor Zwirn has rightly argued (Zwirn, 2007), is different from methodological atomism since it does not study individuals in the abstract realm. Rather, Hayek constantly emphasises that individuals should be seen in society and in their relations to each other. Moreover, Hayek's methodological individualism is different from that of Weber and Mises because he focuses on the unintended or un-designed consequences of human action. Hayek argues that if the intended consequences of individuals' actions were the case, then psychology plus arithmetic would be sufficient to explain social phenomena. The interaction between individuals may, and mostly do, give rise to unintended and even undesired emergent phenomena. The task of the social scientist, Hayek maintains, is to study such un-designed phenomena. The mechanism which Hayek identifies for the emergence of these phenomena is the spontaneous formation of social order or in short, the spontaneous order. After discussing what Hayek considered to be the 'false dichotomy' between the natural and artificial orders, I turn my attention to Hayek's definition of the spontaneous order. I

argue that Hayek's notion of spontaneous order, as he himself and many scholars have acknowledged, has many similarities with the mechanism of biological evolution. Yet according to Hayek, his theory of spontaneous order and cultural evolution is more similar to Lamarck than Darwin since it emphasises the inheritance of learned characteristics. Like his discussions on epistemology and philosophy of mind, Hayek is a sceptic for providing a fully-fledged theory of cultural evolution. Hayek's scepticism becomes more evident when he maintains that both biological evolution and cultural evolution are complex phenomena and it is impossible to provide law-like theories for such phenomena. Just like his theory of mind, what we can do for clarifying these phenomena is to offer an 'explanation of principles' which allows us to have some 'pattern predictions'.

In chapter five, I try to show that Hayek's social theory and his scepticism towards the role of reason in society brings him very close to conservatism. After a short discussion of the different ways of approaching conservatism, I identify three central doctrines for conservatism. The main doctrine which I believe sits at the centre of conservatism is scepticism about a particular conception of reason. I argue that conservatives are almost always sceptical about the role of reason in society. This does not necessarily imply that their hostility is against reason *per se*, but rather, they believe that since in politics we deal with contingent and variable elements, we need to follow a different kind of reason which cannot be theorised by abstract formulae. This 'practical wisdom' or 'knowledge of' depends on particular matter in a particular time and place and is based on particular information. If it becomes generalised, it loses its meaning and practicality. If abstract reason is not our best guide in politics, conservatives argue, our social traditions are. Traditionalism is the second doctrine which I associate with conservatism. According to conservatives, social traditions are the

crystallisation of past experiences. Instead of trying to construct a society based on some abstract blueprints, conservatives look at social traditions as the main source of knowledge. From the conservative point of view, it is safer to rely on social traditions in order to make any change in society since these traditions have endured throughout time and proven their benefits to society. Moreover, due to scepticism about abstract reason, it seems that conservative thinkers do not wish to direct society towards a particular end. They see politics as a regulator rather than a director. According to this view, the main task of politicians is to make sure that society works properly, not moving towards a particular goal. Although change is inevitable in society, any changes should be in tune with the specific characteristics of particular society. This leads to the third doctrine of conservatism, that is an organic view of society. Conservatives believe that society, unlike machine, is an organism. Society constitutes a whole which is more than just its component parts. Each society has its own character and the individuals who grow up and live in that society acquire and connect to its particular way of living. The relation between them and their society is an organic one, meaning that they will find it difficult or sometime unbearable to live in another society. After providing these three central doctrines of conservatism, I compare Hayek's philosophy with regard to each doctrine. I conclude that there are high degree of similarities between Hayek's social and political thought and the central doctrines of conservatism.

In the final chapter, I summarise and conclude the argument I have made in the thesis. I also provide certain reflections on some aspects of Hayek's political thought. Although I believe that Hayek's project is a fruitful one, I find some inconsistencies in Hayek's thought. Some of these inconsistencies, I argue, have a theoretical basis whereas some others are due to Hayek's 'liberal agenda'. I provide my own criticism mostly on the

first kind of inconsistencies and only briefly mention the latter one. I argue that Hayek's evolutionary approach does not entail his 'liberal agenda', but rather moves towards a more conservative path. Although it seems that Hayek became aware of this inconsistency, I believe he could not manage to provide a convincing response to the issue and it remains unresolved in his theory.

Chapter II: Hayek's *The Sensory Order* and Abuse of Reason Project

2.1. Introduction

In this chapter I focus on Hayek's works on theoretical psychology and his writings on the philosophy of social sciences. Due to the fact that the whole thesis tries to make a connection between Hayek's particular view about the capacity of reason and his political thought, this chapter plays a crucial role in the whole body of my argument. The chapter tries to clarify the main features of Hayek's philosophy of mind and epistemology and bring to the fore his evolutionary view of the formation of mind and also his scepticism against behaviourism and positivism.

In what follows, I will try to show his particular epistemological point of view and also I shall argue that Hayek's epistemology developed throughout his life. In terms of epistemology, the major influence on Hayek's thought was Karl Popper, his lifelong friend and colleague at London School of Economics. Although Hayek had heard about Popper's *Logik der Forschung*,⁴ according to Popper, Hayek hadn't read the book prior to their first meeting in 1943 (Popper, 1992/1997: 311). However, after meeting and discussing with Popper, he almost adopted Popper's methodology (Hayek, 1969/2014: 321). Nevertheless, Hayek's attitude towards Popperian methodology seems ambivalent to me. Hayek, alongside Popper and D. T. Campbell, has usually been associated with the field of study called *evolutionary epistemology* (Vanberg, 1994a: 176), but there are some significant differences between Hayek's ideas and Popper's. Although I mention Popper several times in this chapter, Hayek's relation to Popper and his evolutionary epistemology or 'evolutionary rationalism' (Harnish, 2010: 182) will not be discussed here.

⁴ Popper rewrote the book *The Logic of Scientific Discovery* (1959/2002) in English from its German original which was published in 1934.

For the rest of this chapter, first I discuss Hayek's writing on philosophy of mind; especially *The Sensory Order* (1952/1976) and his two other essays – 'Rules, Perception, and Intelligibility' (1962/2014) and 'The Primacy of the Abstract' (1969/2014). Then I turn my attention to Hayek's methodology and his essay 'Scientism and Study of Society' (1942-44/2010), which was part of his Abuse of Reason project, what he never completed. I pay close attention to *The Sensory Order* because I believe that the ideas expressed in that book play a crucial role in Hayek's methodology/epistemology and that, unfortunately, they have been ignored or misinterpreted by many scholars.

The reason that I discuss Hayek's *The Sensory Order* and his writings on the methodology of social sciences in the same chapter is twofold. From a chronological point of view, the fact that Hayek's *The Sensory Order* and his 'Scientism and Study of Society' essays were published in the same year indicates that he was deeply engaged with both projects at the same time. Such engagement, however, does not only have chronological importance. Hayek believes that 'constructive rationalists' in general, and 'socialists' in particular, have erroneous conceptions of reason and because of that they fail to acknowledge its proper role in society. The insights that Hayek got from working on *The Sensory Order* and its 1920 manuscript helped him to gain a better understanding of the limitation of human reason and that, in turn, facilitated his criticism towards the 'abuse of reason' in society. In retrospect, Hayek says those insights 'were probably the most exciting events that ever occurred to me, which shaped my thinking' (Hayek, 1994: 136) and helped him to improve his understanding of economics and the methodology of social sciences (Hayek, 1994: 136).

2.2. Hayek's The Sensory Order

2.2.1. The Importance of the Book

In a letter to John Nef, dated 6 November 1948, prior to its publication, Hayek described what became known as *The Sensory Order* which is 'the most important thing I have yet done' (Caldwell, 1997: 1856). However, more than two decades after the publication of the book in his interview with Kurt R. Leube, Hayek complained that the book hadn't received the attention it deserved from scholars: 'Of *the Sensory Order* I can truly say, as Hume said of his *Treatise*, that it 'fell dead born from the press' ' (Leube, 2003: 12). *The Sensory Order* contains Hayek's naturalistic theory about the formation and function of the mind. There is still huge controversy among Hayek's scholars regarding the importance of this book. Steven Horwitz believes that *The Sensory Order* is 'crucial to understanding both his economics and his politics, and makes use of a theoretical perspective parallel to them' (Horwitz, 2000: 23). Caldwell also makes the same claim and after mentioning the above letter from Hayek to John Nef, argues that 'Hayek thought *The Sensory Order* a work of considerable importance' and also he asserts that 'it was an essential part of his [Hayek] larger contribution' (Caldwell, 2004b: 239).

Before providing any account of Hayek's *The Sensory Order*, I need to answer another potential question. Hayek published *The Sensory Order* in 1952 from his draft of a work which he had written when he was student of psychology at the University of Vienna. The title of Hayek's 41 page manuscript dated September 1920 is '*Contributions to a Theory of How Consciousness Develops*' (Steele, 1993/2007: 29; Hayek, 1920/2017). Until 1952, Hayek had published several essays which were mostly on pure economic theory or social calculation debate. He also delivered and published some non-economic essays such as: 'Economics and Knowledge'

(1937/2014), 'The Facts of Social Sciences' (1943/2014), 'The Use of Knowledge in Society' (1945/2014) and 'Individualism: True and False' (1945/2010). Moreover, he also published his best-selling book, *The Road to Serfdom* in 1944 (1944/2007). Now, the question that might be asked is why do I think *The Sensory Order* is such a yardstick in all of Hayek's work even prior to its publication in 1952?

In Hayek's economics and non-economic writings between the years 1920 to 1952, the main theme of *The Sensory Order* was implicitly expressed but it took more than thirty years for Hayek to frame them explicitly. The essential issues which Hayek dealt with in *The Sensory Order* and his pre-*The Sensory Order* writings is the problem of processing information – genetically, neurologically and socially – as the mechanism of successful adaptation. It is for these reasons that *The Sensory Order* as Steele rightly mentions 'is central to a full understanding of Hayek's intellectual contributions to cognitive science, to economics and to that encompassing science of human behaviour: praxeology' (Steele, 1993/2007: 29).

There are different reasons why Hayek started to write *The Sensory Order* in that particular time. Besides his academic interest *per se* and a 'concern with the logical character of social theory' (Hayek, 1952/1976: v), I believe that Hayek had two other major reasons to write a book on the pure theory of psychology. The first one is what Hayek explained in one of his interviews; namely that he wanted to be considered as an academic. He says: 'after *The Road to Serfdom*, I felt that I had so discredited myself professionally, I didn't want to give offense again. I wanted to be accepted in the scientific community. To do something purely scientific and independent of my economic view' (Hayek, 1994: 136). In the same interview, he also affirms that his theory in *The Sensory Order* is connected with his economic view, 'I must say that the insights I gained—and I can't

say now when—both from the first stage in 1920 or later in the 1940s, were probably the most exciting events that ever occurred to me, which shaped my thinking’ (Hayek, 1994: 136).

The other reason is that, after *The Road to Serfdom*, Hayek realised that most of the criticisms that he had received were because of the simple fact that people could not appreciate some underlying assumptions of his theory. The most important idea that was essential in Hayek’s thesis, and he had learnt it from the socialist calculation debate in his early intellectual life was that, socialist claims about adequate knowledge for the planning of society are erroneous and can be refuted *scientifically*. He said that ‘the differences between socialists and nonsocialists ultimately rest on purely intellectual issues capable of a scientific resolution and not on different judgments of value’ (Hayek, 1973/1998: 6) and believed that the doctrines advocated by the socialists ‘can be shown to be based on factually false assumptions,’ and the whole family of socialist thought could be ‘proved erroneous’ (Cheung, 2011: 220). Hayek’s faith in the decisive role of epistemology and methodology was so robust that once he said all the great British economists (who were the leading ones in Hayek’s thought) were great men in ‘scientific method’ as well (Hayek, 1956/1967: 131).⁵ Hayek never left the epistemological and methodological issues and he always directly or indirectly linked his ideas to his epistemological stance (Butos, 2010: 2). I think that it is fair to say, as Weimer says ‘nearly everything Hayek wrote (except obvious technical discussions and replies) is relevant to psychology and epistemology’ (Weimer, 2011: xxvi). Hayek’s *The Sensory Order* is his ‘lifelong attempt to understand society from an epistemological point of view’ (Strong, 2013: 462).

⁵ Hayek exempted two figures from his assertion but he did not mention their names (Hayek, 1956/1967: 131).

2.2.2. Two Orders

Hayek starts his theory in *The Sensory Order* by making a distinction between two orders in which we 'classify' the world around us. 'One is the order of our sense experiences in which events are classified according to their sensory properties such as colours, sounds, odours, feeling of touch, etc.' Hayek writes 'the other is an order which includes both these same and other events but which treats them as similar or different according as, in conjunction with other events, they produce similar or different other external events' (Hayek, 1952/1976: 3). Hayek calls the first one a phenomenal, mental or sensory order and the second one a physical order (Hayek, 1952/1976: 4). The physical order is revealed to us through natural sciences whereas the sensory order is what we all experience as individuals (Caldwell, 2004a: 262). This distinction is crucial to understanding the problem that Hayek seeks to address in *The Sensory Order*, which is 'why our phenomenal picture does not always accord with how the world actually is, as revealed by science' (Tebble, 2010: 14).

Hayek asserts that although all of us have a perception of the world around us, this picture is not usually similar to what natural science tells us about the world. What Hayek wants to show is that 'why and how the senses classify similar physical stimuli sometimes as alike and sometimes as different, and why diverse physical stimuli will sometimes appear as similar and sometimes as different' (Hayek, 1952/1976: 8). In other words, the task of theoretical psychology is to explain how our sensory order is different from the physical order or as Horwitz has put it 'why is the way we perceive the world through our senses different from the way we might describe that world in the language of science?' (Horwitz, 2000: 24). Hayek argues that there is no one to one correspondence between the physical properties on one hand and the effects that those properties produce in our sensory order

on the other hand. 'The manner in which the different physical stimuli can vary and the different physical dimensions in which they can be arranged have no exact counterpart in the manner in which the sensory qualities caused by them will differ from each other, or in the dimensions in which these sensory qualities can be arranged' (Hayek, 1952/1976: 14). For example, two different physical objects such as salt and sugar may provide the similar effect in our mind, i.e. whiteness (in this case via our vision). Conversely, the same substance like lemon juice affects our senses in different ways if it is applied to for example our tongue and our eyes (Tebble, 2010: 15). In Hayek's words, 'there is no problem of sensory qualities beyond the problem of how the different qualities differ from each other and these differences can only consist of differences in the effects which they exercise in evoking other qualities, or in determining behaviour' (Hayek, 1952/1976: 18). So, when we talk about sensory order or mind, we should be aware that it is not necessarily the mirror of the physical order.

I would like to emphasize that it is absolutely essential to remember Hayek's distinction between the mental and the physical worlds. It is clear that at this point, Hayek was aware of the controversy between the Behaviourists and Gestalt schools. As a critic of Behaviourism, he 'avoided naïve physicalism and empiricism by dividing the sensory order into a physical layer and a mental layer and by emphasizing the importance of consciousness' (Egashira, 2010: 278). For Hayek, mind is not identical with the natural world, 'human perception and human action is a purely subjective phenomenon' (Gick, 2010: 338); therefore mind is 'a particular order of a set of events taking place in some organism and in some manner related to but not identical with, the physical order of events in the environment' (Hayek, 1952/1976: 16). Hayek seeks to answer the question of 'how in a part of the physical order (namely an organism) a sub-system

can be formed which in some sense (yet to be more fully defined) may be said to reflect some features of the physical order as a whole, and which thereby enables the organism which contains such a partial reproduction of the environmental order to behave appropriately towards its surroundings' (Hayek, 1952/1976: 16). In other words, the problem for Hayek is why the order of mind is in some respects similar to the 'comprehensive physical order', but in other respects different from it (Hayek, 1952/1976: 16). Hayek believes that 'naïve empiricism' fails to explain the differences between the physical order and mental order.

The root of Hayek's hostility towards naïve empiricism and Behaviourism goes back to Hayek's student days in Vienna, when 'scientific method was entirely in the school of Ernst Mach and later of the logical positivists' (Hayek, 1943/2014: 78-79), and also his first visit to the USA and attending the courses which were conducted by Wesley Clair Mitchell (Caldwell, 2010: 22-23). Even in his 1920 student manuscript *The Sensory Order*, Caldwell says, it 'contained a critique of the psychological theory propounded by Ernest Mach, a polymath Viennese scientist whose theories in a variety of fields were dominant when Hayek was a student' (Caldwell, 2004b: 239-240). After his encounter with Mitchell during 1923-24 in New York, Hayek became more critical towards Mitchell's endorsement of the behavioural approach in psychology. Mitchell was also an austere advocate of the empirical, statistical and quantitative approach to economics (Ebenstein, 2001: 33). Mitchell's behaviourism and Mach's naïve empiricism were the targets of Hayek's *The Sensory Order* and the methodological essays that preceded it.

Ernest Mach's influence on Viennese students and scholars was huge until 1930s, so it is not surprising that at the beginning Hayek was also inspired by Mach. What Hayek took from Mach is more about the scientific

method than his philosophical results. The other important school which at the same time was also heavily influenced by Mach was the Vienna Circle 'where scholars like Otto Neurath and Rudolph Carnap had founded the Ernst Mach Society to support their movement and to link Mach's empiricism to their philosophical approach, which they later named 'logical positivism'' (Becchio, 2011: 172). What logical positivists took from Mach's writings was not similar to what Hayek did. Although both Hayek and the logical positivists considered Mach as 'the most influential anti-metaphysical thinker' (Becchio, 2011: 172), positivists accepted Mach's reductionism in psychology and also his idea of the methodological monism between physics and psychology.

Mach's influence on Hayek was more complex though. Like Mach, Hayek also started his inquiry by using the experimental method which had been advanced by Mach, but he did not take the reductionist step in the end. In the introduction to *The Sensory Order*, Hayek writes 'I still vividly remember how in reading Mach, in an experience very similar to that which Mach himself describes with reference to Kant's concept of the *Ding an sich*, I suddenly realized how a consistent development of Mach's analysis of perceptual organization made his own concept of sensory elements superfluous and otiose, and idle construction in conflict with most of his acute psychological analysis' (Hayek, 1952/1976: vi). About the 'philosophical consequences' of his theory, Hayek acknowledges the importance of Mach's work but he rejects their results because Hayek believes that Mach did not follow his argument to its logical conclusion. The systematic development of his own theory, however, 'leads to a refutation of his [Mach's] and similar phenomenalist philosophies: by destroying the conception of elementary and constant sensations as ultimate constituents of the world, it restores the necessity of a belief in an objective physical world which is different from that presented to us by our senses' (Hayek,

1952/1976: 175-176). Twenty five years after the publication of *The Sensory Order*, Hayek reminisced that '... scepticism about Mach's phenomenalism, in which pure, simple sensations are the elements of our entire sensory perceptions... I had the revelation that Mach's concept of 'simple and pure sensation' in his sensory psychology was actually meaningless' (Caldwell, 2004b: 242).

So far, I have tried to show that the distinction between sensory order – or mind – and natural order was so essential for Hayek. In the end, Hayek's attack on socialism, positivism, behaviourism and in general all the 'isms' that fail to notice the distinction between natural and phenomenal orders or reduce it to just physical properties, is based on his argument about the separateness of these two orders. We should remember that Hayek published another book *The Counter Revolution of Science* (1952/1964) in the same year that he published *The Sensory Order*. I will discuss in more detail the main arguments of *The Counter Revolution of Science* later on, but for now, I would like to mention the fact that the main theme of the book is an attack on what Hayek called 'scientism'. One of the errors of scientism in Hayek's mind is that it disregards the distinction between the natural and phenomenal world. The difficulty of scientism and behaviourism for Hayek is that they reduce all phenomena to simple one-to-one casual relations. As Steele has remarked 'in certain respects, scientism presents as an extension of 'behaviourism', with its aversion to unobservable causes and a desire to establish psychology as a science of human behaviour' (Steele, 2010: 72). Hayek might agree with Plotkin by saying that 'what behaviourism did was forbid causal explanations if they did not lie within the limits of ordinary everyday experience. Scientifically this was an extraordinary bankrupting stance' (Steele, 2010: 72).

Although Hayek tried to provide an account that challenged causal interpretation, it is highly dubious how successful he was. There are some who believe that Hayek's theory of mind is itself a causal theory. In a letter dated December 2, 1952, after a reading of the book and acknowledging its merits, Popper responded as follows, 'I am not sure whether one could describe your theory as a causal theory of the sensory order. I think, indeed, that one can. But then, it would be also the sketch of a causal theory of the mind. But I think I can show that a causal theory of the mind cannot be true (although I cannot show this of the sensory order; more precisely, I think I can show the impossibility of a causal theory of the human language (although I cannot show the impossibility of a causal theory of perception). I am writing a paper on the impossibility of a causal theory of the human language, and its bearing upon the body-mind problem, which *must* be finished in ten days' (quoted in: Feser, 2011: 74). The paper Popper was referring to is his very short article 'Language and the Body-Mind Problem' (1953/1991). Hayek began a draft of a paper entitled 'Within Systems and About Systems: A Statement of Some Problems of a Theory of Communication,' (1953/2017) which, as Jack Birner has suggested, appears to have been intended at least in part as a response to Popper's criticisms. But it was never completed, and Hayek never addressed Popper's arguments in any of his published work during his lifetime (Feser, 2011: 74).

Putting aside the question about Hayek's success, the first step for Hayek in his theory was to make a sharp distinction between the realm of the natural world and the sphere of mind. In *The Sensory Order*, Hayek wants to demonstrate why such a distinction is needed and how we can justify it. He wants to provide an 'explanation' about how the human mind works. His contention – as we can understand from the title of the book – was just focused on the sensory order and not the physical one. Before I go

any further and explain the procedure through which our sensory order is formed, some remarks about Hayek's view about natural world are needed.

As I have explained above, one of Hayek's major contentions against Mach, logical positivists, behaviourists and physicalists was his objection to reductionism. All of these doctrines, Hayek maintains, fail to appreciate the distinction between the natural and mental orders and moreover, the important fact that our subjective/mental image of the world is not always identical with the objective/physical world. However, in order to say that something is identical or is not identical with something else, we need to know both of these things. As Ludwig Wittgenstein said: 'in order to be able to draw a limit to thought, we should have to find both sides of the limit thinkable' (Wittgenstein, 1922/2001: 3); yet, Hayek didn't provide any account about the physical world at all. As Ebenstein has rightly said 'while he believed in the existence of a physical world external to mind, he ascribed almost no (if any) properties to it' (Ebenstein, 2003: 136). In this sense, Hayek's views in *The Sensory Order* can be characterized as subjectivism. Although Ebenstein called Hayek's position as 'solipsism' (Ebenstein, 2003: 135), I agree with Caldwell to call it subjectivism. The reason for this preference is that, Hayek was not solipsist in a sense that he *only* believes in *his own mental states*. 'Hayek's project in *The Sensory Order* was to provide a physiological (hence 'scientific') foundation for subjectivism. This fits into his larger project of providing a scientific basis for his bedrock claim that we face limits in our ability to understand and control complex phenomena' (Caldwell, 1994: 309).

2.2.3. Classification Mechanism

The mechanism of classification is the core idea of Hayek's notion of sensory order. Hayek asks his question in a long sentence: 'how it is possible to build from the known elements of the nervous processes a structure of

intermediate links between the physical stimuli and the overt responses which can account for the fact that the responses to different stimuli differ from each other in precisely that fashion in which we know the responses to the experienced sensory qualities to differ from each other' (Hayek, 1952/1976: 18). In other words, how is it possible that an organism responds properly to different stimuli in a way that its chance of survival increases? Hayek's answer to this question is that the nervous system accomplishes its task by acting as a 'giant classification mechanism' (Caldwell, 2004a: 264). Hayek defines classification as 'a process in which on each occasion on which a certain recurring event happens it produces the same specific effect, and where the effects produced by any one kind of such events may be either the same or different from those which any other kind of event produces in a similar manner' (Hayek, 1952/1976: 48). So, for Hayek, different events belong to the same class as far as they produce the same effect whenever they occur. He maintains that 'the fact that every one of them produces the same effect will be the *sole* criterion which makes them members of the same class' (Hayek, 1952/1976: 48).

Although the mind performs its task by classifying the stimuli which each individual receives during his/her lifetime, the classification mechanism of the nervous system has also evolved with the evolution of human species. In other words, for Hayek, the mind is the result of twin processes of evolution. To some extent the physical structure of the brain has evolved in certain shared ways that are reflected in the strong consistencies in perception among human species. At the same time, the environment and experiences of particular people will lead individual minds to evolve in distinct directions and guide perception in different ways. For example, the experience of learning one's mother tongue clearly shapes one's perception of the world. As we move through our lives, the various experiences we

encounter all affect our mental evolution and development so that at any given point, the mind can be seen as the product of these historical and experiential events. Thus, the mind is a cultural product that emerges from a particular physical structure (Horwitz, 2000: 24). To use scientific terminology, we can say 'there are, both species-based or 'phylogenetic', and individual or 'ontogenetic' factors that explain our capacity to classify the elements of the environment in which we find ourselves as belonging to one or another class of phenomena' (Tebble, 2010: 18). Hayek would agree with Mach in maintaining the physical basis of the order we call mind, but he would depart from Mach's belief that the mind can be *reduced* to physical phenomena. The self-organizing properties of the mind take it beyond our ability to understand in physical terms, despite its ultimately material basis. For the most part of *The Sensory Order*, Hayek discusses the evolution of the mind from a 'materialist' point of view, but it should be noticed that that view is just a *part* of the whole process.

The sensory qualities that we experience are the result of combinations of various systems of connections (Caldwell, 2004a: 264). It can be said that Hayek's objection against all advocates of reductionism is that they are unable to recognise the difference between phylogenetic and ontogenetic factors. Although Hayek accepts the significance of phylogenetic properties, he maintains that the sensory qualities 'are not in some manner originally attached to, or an original attribute of, the individual physiological impulses' (Hayek, 1952/1976: 53). Hayek argues that the whole of these qualities is determined by a 'system of connexions' which is 'acquired in the course of the development of the species and the individual by a kind of 'experience' or 'learning'; [...] The connexions between the physiological elements are thus the primary phenomenon which creates the mental phenomena' (Hayek, 1952/1976: 53). So what we call the 'mind' in the Hayekian sense

is an immense network of interconnected neurons. Amongst the neurons, some may have many connections in common, whereas others fewer. 'Receptor organs that are sensitive to similar stimuli tend to be excited at the same time, sending a certain sequence of impulses through pathways in the dense network of connections' (Caldwell, 2004a: 265). Hayek maintains that each of these sorts of stimuli creates 'initial and then subsequent firings of impulses' and these shape patterns amongst the different levels of classification that finally constitute the neural network.

Hayek calls this pattern a 'linkage' which is 'the most general lasting effect which groups of stimuli can impress upon the organization of the central nervous system' (Hayek, 1952/1976: 104). Linkages reflect the effects of external events on the organism, but initially they do not necessarily have any 'distinct significance for the organism' (Hayek, 1952/1976: 104). It is only after many occurrence that 'give them special significance for the organism'. Hayek refer to linkages as 'pre-sensory experience' that determine the sensory qualities (Hayek, 1952/1976: 165). The linkages are previously created within the organisational structure of the central nervous system: a system of connections which is acquired, as I have said previously, in the course of evolution of species and individuals (Hayek, 1952/1976: 52). Linkages determine 'the order of the apparatus of classification'; that is, the framework that determines all our 'conscious experience of qualitative attributes of external events' (Hayek, 1952/1976: 143). The core, then, of the sensory order is one of linkages, of classifications of physiological events – based on the event itself, to be sure, but also its place within a classificatory order based on past experience. The sensory order is thus variable and dynamic, as it builds on past knowledge (Wenzel, 2010: 316), 'the operation of mind is' Tebble says 'a process in which stimuli are discriminated, transformed and grouped, with stimuli

belonging to the same class if they provoke the same response' (Tebble, 2010: 17). To put it in different way, what we perceive in our life is built on our individual experience of the world which always shaped by pre-sensory experience of the species and also 'social experience too, given that we are social beings' (Petsoulas, 2001: 24). Hayek argues that 'there will be implicit in all sensory experience certain relationships determined by earlier linkages (i.e. by the influence of the external world on the organism) which have never been the object of sensory experience in the ordinary meaning of the term; and that the order of sensory qualities will be subject to continuous modification by new linkages between impulses' (Hayek, 1952/1976: 106).

We should note that linkages are not rigid and totally unchangeable phenomena. They do change, especially through new neural connexions, yet their change is less fundamental. Hayek argues that 'even after relatively simple systems of connexions, effecting some measure of classification, have been formed, this system will be constantly modified by new linkages. But as the existing system of connexions becomes more and more complex and more firmly embedded, any new linkage will be less likely to alter its general character' (Hayek, 1952/1976: 105). So, the process of classification has one important feature for Hayek; we cannot perceive a stimulus in its 'pure' form, but only in a categorized, classified or abstract way. Sensory qualities are determined by the 'differentiating' neurological responses of the system as a whole. The significance of each stimulus derives from its relationship to, and combination with, other stimuli. It is by the coordination of a multitude of sensory impulses that an effect is created. Therefore, 'an event of an entirely new kind which has never occurred before, and which sets up impulses which arrive in the brain for the first time, could not be perceived at all' (Hayek, 1952/1976: 142). Any knowledge of the world, therefore, necessarily is –and can't be anything but

– an interpretation of the world. 'Classification is based on the connexions created in the nervous system by past linkages' Hayek writes 'every sensation, even the 'purest', must therefore be regarded as an interpretation of an event in the light of the past experience of the individual or the species (Hayek, 1952/1976: 166).

Here we can clearly see Hayek's point of departure from a Machian, positivist and any reductionist approach or what Lindemans has called 'sensationalist empiricism' (Lindemans, 2011: 145). Hayek's contention is that we cannot start from 'pure sensation' as Mach advocated, because any sensation is disciplined either by an individual's or species' past experience. There is an interconnection between a new stimulus and past experience of the organism; 'The sensation is interpreted according to the previous experience, resulting in a continuously adapting sensory order. Thus, neither a past experience nor the physical stimulus alone determines the response, but rather the complex interaction between the two' (Leppälä, 2010: 242).

Hayek's theory implies that all perception is abstract in two ways. First, since it would be cognitively impossible to perceive *all* the properties of objects, 'the mind does not represent physical or external events but is an interpretation of these events that we call reality' (Gick, 2010: 338). It 'will always reflect only some of these generic properties which might be ascribed to the perceived object' (Hayek, 1952/1976: 144). Second, 'what we perceive can never be unique properties of individual objects but always only properties which the objects have in common with other objects' (Hayek, 1952/1976: 142). Experience is not something that starts with an individual's life, but it is something that has been evolved by our species. Although Hayek never put it in this way, I think it is right to say that our genetic make-up is constituted by the experiences of whole generations before us and it shapes our personal experience even before we have any

knowledge of it; Hayek 'assumes that the elementary structure of the central nervous system is already in place at, or soon after, conception and that the connections created in the neural network are only formed afterwards during the course of our lifetime' (Tebble, 2010: 18). Thus, the concept of mind as *tabula rasa* or passive recipient of sensations was unacceptable for Hayek (Fuster, 2011: 5). So, for Hayek the process of experience does not start with sensations or perceptions, but rather, it precedes them; 'it operates on physiological events and arranges them into a structure or order which becomes the basis of their 'mental' significance; and the distinction between the sensory qualities, in terms of which alone the conscious mind can learn about anything in the external world, is the result of such pre-sensory experience' (Hayek, 1952/1976: 166). According to Hayek's theory of mind then, experience is not the function of mind, but quite the contrary, 'mind and consciousness are rather products of experience' (Hayek, 1952/1976: 166).

So as Hayek said at the beginning of *The Sensory Order* 'the qualitative differences between experiences' refers to 'mental and not physical events' (Hayek, 1952/1976: 6-7) and that what 'we believe we know about the external world is, in fact knowledge about ourselves'. In short, '*all* we know about the world is of the nature of theories' (Hayek, 1952/1976: 143). Later, this idea reappears in 'The Primacy of the Abstract' where Hayek characterises the 'formation of abstractions [...] as something which happens to the mind' (Hayek, 1969/2014: 322). These lines of argument have made some believe that in terms of epistemology, Hayek is a Kantian philosopher. I will examine and evaluate that argument at the end of my discussion about *The Sensory Order*. Yet, for the time being, it suffices to note to the fact that the core idea of the Kantian interpretation of Hayek is that it assumes the linkages or 'pre-sensory experience' as *a priori* concepts in Kantian

terminology. Although I am not denying that there are some strong Kantian echoes in Hayek's theory, in terms of epistemology, to call him a Kantian philosopher is a misunderstanding of his position.

2.2.4. The Map and the Model

Hayek believes that in order to explain how linkages make a network in our mind, it is useful to use 'the simile of the map', since 'in a somewhat analogous manner reproduces some of the relations which exist in certain parts of the physical world' (Hayek, 1952/1976: 109). The formation of the network is a *gradual* process. The mental order that results is an approximation of the order that exists in the external world among stimuli, which have themselves evoked impulses that 'represent' them in the sensory order (Caldwell, 2004a: 268). The map, in Hayek's own words, represents 'the kind of world in which the organism has existed in the past, or the different *kinds* of stimuli which have acquired significance for it' (Hayek, 1952/1976: 115). The map is a semi-permanent structure of connections, an apparatus for classification that exists independent of particular impulses at a given moment, but it 'provides by itself no information about the particular environment in which the organism is placed at the moment' (Hayek, 1952/1976: 115). What the map provides is 'a sort of inventory of the kind of things of which the world is built up, a theory of how the world works rather than a picture of it' (Hayek, 1952/1976: 131). Having said that, it might seem that different people have identical mental maps; however, that is not the case. The relatively stable maps 'are complemented by personal experience of the individual' (Gick, 2010: 343), therefore, maps might be similar, but they are never identical; Hayek says: 'the different maps which will thus be formed in different brains will be determined by factors which are sufficiently similar to make those maps also similar to each other. But they will not be identical. Complete identity of the maps would

presuppose not only an identical history of the different individuals but also complete identity of their anatomical structure. The mere fact that for each individual the map will be subject to constant changes practically precludes the possibility that at any moment the maps of two individuals should be completely identical' (Hayek, 1952/1976: 110). It is important to remember that Hayek was so cautious about this matter, because in Hayek's epistemology, having completely identical 'maps' is an impossibility. As Caldwell summarizes it, 'like snowflakes, no two people are alike' (Caldwell, 2004a: 269).⁶

On the other hand, at any given moment, the organism uses a share of existing map as well as the pattern of impulses already proceeding within the network to form a 'model' of an existing situation. This pattern of impulses acts as 'a sort of representation or picture of the momentary environment' (Hayek, 1952/1976: 113). The model thus draws from the map to represent the 'particular environment in which the organism finds itself at the moment and which will enable it to take account of that environment in all of its movement' (Hayek, 1952/1976: 114-115). It allows for a continuous self-updating from new information (impulses) received, and, in a much slower process, updates to the underlying map. Thus, the model represents both the actual state of the environment and expected changes, in a constantly adaptive, dynamic process through which the organism can constantly check and correct expectations. In fact, Hayek emphasises that the organism lives as much in a world of expectations as a world of fact (Wenzel, 2010: 318). Hayek says 'most responses to a stimulus are probably determined only via fairly complex processes of 'trying out' on the model the effects to be expected from alternative courses of action. The

⁶ Although I believe it is better to say that, like snowflakes, no two people are *exactly* alike, since snowflakes and people may be similar, but they are not exactly identical.

reaction to a stimulus thus frequently implies an anticipation of the consequences to be expected from it' (Hayek, 1952/1976: 121). It is also important for Hayek that whenever there occurs a new experience represented by a model that is inconsistent with the mind's map formed so far, it is the map that is revised. Thus, in a case where we experience a white substance hitherto classified as sugar, but which turns out to be salt when tasted, the configuration of neural connections in the map which comprise our subjective, sensory experience of these substances, is altered (Tebble, 2010: 22).

Therefore, we can conclude that the relationship between the semi-temporal map and temporary models is corrective and adaptive. Models help the organism to adapt itself at any moment with its environment and also at the same time accumulates and corrects its overall knowledge regarding how the world works. This is the mechanism which Steel has called 'developmental plasticity of the human mind' that 'constitutes the relevant evolutionary adaptation; and that the mind, like the immune system, is continuously adapting, over both evolutionary time (phylogeny) and an individual lifetime (ontogeny)' (Steele, 2010: 60). This mechanism suggests that we adapt ourselves to our environment by the model-based process of validation and invalidation, or learning. Therefore, the map is not the result of deliberate selection; rather it is a product of spontaneous order which has taken place through phylogenetic and ontogenetic times. Tebble rightly argues that 'given that our minds are constantly undergoing this transformative process within the context of our different ongoing personal experiences and, perhaps most fundamentally, the different anatomical structures of our bodies that determine the specific quality of our sensory experience, the personal knowledge of the world that is spontaneously built up in this way inevitably differs from one individual to another' (Tebble,

2010: 22). So, Hayek's assertion is that the dispersed nature of knowledge in *The Sensory Order* is not just an epistemological claim, but a scientific claim about our genetically limited nature.

2.3. Some (mis)interpretations of *The Sensory Order*

2.3.1. The Insignificance of the Book

Some scholars have maintained that the importance of *The Sensory Order* has been exaggerated. Edward Feser, for example, acknowledges the importance of *The Sensory Order* both as a work of philosophy and also as a significant text which foreshadowed connectionism in psychology. However, he states that it is an exaggeration to consider *The Sensory Order* as a 'foundation' for Hayek's economics and politics. '[C]laims for such a status typically resting on little more than the fact that the book characterizes the mind just as Hayek characterized economic and social systems, namely, as being complex, dynamic, and unpredictable in principle. (Hayek would no doubt have characterized the weather in exactly the same terms. Should we therefore regard meteorology as providing a 'foundation' for his economics and politics?)' Feser asks us (Feser, 2006a: 287-288).

I believe that Feser's claim is fundamentally flawed. Hayek did not want to just describe what mind is, but rather, he tried to provide an account which can in principle explain the formation of mind. In this respect, I agree with Leslie Marsh who writes 'though Feser's argument is formally weak, a more charitable reading reveals a fundamental oversight. In addition to mind being complex, dynamic, and unpredictable Feser misses the key idea of mind as an *adaptive classifying structure* necessarily embedded in a social world' (Marsh, 2010: 131). What Hayek intended to do was to illustrate how such a phenomenon has evolved and been shaped through the history of human species and an individual's lifetime. Hayek thought that by doing

that, he could make a distinction between the legitimate and illegitimate use of reason in general. As Steele says: '*The Sensory Order* is important for having established the limitations of intellectual endeavour and explicit knowledge and (thereby) the rationale for a dependency upon the tacit knowledge that is embodied in cultural and institutional forms. These were themes that, in their development, brought an original 'integrative approach to the study of complex social phenomena' ' (Steele, 1993/2007: 27). In *The Sensory Order*, Hayek provided some arguments in order to support his main claim, but I am deeply suspicious about the application of those arguments to meteorology. In my reading of him, Hayek's theory of mind is central to his whole theory and it is difficult for me to assume that someone can properly understand Hayek's social theory without having any knowledge about his theory of mind. As Leslie Marsh rightly says 'the canonical and inextricably related Hayekian themes of complexity, distributed cognition, and spontaneous order, not to mention his famous critique of rationalism, all turn upon his theory of mind. Hayek's core presupposition – that mind is subject to terminal cognitive and epistemological constraint – crucially informs his social epistemology, philosophy of social science and social theory' (Marsh, 2011: xi).

However, it should be noted that Hayek himself sometimes made claims that are not compatible with his theory. Hayek changed his mind throughout his life and sometimes he transgressed the lines he had previously drawn as the limitations on human knowledge. Especially at some points he asserts optimism about the future of mankind (Hayek, 1994: 138) and at other points, he argued that he is a 'pessimist' (Hayek, 1978a). According to Hayek's epistemology, detailed prediction about the future is not possible. If that is the case – and it is the case – Hayek could not be an optimist or pessimist about the future at all. The only position that his

epistemology allows him to take about the future is agnosticism. In order to be either optimist or pessimist about the future, the person should be able to foresee the future with some degree of confidence (Kerstenetzky, 2000: 179). Yet, Hayek believes that no person, or group of people, could have a complete knowledge of the situation that they are living in, let alone to predict the consequences of their actions in the future. If we do not have complete knowledge of our situation at present and do not know how the events will turn out in the future, then logically we are not allowed to infer that the future is better or worse than the present. It may be argued that being optimist or pessimist is a psychological attitude and it does not need to be logical. I have no contention with such claim. My point is that either we consider Hayek's optimism or pessimism about the future as a logical consequence of his theory, or on the other hand, we believe that his optimism has nothing to do with his theory and is only a psychological stand. I argue that Hayek's sceptical view about efficiency of reason to have a complete knowledge of the present events and its inability to compute the consequences of every single event in the future makes us visionless about the future. If we have no vision of the future, then it is not logically possible to compare it to our present situation and find it better or worse. But if we accept that Hayek's position is just a psychological one and it has no effect on Hayek's logical consistency, then a pessimist position would be as consistent as optimist and there is no preference between these two positions.

2.3.2. Hayek's Kantian Epistemology

There is huge discussion among scholars regarding the roots of Hayek's epistemology. Most scholars have considered Hayek's position in epistemology as a kind of Kantian stance. John Gray in his influential book *Hayek on Liberty* called Hayek's standpoint in epistemology a 'sceptical

Kantian' (Gray, 1986/1998: 4; and also: Gray, 1988: 251). Other scholars have mainly shared Gray's interpretation of Hayek as a Kantian philosopher (Gamble, 1996: 11; Butos, 2010: 6-7; Cheung, 2011: 229; Crowley, 1987: 17; Aarons, 2009: 178; Feser, 2006a: 300; Tomlinson, 1990: 12; Kley, 1994: 10; Petsoulas, 2001: 24; Ebenstein, 2003: 127), although, they have not used Gray's odd phrase 'sceptical Kantian'. For instance, Lesile Marsh used 'soft Kantianism' perhaps in order to avoid the somehow oxymoronic phrase that was used by Gray. In what follows in this section, I will try to first, reconstruct the Kantian interpretation of Hayek's epistemology, then I will examine that interpretation and show what is wrong with such interpretation.

John Gray believes that Hayek's works are formed by a distinctively Kantian approach; he argues that 'Hayek's thought is Kantian in its denial of our capacity to know things as they are or the world as it is. It is in his denial that we can know things as they are, and in his insistence that the order we find in our experiences, including even our sensory experiences, is the product of the creative activity of our minds rather than a reality given to us by the world, that Hayek's Kantianism consists' (Gray, 1986/1998: 4). Gray goes on and claims that the fundamental conviction of Hayek and post-Kantian philosophy is that 'we cannot step out of our human point of view as to attain a presuppositionless perspective on the world as a whole and as it is in itself' (Gray, 1986/1998: 5). This last point is one of the issues that many scholars have emphasised. Christina Petsoulas argues that 'following Kant's critical philosophy, Hayek believes that we can never attain a transcendental standpoint from which to develop a real conception of the world as it is, free from our human experience and preconceptions' (Petsoulas, 2001: 24). Ebenstein also approves a Kantian interpretation and says that 'Hayek essentially adopted a Kantian view of the nature of the

world. He saw the mind as implanting order on the world rather than the world necessarily having any properties of, as it were, itself' (Ebenstein, 2003: 131). In other words, we can say that Hayek introduced a sort of Kantian dualism (Becchio, 2011: 178). To explain Hayek's position by Kant's terminology, we can say there are two worlds; the phenomenal world which can be associated with Hayek's sensory world and the noumenal world which Hayek presupposed in his theory but he never explained it properly.

The Kantian interpretation of Hayek's epistemology in *The Sensory Order* may seem quite sound and acceptable. It is true that Hayek believes we perceive the world through the medium of our mental categories; we do not have access to the world *in itself*. All of our mental properties are in their nature a theory, an interpretation, a particular understanding of the world. It is so, and it cannot be otherwise, there is no way out, there is no *Punctum Archimedis* to stand there and see the world 'from nowhere'. The best we can do is to understand the such position. Hayek speculates that 'reason's most important task, may be recognition of the limits of reason' (Rowland, 1988: 228). So far, I have no objection about the above interpretation of Hayek. However, that is not the whole story.

My main contention with the Kantian interpretation of Hayek is that it is plausible as far as we just consider a single individual and the mechanism of acquiring and justifying knowledge in just one person. However, if we move from that limited scope to a broader one which considers not the individual but the species, then the whole Kantian interpretation will collapse. Hayek's main concern both in epistemology and social theory is the *evolution* of mind (in epistemology) and institutions (in social theory) throughout the course of history. The concept of evolution, I believe, is the most dominant theme in Hayek's intellectual works which shall be discussed in the next chapters.

It is true that for both Hayek and Kant we perceive the world through the lens of an *a priori* framework, however, the nature of this *a priori* framework is understood very differently in the two cases, since Kant's definition of *a priori* is not the same as what Hayek meant by it. It is a misunderstanding to consider them as the same thing. For Kant, the *a priori* form of intuition and categories are universal, pure (of any empirical content), fixed and eternal. Although it is practically impossible to stand outside of our understanding of the world and study them, it is still theoretically possible to track the constructive function of them in shaping our understanding of the world. These forms of intuition and categories shape our raw sensations of the world around us (Guyer, 2006: 53-54). They provide *a priori* framework for our *a posteriori* sensations, 'the matter of all appearance is only given to us *a posteriori*, but its form must all lie ready for it in the mind *a priori*, and can therefore be considered separately from all sensation' (Kant, 1781/1999: 156). Kant's endeavour was to study the pure form of reason which is universal and eternal. The categories that Kant explained in his theory are not limited to just one person at a particular time and place, but they have been and will be the very nature of any human being since the beginning of time to the eternal future. Perhaps the sensational contents of our cognition have changed, but it has nothing to do with our *a priori* 'form' of our reason. Kant believed that our cognition is formed by sensation and *a priori* categories of mind, however he thought that he can make a distinction between our sensations and experiences of the world and our cognitive framework 'independently of all experience' (Kant, 1781/1999: 101). Kant says that 'reason determines its object wholly *a priori*' (Kant, 1781/1999: 107), sensory and experimental qualities have no effect on Kant's *pure* reason. In Kant's own words 'every cognition is called pure, however, that is not mixed with anything foreign to it. But a cognition is called absolutely pure, in particular, in which no experience or

sensation at all is mixed in, and that is thus fully *a priori*. Now reason is the faculty that provides the principles of cognition *a priori*' (Kant, 1781/1999: 132).

Now, I mentioned before that Gray's phrase 'sceptical Kantianism' is an oxymoronic phrase. It may seem that it is a bold claim to call that position 'oxymoron'; hence, I will explain why such position seems to be an oxymoron to me. The whole of Kant's epistemology was an endeavour that was conducted by Kant against scepticism in general and Hume's scepticism in particular. What Kant wanted to do was to provide a safe ground for metaphysics against 'the sceptics, a kind of nomads who abhor all permanent cultivation of the soil, shattered civil unity from time to time' (Kant, 1781/1999: 99). In his Preface to *Prolegomena to Any Future Metaphysics That Will Be Able to Come Forward as Science* (1783/2004), Kant asserts that the doubt that Hume had raised regarding rational justification of the 'connection of cause and effect', turned out to be a doubt about the possibility of metaphysics in general. Kant expresses this by saying that 'he [Hume] concluded that reason has no power at all to think such connections, not even merely in general, because its concepts would then be bare fictions, and all of its cognitions allegedly established *a priori* would be nothing but falsely marked ordinary experiences; which is so much as to say that there is no metaphysics at all, and cannot be any' (Kant, 1783/2004: 7-8). Kant objected to the scepticism that had been advanced by Hume because, if it was true, it would have shattered the throne of 'the queen of all the sciences' (Kant, 1781/1999: 99). What Hume had done, Kant believed, was 'looking only to the negative benefit that curbing the excessive claims of speculative reason would have, in completely abolishing so many endless and continual conflicts that perplex the human species; he meanwhile lost sight of the positive harm that results if reason is deprived

of the most important vistas, from which alone it can stake out for the will the highest goal of all the will's endeavours' (Kant, 1783/2004: 8), and looking at 'positive harm' was exactly what Kant claimed to do. In this respect, Kant tried to provide a safeguard for metaphysics. In all his philosophy, Kant attempts to give us necessary and sufficient conditions for any valid judgments in the fields of epistemology (First Critique), ethics (Second Critique) and aesthetics (Third Critique), and at the same time shows us the limitation of reason. By clearly defining the proper domain of reason, Kant believes, we can be *sure* about the correct use of reason within that domain. All of these can be done, only by rejection of Humean scepticism. 'As I had now succeeded in the solution of the Humean problem not only in a single case but with respect to the entire faculty of pure reason', Kant says, 'I could therefore take sure, if still always slow, steps toward finally determining, completely and according to universal principles, the entire extent of pure reason with regard to its boundaries as well as its content, which was indeed the very thing that metaphysics requires in order to build its system according to a sure plan' (Kant, 1783/2004: 10-11).

Kant was absolutely *sure* that he did provide a complete set of answers to all metaphysical problems. In his Preface to *Critique of Pure Reason* he even claims that 'there cannot be a single metaphysical problem that has not been solved here, or at least to the solution of which the key has not been provided' (Kant, 1781/1999: 101). Kant believed that his metaphysics is so comprehensive and accurate that even 'a single metaphysical problem' cannot be resided outside of its borders, all metaphysical problems either are solved or the key for solving them is provided in his system. Having said that, it is rather difficult for me to read the above passages and attach the 'sceptical' adjective to Kantian philosophy. There is no doubt that scepticism was something that initially awakened Kant from his 'dogmatic slumber'

(Kant, 1783/2004: 10), yet, as Bertrand Russell once sarcastically said 'the awakening was only temporary, and he soon invented a soporific which enabled him to sleep again' (Russell, 1946/1991: 678).

As I have mentioned before, it is true that there are some similarities between Hayek's theory of mind and Kant's epistemology. Although in *The Sensory Order*, Hayek mentions Kant only once and that is in an anecdotal way (Hayek, 1952/1976: vi),⁷ he was quite aware of Kant's philosophy. Both Kant and Hayek believe that we have a cognition of world through our mental 'categories'. However, the 'categories' are completely different things for either of them though. We don't have access to the world in itself and our understanding of the world is not a full correspondent picture of it. That is the key similarity between Hayek and Kant. However, besides John Gray, whom I mentioned before, other scholars also go far beyond that. For instance, Lindemans argues that 'much of *The Sensory Order* is 'transcendental aesthetic' in Kant's sense: the study of the (a priori) conditions that enable sensation' (Lindemans, 2011: 150), although later on he asserts, contrary to Gray, that 'Hayek's 'general philosophy' was *not* Kantian' (Lindemans, 2011: 153). In the same way, Horwitz claims that 'for Hayek, the mind has 'categories' in the Kantian sense' (Horwitz, 2000: 25). Tebble also believes that Hayek's theory concerning pre-sensory linkages is in a manner 'reminiscent of Immanuel Kant's postulation of inherent mental categories which impress order upon the objects of our sensory experience' (Tebble, 2010: 18). What all of these scholars fail to see is the crucial distinction that exists in Hayek's theory between *ontogenetic* and

⁷ Here is the passage: 'I still vividly remember how in reading Mach, in an experience very similar to that which Mach himself describes with reference to Kant's concept of the *Ding an sich*, I suddenly realized how a consistent development of Mach's analysis of perceptual organization made his own concept of sensory elements superfluous and otiose, an idle construction in conflict with most of his acute psychological analysis' (Hayek, 1952/1976: vi).

phylogenetic processes of our experience of the world or to put in a simple language, between the experience of an *individual* and *human species*.

If Hayek's *The Sensory Order* is studied as a book that explains the mental mechanism of acquiring knowledge in *an individual*, then Kantian interpretation is quite appropriate. There are some 'super-conscious' categories that form our understanding of the world. In 'The Primacy of The Abstract' (1969/2014), even Hayek himself talks about 'the obvious relation of all this to Kant's conception of the categories that govern our thinking—which I took rather for granted' (Hayek, 1969/2014: 324). But that is not the whole story. Hayek also wanted to study the ways that categories are determined through the history of the human species. Regarding this second task, Hayek does not belong to the Kantian tradition at all. Quite contrary to Lindemans' claim that much of *The Sensory Order* is the study of 'a *priori* condition' of mind in Kantian sense (Lindemans, 2011: 156), Hayek rejects the basic distinction 'between sensory perception of given qualities and the operations which the intellect is supposed to perform on these data' in order to arrive at an understanding of the phenomenal world. For Hayek, the classification machine or the 'intellect' itself is the result of 'past experience of the individual or the species' (Hayek, 1952/1976: 165-166).

There are no 'a priori' or 'innate' qualities in the human mind, all the 'pre-given' qualities are the results of millions of years of evolution of the brain. Hayek says 'it seems that in the dispute between the 'empiricists' and the 'nativists' there were really two different issues involved. The first is whether, so far as the individual is concerned, the order of sensory qualities is congenital or acquired by individual experience. On this probably no general answer is possible. The second is, whether the whole sensory order can be conceived as having been built up by the experience of the race or the individual, i.e. whether it is based on the retention of connexions

between effects exercised upon them by the external world. With regard to this second question our answer is definitely empiricist' (Hayek, 1952/1976: 106). Hayek rejected some of the traditional theses which had been associated with empiricism not from the opposite point of view, but on the contrary, by the 'radical application of its basic ideas' (Hayek, 1952/1976: 172). He argues that 'precisely because all our knowledge, including the initial order of our different sensory experiences of the world, is due to experience, it must contain elements which cannot be contradicted by experience. It must always refer to classes of elements which are defined by certain relations to other elements, and it is valid only on the assumption that these relations actually exist. Generalization based on experience must refer to classes of objects or events and can have relevance to the world only in so far as these classes are regarded as given irrespective of the statement itself. Sensory experience presupposes, therefore, an order of experienced objects which precedes that experience and which cannot be contradicted by it, though it is itself due to other, earlier experience' (Hayek, 1952/1976: 172).

Now the difference between Kant and Hayek can be seen more clearly. While Kant believes that there are some concepts and categories that can be studied in their 'pure' form 'in which no experience or sensation at all is mixed in, and that is thus fully *a priori*' (Kant, 1781/1999: 132), for Hayek that task is an impossible one because the mind itself is the product of our experiences. Kant's way of enquiry in his 'The Transcendental Aesthetic' of the *Critique of Pure Reason* was to 'first isolate sensibility by separating off everything that the understanding thinks through its concepts, so that nothing but empirical intuition remains. Second, we will then detach from the latter everything that belongs to sensation, so that nothing remains except pure intuition and the mere form of appearances, which is the only

thing that sensibility can make available *a priori*' (Kant, 1781/1999: 157). However, from Hayek's point of view that way of enquiry is unattainable because 'experience is not a function of mind or consciousness, but that mind and consciousness are rather products of experience' (Hayek, 1952/1976: 166). There is no 'pure' and '*a priori*' concept which is prior to any experience. The mind itself is a product of millions of years of evolution; we cannot evacuate our mind from its experience – as Kant advocated- in order to achieve a pure and *a priori* 'form' of its structure. For Hayek, if we consider the evolution of the 'pre-sensory' concepts of our mind, we realise that all the pre-sensory concepts in an individual are in fact the results of human evolution through the course of history.

Moreover, Hayek's endeavour for illustrating the mechanism of the mind is much more modest than Kant's. From Hayek's point of view, a full and detailed explanation of the mechanism of the mind is not possible, 'we shall never be able to achieve more than an explanation of the principle on which mind operates, and shall never succeed in fully explaining any particular mental act' (Hayek, 1952/1976: 34); and the 'explanation' is always 'generic in the sense that it always refers to features which are common to all phenomena of a certain kind, and it can never explain everything to be observed on a particular set of events' (Hayek, 1952/1976: 182). The 'explanation of the principle' or 'pattern prediction' (Hayek, 1964/2014: 257-277) is the best that we will ever be able to do, that we will never be able fully to explain the workings of the human mind (Caldwell, 2004a: 276). Another important distinction that Hayek introduces is between the *mental* and *consciousness* levels. The mental level refers to a wider domain than consciousness and includes not only subconscious but also supra-conscious events. 'Mental events may thus be unconscious and incommunicable because they proceed on too high a level as well as because

they proceed on too low a level' (Hayek, 1989: 63) he maintains. These incommunicable processes appear to be the very presuppositions of conscious acts which logically cannot be reduced or lifted to the level of consciousness. In 'Rules, Perception and Intelligibility', Hayek claims that 'If everything we can express (state, communicate) is intelligible to others only because their mental structure is governed by the same rules as ours, it would seem that these rules themselves can never be communicated. This seems to imply that in one sense we always know not only more than we can deliberately state but also more than we can be aware of or deliberately test; and that much that we successfully do depends on presuppositions which are outside the range of what we can either state or reflect upon' (Hayek, 1962/2014: 251). Hayek reminded his readers that these conclusions are closely related and similar to what Kurt Gödel's theorem had done in arithmetical systems, but he added that 'it would thus appear that Gödel's theorem is but a special case of a more general principle applying to all conscious and particularly all rational processes, namely the principle that among their determinants there must always be some rules which cannot be stated or even be conscious' (Hayek, 1962/2014: 254). In *The Sensory Order* Hayek also argues that we cannot fully explain the mechanism of our mind for the simple reason that 'any apparatus of classification must possess a structure of a higher degree of complexity than is possessed by the objects which it classifies' (Hayek, 1952/1976: 185). We can only explain the phenomena which have lower complexity than ours, Hayek goes on and says that 'it means that no explaining agent can ever explain objects of its own kind, or of its own degree of complexity, and, therefore, that the human brain can never fully explain its own operations' (Hayek, 1952/1976: 185). This is an 'impossibility claim' (Caldwell, 2004a: 276) that in principle, it is impossible for humans to fully understand the mechanism of their own minds.

Finally, when Hayek was asked about Gray's Kantian interpretation of his works in the above mentioned book, Hayek replied that he was inclined to say that Gray had exaggerated the influence 'I have never studied Kant very carefully,' he says. Hayek also says, however, that at the age of twenty or twenty one he got fascinated by 'the works of a Kantian contemporary named Alois Riehl'. Hayek explains that what he knows about Kantian philosophy comes largely from Riehl and not from reading Kant directly. The person who influenced Hayek's theory in this respect, is not Kant but Konrad Lorenz, one of Hayek's contemporaries who biologized Kant's notion of *a priori* concepts (Lindemans, 2011: 158). I will discuss Lorenz in more detail in chapter three.

2.4. The Abuse of Reason Project

2.4.1. 'The Best I Can Do for the Future of Mankind'

Hayek started his academic career at LSE as a visiting professor in 1931 and then he secured his position as the Tooke Chair of Economic Science and Statistics the following year. From late 1931 onwards, he worked restlessly over several topics on monetary theory and the business cycle, which were published in *Prices and Production* (1931) and *Monetary Theory and Trade Cycle* (1933).⁸ Alongside those projects, Hayek was also working on another related topic. His main task was the intended two-part treatise on the statics and dynamics of capital, the first part of which was published in 1941 as *The Pure Theory of Capital* (1941/2009). This grew out of his earlier and continuing work in monetary theory. In 1935, Hayek edited and published *Collectivist Economic Planning* (1935/1963) and on November 10, 1936, he gave his presidential address to the London Economic Club, 'Economics and Knowledge' (1937/2014). 'Economics and Knowledge' is, I believe, quite

⁸ Both reproduced in (Hayek, 2008)

crucial in portraying Hayek's intellectual development in terms that it shows Hayek's divergence from pure economics to philosophy and methodology. It also shows that Hayek became more confident to move away from Mises' criticism of socialism to his own particular line of argument. It seems that Hayek himself also saw it in the same way when he says 'though at one time a very pure and narrow economic theorist, I was led from technical economics into all kinds of questions usually regarded as philosophical' (Hayek, 1965/2014: 49). Bruce Caldwell has rightly named this period as 'Hayek's transformation' (Caldwell, 2004a: 205). More than forty years later, in an interview with UCLA economist and Mont-Pelerin Society member Armen Alchian, dated 11 November 1978, Hayek recalled that 'Economics and Knowledge' 'was really the beginning of my looking at things in a new light. If you asked me, I would say that up 'til that moment I was developing conventional ideas. With the '37 lecture to the Economic Club in London ... I started my own way of thinking' (Hayek, 1978a). So, Hayek had started his 'own way of thinking' and got interested in the knowledge problem in the late 1930s, which was almost a decade before the publication of his subsequent works. In this respect, Ebenstein claims that 'Hayek attached great importance to the issue of knowledge. 'Economics and Knowledge' led to an intended two-part great treatise to be titled 'The Abuse and Decline of Knowledge.' While Hayek never completed this project, he greatly valued the immediate work connected with it—the essays that were later published as *The Counter-Revolution of Science*, *The Road to Serfdom*, and some papers in *Individualism and Economic Order*' (Ebenstein, 2003: 108).

In a letter to his friend Fritz Machlup dated 27th August 1939; Hayek explained his Abuse of Reason project as 'wide-ranging historical investigation that would incorporate intellectual history, methodology, and an analysis of social problems, all aimed at shedding light on the

consequences of socialism' (Caldwell, 2010: 1). Hayek wrote in the same letter 'a series of case studies should come first, that would have as its starting point certain problems of methodology and especially the relationship between the method of natural science and social problems, leading to the fundamental scientific principles of economic policy and ultimately to the consequences of socialism. The series should form the basis of a systematic intellectual historical investigation of the fundamental principles of the social development of the last hundred years (from Saint-Simon to Hitler)' (Caldwell, 2010: 1). The date of the letter and the fact that he mentioned Hitler are quite significant. In less than ten days after that day, Hitler invaded Poland and because of that Britain and France declared war on Germany. The question is why Hayek associated Hitler with his 'Abuse of Reason Project'. The task that Hayek undertook in his 'Abuse of Reason Project', in a way, was to explain the intellectual roots of Nazism. In this respect, his work was rather similar to what his later friend Karl Popper was doing at the same time in *Open Society and Its Enemies* (1945/2011).

In March 1938, Hayek was in Austria and when the Anschluss happened he witnessed thousands of Austrians stream to greet and cheer Hitler at the border, and witnessed Hitler's welcome in Vienna on the Heldenplatz. Hayek's family in Austria, Ebenstein says 'was typical of many, perhaps most, Austrian Catholics. Hayek's mother became a strong supporter of Hitler and at least one, or possibly both, of Hayek's brothers were members of the Nazi Party during World War II' (Ebenstein, 2003: 111).⁹ Obviously, Hayek did not share such feelings with the majority of people. But more than that, he saw Nazism as a by-product of socialism. In this second sense, Hayek was in a minority as well. He says 'few are ready

⁹ Ebenstein adds that 'regarding Hayek's brothers, this appears to have been more for reasons of career advancement than political conviction' (Ebenstein, 2003: 111).

to recognize that the rise of fascism and Nazism was not a reaction against the socialist trends of the preceding period but a necessary outcome of those tendencies. This is a truth which most people were unwilling to see even when the similarities of many of the repellent features of the internal regimes in communist Russia and National Socialist Germany were widely recognized. As a result, many who think themselves infinitely superior to the aberrations of Nazism, and sincerely hate all its manifestations, work at the same time for ideals whose realisation would lead straight to the abhorred tyranny' (Hayek, 1944/2007: 59).

Within a week after Britain's declaration, Hayek drafted a letter to the director general of the British Ministry of Information and offered his service to the war effort. Alongside the letter, he attached a memo 'Some Notes on Propaganda in Germany' (1939/2010) that contained some of Hayek's suggestions regarding how to launch a successful propaganda campaign among the German people. 'Among the recommendations' Caldwell summarises 'was an initiative that would seek to demonstrate to the German people, using German sources, that the principles of liberal democracy now being defended by England and France had also once been embraced by some of the great German poets and writers of the past, a fact that had been effectively written out of German history since Bismarck's time' (Caldwell, 2010: 2). After a couple of months, Hayek received a response from the Ministry of Information thanking him, but he was not called for further assistance. So, he returned back again to the research that he mentioned in his letter to Machlup.

Although he was not called in for help, he tried to keep his fight against Nazism in the intellectual field. In a letter to Machlup dated 21 June 1940, we can clearly see his enthusiasm for continuing his research even during the war time. 'If things go really badly, Hayek says to Machlup 'I shall

certainly not be able to continue it here and since I believe that it is really important and the best I can do for the future of mankind, I should then have to try to transfer my activities elsewhere' (Caldwell, 2010: 3). And again, in another letter to Machlup on October 1941, Hayek says 'if one cannot fight the Nazis one ought at least fight the ideas which produce Nazism; and although the well-meaning people who are so dangerous have of course no idea of it, the danger which comes from them is none the less serious. The most dangerous people here are a group of socialist scientists and I am just publishing a special attack on them in *Nature*—the famous scientific weekly which in recent years has been one of the main advocates of 'planning' (Caldwell, 2010: 7).

The Abuse of Reason Project was originally intended to consist of two parts, 'Hubris of Reason' and 'The Nemesis of the Planned Society'. The ancient Greeks believed that hubris, particularly of human presumption, was followed by Nemesis, the goddess of retribution. The abuse of reason will lead to its decline. Not only is ignorance the enemy of knowledge and truth; so too are deliberate efforts to control thought (Ebenstein, 2003: 112). However, Hayek only finished parts of his grand project. His 'series of case studies' on methodology and the scientific method to social problems were finally published under the title of 'Scientism and Study of Society' (1942-44/2010). Although Hayek never finished the intellectual history part of his project, he published his study on the origins of scientism in France, which carried the title 'The Counter- Revolution of Science', plus the short piece 'Comte and Hegel'. The last part of his project, namely 'the consequences of socialism', was published in a separate book in 1944 under the name of *The Road to Serfdom* (1944/2007). Another essay, 'Individualism: True and False', was supposed to serve as an introduction, however, it ended up being published with a group of other papers in 1948 (Caldwell, 2002: 228).

Hayek's chief purpose in undertaking the Abuse of Reason project was to show the origins of ideas that he thought were leading us astray and to criticise them. But in the longer run, it is clear that criticism was not his only goal; he ultimately sought also to offer an alternative to the planned society. In his original formulation for his book, the hubris of reason was to be contrasted with the humility of individualism. By 1945 he would contrast the 'false' individualism of the French Enlightenment philosophers with the 'true' individualism of such Scottish Enlightenment figures as Adam Ferguson, Josiah Tucker, David Hume, and Adam Smith. Hayek maintains that the advocates of true individualism first and foremost provided a theory of society in which 'individual actions [are] directed toward other people and guided by their expected behaviour' (Hayek, 1945/2010: 52). This approach, Hayek argues, led the Scottish philosophers to the important insight that many social institutions were not designed intentionally, but emerged and evolved spontaneously. Proponents of false individualism, according to Hayek, fail to recognise the very existence of such spontaneous order and hold that any order in society should have been the result of conscious design. From this mistaken belief, Hayek suggests, the advocates of false individualism concluded that if society is to progress, then its social institutions should be rationally constructed. Hayek believes that such an erroneous conception of individuals and society is not present in the writings of Scottish Enlightenment philosophers. In his later work, the writings of these Scottish philosophers (together with those of such disparate thinkers as Edmund Burke, Alexis de Tocqueville, and Lord Acton) would provide the intellectual underpinnings of his effort to create a liberal philosophy for the twentieth century and beyond (Caldwell, 2010: 30).

2.4.2. Hayek's Interpretation of History

In his long essay 'scientism and study of society', Hayek provided a historical account of the methodology of social sciences especially in nineteenth century France. But his historical account is a very particular one. He did not provide, nor intended to provide, a proper or 'thick' historical description of that period. Instead, he only focused on those aspects of the intellectual atmosphere which support his grand goal. Nor had he wanted to present a history of particular people's life and thought. What made him interested was the development of particular ideas; 'we are concerned entirely with the history of ideas ... the men only as representative figures in whose ideas manifest themselves but shall neither attempt to discuss systems of thought of individuals nor do we mean to assert that ideas operated only through them' he says (Caldwell, 2010: 33). When Hayek is dealing with any philosophers, he usually focuses only on those parts which support his own general story and he ignores the other parts. Undertaking this kind of history would inevitably result in a history which might not be technically incorrect, but it would be quite one-sided. Caldwell believes that there are two reasons for this attitude 'one reason for this might be that the essays began as journal articles, published in a journal of which Hayek was the editor: under the circumstances, it would have taken considerable arrogance to enlarge them much beyond their current size. But more fundamentally, Hayek's goal was to tell a story about the origins of certain specific ideas. Given that goal, his account as it stands is a coherent and, indeed, a compelling one' (Caldwell, 2010: 34-35).

It needs to be remembered that Hayek's particular interpretation of history is based on his grand project. He wanted to illustrate the trend of thought that had started from Saint-Simon and ended up with Hitler. Hayek's point is that such a set of beliefs were actually based on false methodological

conceptions and because of that, resulted in a social and political disaster. Hayek's political philosophy cannot easily be classified among conventional political philosophies. The conventional political philosophers usually base their political arguments on their moral philosophy; however, for Hayek that is not the main concern. What is wrong with socialism and social planning, from Hayek's point of view, is not the lack of morality, but the lack of knowledge about the ways in which society actually works. Since socialists fail to understand how society really works, even their highest moral values will end up in ruin. I think Hayek would definitely appreciate Popper's statement in *The Open Society and Its Enemies* that 'even with the best intentions of making heaven on earth it only succeeds in making it a hell—that hell which man alone prepares for his fellow-men' (Popper, 1945/2011: 182).

In general, I believe, Hayek's criticisms can be classified in two main categories, one is methodological/epistemological argument (MEA) and the other is moral/political argument (MPA). Hayek's discussion regarding MEA is to show why, from the epistemological point of view, it is impossible to plan society. In this regard, he identifies and attacks three broad types of 'scientific' thought. As Caldwell has put it, there are 'those who demand a more 'objectivist' approach deny the *subjective* nature of the data of the social sciences ... Those who tout 'collectivism' deny that the social sciences should start from the opinions of *individual* humans, preferring instead to begin with empirical regularities that exist at the levels of wholes like 'the economy' or 'society' ... Finally, those who advocate 'historicism' deny that the social sciences are properly *theoretical* in nature' (Caldwell, 2004a: 247). Hayek deals with two variants of historicism. One sees history as the gradual accumulation of statistics, which ultimately will be used to draw generalisations about society. Another variant is the search for laws of the

development of human history. In this camp Hayek places various stage theories and philosophies of history, the 'darling vice' of the nineteenth century' (Caldwell, 2010: 12). Hayek's aim was to shed some light on the failure of social planning and, as I have said before, he wants to refute socialism 'scientifically'. Hayek's discussion in this regard, I believe, is the most obvious emblem of his scepticism towards a particular notion of 'Reason' which considers human reason an omniscient and omnipotent entity. Hayek raises serious doubts about such qualities for human reason, especially the omniscience one.

From his criticisms about the inadequacy of human reason for planning a society, then, he moves on to his MPA. There, Hayek argues that those who think human reason can acquire absolute and total knowledge about the society and therefore can plan the society based on that knowledge, are actually those who pave 'The Road to Serfdom'. Instead of trying to understand and develop the theories which are based on copious complexities of society, the 'Men of Science' make abstract theories and then try to fit society to their theories. In other words, they put the cart before the horse. In Hayek's thought, no abstract theory can possibly contain all the information, details and conditions that are crucial for planning a society. The endeavour to fit a society to abstract theories requires the limitation of the liberty of those who are living under that society and, that is what Hayek is against. Socialism for Hayek is an example of that kind of mentality and social planning in the end will result in the destruction of human liberty and eventually, society itself. Hayek asserts that, this result is not even what socialists want: 'socialism can be put into practice only by methods of which most socialists disapprove' (Hayek, 1944/2007: 141).

It is important to remember that during his life, Hayek always took ideas quite seriously. The importance of ideas for Hayek is not only because

he was interested in speculation and therefore he liked ideas *qua* ideas, but rather, ideas were important for him because they are deeply connected to human conduct. I have already mentioned Hayek's two letters to his friend Machlup, which indicate his eagerness for fighting the ideas that he believed had produced Nazism and other totalitarian governments. By reading 'scientism and study of society', anyone can grasp the sense of Hayek's aversion towards Saint-Simon, Comte, Hegel and Marx. Although he never explicitly said that, it seems to me that he believed those philosophers had been partially responsible for what was happening in totalitarian governments in that time. I would say, Hayek's view about the role of ideas was rather similar to what Heinrich Heine had stated almost two hundred years before Hayek about the 'men of thought', 'Mark this, ye proud men of action' Heine says 'ye are nothing but unconscious henchmen of the men of thought who, often in humblest stillness, have appointed you your inevitable task. Maximilian Robespierre was merely the hand of Jean Jacques Rousseau, the bloody hand that drew from the womb of time the body whose soul Rousseau had created' (Heine, 1986: 106).

These were, I think, the major points that Hayek wanted to make in his 'Abuse of Reason' project. However, this evaluation as it stands seems quite vague. In what follows, I will try to explain -as clearly as I can- some of the concepts which play the major roles in Hayek's theory. Especially, I will pay close attention to the way that Hayek formulated the concept of 'Reason'. By doing that, I assume, we can have a better understanding of what Hayek called 'constructive rationalism' and also his 'evolutionary rationalism' which he raised as an alternative to it.

2.4.3. 'Scientism' and the Method of Natural Sciences

Hayek traces the roots of socialism and totalitarian governments back to the nineteenth century. The rapid success and development of the natural

sciences which had started from the sixteenth and the seventeenth centuries, gained a new ground in the early nineteenth century. 'The term science' Hayek claims 'came more and more to be confined to the physical and biological disciplines which at the same time began to claim for themselves a special rigorousness and certainty which distinguished them from all others' (Hayek, 1942-44/2010: 78). Because of the great success of natural sciences, their other less successful sisters in social sciences started to imitate the method of natural sciences for their own fields of study. Hayek expresses his discontent by saying that 'although in the hundred and twenty years or so, during which this ambition to imitate Science in its methods rather than its spirit has now dominated social studies, it has contributed scarcely anything to our understanding of social phenomena, not only does it continue to confuse and discredit the work of the social disciplines, but demands for further attempts in this direction are still presented to us as the latest revolutionary innovations which, if adopted, will secure rapid undreamed of progress' (Hayek, 1942-44/2010: 78). This imitation of science 'in its methods rather than its spirit' is what Hayek calls 'scientism' and he accuses it of being 'a very prejudiced approach which, before it has considered its subject, claims to know what is the most appropriate way of investigating it' (Hayek, 1942-44/2010: 80). It can be said that for Hayek, this blind imitation of the method of natural sciences 'is the source of all the methodological confusions of the social sciences' (Leube, 1984: xxii).

Hayek makes two qualifications to his claim though. Regarding the imitation of the method of natural sciences to the social sciences, first, he asserts that 'those who were loudest in these demands were rarely themselves men who had noticeably enriched our knowledge of the Sciences' (Hayek, 1942-44/2010: 78); then, he refers to Francis Bacon, August Comte

and 'physicalists' as the examples of those who advocated such imitation of method. The second qualification is that the method that scientists and also 'men of science' usually advocate is not actually the method that scientists really perform in their course of research. In other words, the way that scientists usually do their research in *practice*, is not necessarily the same thing that they express *theoretically* as the method of science. Here Hayek is echoing Albert Einstein who once said 'if you wish to learn from the theoretical physicist anything about the methods which he uses, I would give you the following piece of advice: Do not listen to his words, examine his achievements. For to the discoverer in that field, the constructions of his imagination appear so necessary and so natural that he is apt to treat them not as the creations of his thoughts but as given realities' (Einstein, 1934: 163). Hayek adds that 'the views about the character of the method of Science have undergone various fashions during the last few generations, while we must assume that the methods actually followed have remained essentially the same' (Hayek, 1942-44/2010: 79). It has been suggested that Hayek added the second qualification entirely in 1952 edition of his essay and without any doubt, it was because the influence of Popper's philosophy of science on him (Caldwell, 2010: 36-37).

Hayek emphasizes that his contention is not about 'the methods of Science in their proper sphere or is intended to throw the slightest doubt on their value' (Hayek, 1942-44/2010: 80), but rather the 'slavish imitation of the method and language of Science' (Hayek, 1942-44/2010: 80) in other disciplines of knowledge. This 'slavish imitation' is in fact 'unscientific in the true sense of the word', because 'it involves a mechanical and uncritical application of habits of thought to fields different from those in which they have been formed' (Hayek, 1942-44/2010: 80). The application of the methods of science to social sciences, for Hayek is not only methodologically

mistaken, but also politically disastrous. Hayek maintains that science, which 'has so far been the greatest achievement of the human mind (the techniques of commanding the forces of nature) applied to society may yet prove the cause of its destruction' (Caldwell, 2010: 9). 'Scientism' is fatal in the social sciences because it is unable to comprehend the particular features of human life that although play the crucial roles in society, are not accessible by the methods of natural sciences.

Hayek argues that one of the most important tasks of natural sciences is to improve our 'classification system'. As I have discussed before, different stimuli may produce the same mental image in our brain, but it is also possible that one stimulus causes different effects in our mind. We are aware of this fact, because natural sciences have helped us to classify and reclassify our mental qualities. He points out that 'this process of reclassifying 'objects' which our senses have already classified in one way, of substituting for the 'secondary' qualities in which our senses arrange external stimuli a new classification based on consciously established relations between classes of events is, perhaps, the most characteristic aspect of the procedure of the natural sciences. The whole history of modern Science proves to be a process of progressive emancipation from our innate classification of the external stimuli till in the end they completely disappear' (Hayek, 1942-44/2010: 84). In short, the natural sciences wants to give us a better understanding about natural world and shows us that 'facts' are different from the 'appearance' ' (Hayek, 1942-44/2010: 83). In contrast, the task of the social sciences is quite the opposite. The social sciences must take our natural way of seeing the world as their starting point because that forms the basis on which humans act. For the social sciences, the question is, 'not how far man's picture of the external world fits the facts, but how by his actions,

determined by the views and concepts he possesses, man builds up another world of which the individual becomes a part' (Hayek, 1942-44/2010: 87).

2.4.4. The Character of the Social Sciences

2.4.4.1. Subjectivism vs. Objectivism

Hayek starts his discussion by saying that the object of the social sciences is not things, but rather 'the relation between men and things or man and man'(Hayek, 1942-44/2010: 88). They are concerned with man's actions, and their aim is to explain 'the unintended or un-designed results of actions of many men' (Hayek, 1942-44/2010: 88). Later on, Hayek says that the difference between the social and natural sciences is that the first one deals with the phenomena of individual minds or mental phenomena and 'not directly with the material phenomena' (Hayek, 1942-44/2010: 92).

What he means by 'mental phenomena' is that that the social sciences deals with the phenomena which can be understood only because the object of our study has a mind of a structure similar to our own. It is shown not merely by the possibility of communicating with other people we act on this knowledge every time we speak or write; it is confirmed by the very results of our study of the external world (Hayek, 1942-44/2010: 92). Hayek maintains that none of the phenomena which the social sciences studies can be defined in physical terms. They are all 'teleological concepts' in the sense that their meaning depends on the attitude which some person holds towards them. He says that 'neither a 'commodity' or an 'economic good,' nor 'food' or 'money,' can be defined in physical terms but only in terms of the views that people hold about things... the history of any particular commodity indeed shows that as human knowledge changes the same material thing may represent quite different economic categories. Nor could we distinguish in physical terms whether two men barter or exchange or whether they are playing some game or performing some religious ritual'

(Hayek, 1942-44/2010: 94). The meaning can only be understood by entering into the minds of others, and since this is impossible, it can only be done by reconstructing the meaning through the knowledge of our own mind (Gamble, 2006: 120-121). Social scientists use the analogy of their own mind in order to understand social phenomena. Hayek says, 'in all such attempts we must start from what men think and mean to do: from the fact that the individuals which compose society are guided in their actions by a classification of things or events according to a system of sense qualities and of concepts which has a common structure and which we know because we, too, are men; and that the concrete knowledge which different individuals possess will differ in important respects. Not only man's action towards external objects but also all the relations between men and all the social institutions can be understood only in terms of what men think about them' (Hayek, 1942-44/2010: 97).

Hayek's subjectivism situates him on the opposite side to behaviourism and positivism. I have already mentioned Hayek's disagreement with behaviourism when I was reconstructing Hayek's ideas in *The Sensory Order*. In terms of methodology, Hayek asserts that behaviourism and positivism are the extension of scientism due to their over-emphasis on observable phenomena whereas Hayek believes that in the sphere of human interaction, true scientific theories must consider beliefs, assumptions, prejudices and ideas which are not observable in the strict sense of the word. But why was Hayek so keen to rebut behaviourism and positivism? I think there are two major reasons. The first one is about positivism. As I have mentioned before, while Hayek was a student at the University of Vienna he encountered Ernest Mach's theory and also a group of intellectuals which later on was called as Vienna Circle or logical positivism. One of the key elements in their philosophy was the unity of research method both in the

natural and social sciences and also the importance of observable and empirical facts in both fields. Anything which cannot be *verified* empirically is labelled meaningless. If humans and societies could be studied scientifically and its laws revealed as logical positivists had maintained, then it would be possible to plan the society based on those scientific laws. One of the proponents of logical positivism in social science was a Marxist social scientist, Otto Neurath, and Neurath's theory of 'war economics', which asserted that the idea that the massive central planning that typically characterises an economy in war should be extended into peacetime (O'Neill, 2006). Neurath further argued that money should be abolished; managers charged with directing the economy should rely instead on 'in natura' calculation, utilising an extensive body of social statistics to plan production and distribution (Caldwell, 2010: 17).

The second reason about Hayek's disagreement towards positivism and behaviourism goes back to his visit and studies in New York during 1923-24, where he attended the courses which were conducted by the American institutionalist Wesley Clair Mitchell. In a way Mitchell had a profound influence on Hayek; he was one of the advocates of behaviourism and use of massive statics data in order to plan society. Though Mitchell had no sympathy for the Marxism that underlay Neurath's positions, his advocacy of behaviourism (which could be viewed as the psychological analogue of physicalism) and his insistence on the scientific management of society were both reminiscent of arguments that had been made by that Vienna Circle philosopher. What would have been evident to Hayek, then, was that though men like Neurath, Mitchell, and the German historical school economists had very different political views and agendas, they all shared similar views about methods and about the role of science in shaping the society to come (Caldwell, 2010: 17). Mitchell's behaviourism was one of the targets in *The*

Sensory Order and Hayek's other essays in *Abuse of Reason* project (Caldwell, 2004a: 240).

Hayek's objection to both positivism and behaviourism is that they are unable to see the subjective nature of social sciences. The whole idea of methodological monism is repulsive for Hayek. Human beings, for Hayek, are not individual cogs in the great machine of the society. Objective and empirical study of humans are not the only sufficient means to understand human society, what we need to take into the account is the subjective and individual's feelings, beliefs and opinions of people. As Adam Smith, one of Hayek's favourite philosophers, said: The man of system... is apt to be very wise in his own conceit; and is often so enamoured with the supposed beauty of his own ideal plan of government, that he cannot suffer the smallest deviation from any part of it. He goes on to establish it completely and in all its parts, without any regard either to the great interests, or to the strong prejudices which may oppose it. He seems to imagine that he can arrange the different members of a great society with as much ease as the hand arranges the different pieces upon a chess-board. He does not consider that the pieces upon the chess-board have no other principle of motion besides that which the hand impresses upon them; but that, in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might chuse to impress upon it. If those two principles coincide and act in the same direction, the game of human society will go on easily and harmoniously, and is very likely to be happy and successful. If they are opposite or different, the game will go on miserably, and the society must be at all times in the highest degree of disorder (Adam, 1759/2002: 275).

2.4.4.2. Constitutive vs. Speculative

Having provided a general description about the importance of opinions in causing individuals' actions, Hayek next makes a distinction between two types of opinions; constitutive and speculative (Hayek, 1942-44/2010: 100). Constitutive opinions, Hayek argues, are those opinions that motivate agents to act and such actions cause some social phenomena to occur. For example, 'if a group of people's opinion about the quality of a certain commodity change, the result could be actions that result in the social phenomena of a change in that commodity's market price' (Caldwell, 2004a: 245). Speculative opinions, according to Hayek, are those that both agents and social scientists form in order to explain to themselves what caused a phenomenon to occur. So collectives such as 'society', 'state', 'economic system', 'capitalism' and other such collective entities, Hayek maintains, must be regarded as 'no more than provisional theories, popular abstractions, and which he must not mistake for 'facts' ' (Hayek, 1942-44/2010: 100).

The 'compositive' method of social sciences, thus, means that social scientists should start from 'the concepts which guides individuals in their actions and not from the result of their theorising about their actions' (Hayek, 1942-44/2010: 100) because such speculative theories cannot constitute social-scientific data (Papaioannou, 2012: 77). This aspect of Hayek's thought is closely related to his subjectivism as I understand it and also to his notion of mind. Constitutive beliefs and opinions are the main motives for individuals' actions and they are not and cannot be similar. Hayek's theory of mind states that people have different ways of categorising the world around and inside them and although there is some similarity, no individual mind is identical to another one. 'The qualities which we perceive are not properties of the objects but ways in which we (individually or as a

race) have learned to group or classify external stimuli' Hayek says (Hayek, 1942-44/2010: 111). What social scientists can do is to explain the principles in which individual agents perform their actions in society, but the precise prediction of such actions is not possible. 'While we can explain the principle on which certain phenomena are produced and can from this knowledge exclude the possibility of certain results', Hayek argues '[...] our knowledge will in a sense be only negative, i.e. it will merely enable us to preclude certain results but not enable us to narrow the range of possibilities sufficiently so that only one remains' (Hayek, 1942-44/2010: 106). Hayek's example of the formation of a pathway in the wild is a good example of what he had in mind. In this respect, Hayek says that at first 'everyone will seek for himself what seems to him the best path. But the fact that such a path has been used once is likely to make it easier to traverse and therefore more likely to be used again; and thus gradually more and more clearly defined tracks arise and come to be used to the exclusion of other possible ways' (Hayek, 1942-44/2010: 104). The people who used the path at the beginning did not want to create a pathway, but based on Hayek's theory, were interested in finding their own way out. Their individual actions, however, has an 'unintended consequence', i.e. formation of a pathway, which was absent in their minds when they performed it. Hayek believes that the pathway example can be extended to the other sphere of social life. 'Language', 'market', 'money' and other such collective entities are speculative concepts and *ad hoc* theories which had not been present in the mind of the agents when they performed their action. The task of social scientists, according to Hayek then, is to provide a theoretical explanation for orders that are the result of human action but not human design (Hayek, 1942-44/2010: 103). In other words, the speculation in social sciences seeks to explain how constitutive opinions of individuals lead them to create such complex orders as 'market', 'society', 'language' and so forth. This

aspect of Hayek's thought is also related to his particular take on methodological individualism. I will discuss Hayek's methodological individualism in chapter four in more detail, but for now it suffices to say that Hayek argues that collectivists seek empirical regularities in complex phenomena such as 'market' and 'society' etc., but they ignore that these are not objects. According to Hayek, these concepts are simply the terms that are used in theories to explain social phenomena. The error of the collectivist approach, then, is to mistake speculative ideas for the fact of the social sciences. For Hayek, the facts are individuals and their constitutive reflections which motivate them to act in particular way(s).

2.4.4.3. Historicism vs. The Theoretical Approach

Related to the above points, Hayek also criticises the historicism approach in social sciences. Hayek has his own interpretation of historicism. For him, historicism is what the German historical school had practiced during his study in the University of Vienna. Hayek maintains that the advocates of historicism 'under the influence of the scientistic currents of the age came to represent history as the empirical study of society from which ultimately generalisation would emerge' (Hayek, 1942-44/2010: 128). Hayek's response will be familiar, he argues that any historical narration, requires selection and any selection both excludes and includes some aspects of 'reality'. 'The object of scientific study is never the totality of all the phenomena observable at a given time and place, but always only certain selected aspects' he writes 'and according to the question we ask the same spatiotemporal situation may contain any number of different objects of study' (Hayek, 1942-44/2010: 132). In the footnote to above passage, Hayek refers to the view of German philosopher Heinrich Rickert that historian choose their subject of study according to the values that they consider important (Hayek, 1942-44/2010: 133). Bruce Caldwell has

suggested that Hayek's argument in this respect is a Weberian one, though Hayek did not cite Weber in the context (Caldwell, 2004a: 251). Although I think Caldwell's claim is valid, I would like to propose that there is more to Hayek's argument than the influence of Rickert and Weber. The point that many of Hayek's scholars have not paid enough attention to is that Hayek's criticisms of historicism are also rooted in his understanding of the human mind. As I illustrated in my discussion about Hayek's theory of the brain and formation of the mind, for Hayek, not only social theories, but also all of our perceptions of the world are particular ways of categorising it. Hayek expressed his point explicitly by saying that 'it is that not only those mental entities, such as 'concepts' or 'ideas', which are commonly recognised as 'abstractions', but *all* mental phenomena, sense perceptions and images as well as the more abstract 'concepts' and 'ideas', must be regarded as acts of classification performed by the brain' (Hayek, 1942-44/2010: 111). So what we perceive is not the qualities of the objects, but 'ways in which we (individually or as a race) have learned to group or classify external stimuli. To perceive is to assign to a familiar category (or categories)' (Hayek, 1942-44/2010: 111). The advocates of historicism, Hayek maintains, assume that there are some objective 'facts' that can be studied and based on that, generalisations can be made. Hayek on the other hand, argues that there are no 'objective facts', because for him even observation at the physiological level is an act of classification. From Hayek's point of view, 'interpretation is ubiquitous' (Caldwell, 2004a: 249), it is interpretation all the way down. The only thing that we have is theory and interpretation. Hayek's emphasis on the inevitability of interpretation has made some scholars compare his position with hermeneutics and specially the writings of German philosopher Hans George Gadamer (Hunt, 2007: 55-56; Iorio, 2015). Hayek also makes it clear that any theory gives us a particular angle to understand the world around us. It is impossible to achieve a concept of

'whole reality' because the human mind 'can never grasp a 'whole' in the sense of all the different aspects of a real situation' Hayek writes (Hayek, 1942-44/2010: 132). So, I believe to some extent Hayek applies his psychological learnings to the field of history when he says that the place of theory in historical knowledge is in 'forming or constituting the wholes to which history refers; it is prior to these wholes which do not become visible except by following up the system of relations which connects the parts. The generalisations of theory, however, do not refer, and cannot refer, as has been mistakenly believed by the older historians (who for that reason opposed theory), to the concrete wholes, the particular constellations of the elements, with which history is concerned' (Hayek, 1942-44/2010: 134). By assuming that there are concrete wholes, Hayek continues, the advocates of historicism lead to the belief that 'their observation can reveal 'laws' of the development of these wholes' (Hayek, 1942-44/2010: 135). As I mentioned before, Hayek believes that such 'wholes' do not exist and what social scientists should study instead is the way in which individuals conduct their actions in relation to each other. This does not mean that the 'wholes' are completely redundant for Hayek. He acknowledged their importance and he himself used many such 'wholes' in his writings. Nevertheless, he wanted to show that the existence of these 'wholes' should not be taken as 'concrete' reality. As he puts it, these wholes 'do not exist for us apart from the theory by which we constitute them, apart from the mental technique by which we can reconstruct the connections between the observed elements and follow up the implications of this particular combination' (Hayek, 1942-44/2010: 134).

2.5. Conclusion

In this chapter I have tried to outline the main characteristics of Hayek's theory of mind and his understanding of the proper method of social

sciences. Hayek criticises positivism and behaviourism in psychology for their reductionism and argues that the complexity and uniqueness of the individual mind cannot be reduced to some general theories about the formation of the mind. In the Abuse of Reason Project, he argues that the mistaken understanding of the nature of social sciences has led many thinkers – and particularly socialists- to assume that reason is capable of fully explaining social phenomena. For Hayek, however, such a comprehensive explanation of mind and society is not possible. Hayek's scepticism is not about the concept of reason *per se*, but rather about what he considers as the abuse of reason. The common problem amongst socialists, positivists and behaviourists, from Hayek's point of view, is that they all have a wrong conception of reason and therefore, they exaggerate its capacities. That's why Hayek dedicated *The Road to Serfdom* to 'the socialists of all parties' (Hayek, 1944/2007: 36). In Hayek's mind, those who believe in the capacity of reason to provide a fully-fledged explanation of the human mind and society, are also certain that they are able to change them as they wish. These people are socialists regardless of whether they belong to socialist parties or not. Hayek thought that their mistake can be corrected scientifically by showing how the mind and society work. In the next chapter, I will provide Hayek's account about the formation of knowledge and his alternative to positivism and 'constructive rationalism'.

Chapter III: Hayek's Evolutionary Theory of Knowledge

3.1. Introduction

In the previous chapter I outlined Hayek's main criticisms against what he calls 'constructive rationalism'. One of the major points in his Abuse of Reason Project was to show what is methodologically wrong with socialism and any other endeavours for planning the society. In a nutshell, Hayek claims that socialists (in all parties) suffer from 'scientism' or what Philip Mirowski calls 'physics envy' (Mirowski, 1989: 354). In this respect, Hayek argues that constructive rationalists slavishly imitate the method of the physical sciences in order to study social sciences. Hayek, however, has a different idea about the method of the social sciences. The proper method to study human beings and human related subjects, according to Hayek, is evolutionary theory.

Evolutionary theory is usually associated with Darwin's theory of evolution in biology. Many of the changes and discoveries that have happened since Darwin are also in the field of the natural sciences. Now, it might be asked: is not it a contradiction in Hayek's thought to use the evolutionary theory for the study of society since he objected to 'slavish imitation' of the methods of one field of science in the other fields, how come that he himself used evolutionary theory in biology to study the social sciences? I believe there are two main reasons why Hayek thought that he did not contradict himself.

First, from Hayek's point of view, historical facts indicate the opposite. Hayek maintains that it was Darwin who 'was able successfully to apply to biology a concept which he had largely learned from the social sciences' (Hayek, 1960/2011: 116). Then he goes on and says that '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 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. Those eighteenth-century moral philosophers and the historical schools of law and language might well be described, as some of the theorists of language of the nineteenth century indeed described themselves, as Darwinians before Darwin' (Hayek, 1973/1998: 23 and also; Hayek, 1988/1992: 24). So from Hayek's perspective, he does not slavishly imitate the biological method for the social sciences, rather he uses the concept of evolution 'in the field in which it originated' (Hayek, 1973/1998: 23).

The second main reason is that it is not just a matter of the historical sequence of events, but also a matter of evolutionary logic. Hayek's objections are primarily against the 'slavish imitation' of the methods of physics and Newtonian mechanics in the field of social sciences. In his article 'The Theory of Complex Phenomena' (1964/2014), Hayek argues that the methods of physics are well suited for the study of 'relatively simple phenomena', however, in dealing with complex phenomena 'of life, of mind and of society' (Hayek, 1964/2014: 206), they face major problems. Hayek believes that the underlying mechanism of the complex phenomena of life, mind and society is the evolutionary mechanism. Although Hayek acknowledges that cultural evolution and biological evolution are not identical, he asserts that 'all evolution, cultural as well as biological, is a process of continuous adaptation to unforeseeable events, to contingent circumstances which could not have been forecast' (Hayek, 1988/1992: 25). From Hayek's point of view then, it is the concept of evolution that has a better opportunity to provide us with a 'pattern prediction' of complex phenomena, either biological or cultural.¹⁰ I think Hayek would agree with

¹⁰ What I mean by culture is culture in general, rather than the culture of particular civilisation or society.

Stanley Metcalfe when he said that 'evolutionary theory is a manner of reasoning in its own right quite independently of the use made of it by biologists' (Metcalfe, 1998: 36).

It should be noted that Hayek acknowledges Darwin's role for expressing the evolutionary logic in a sophisticated way. He was also aware of the developments of evolutionary theory after Darwin and constantly had an eye on them. Moreover, he tried to merge these advancements into his own theory on cultural evolution. It seems, however, that he never considered what he was doing as a 'slavish imitation' of the evolutionary method in biology. Hayek remained confident that the method he was using was primarily the method of the social sciences, which was also used in biology.

In this chapter I provide my account of Hayek's evolutionary theory of mind and knowledge. My aim is to illustrate why the evolutionary approach is so crucial for understanding Hayek's theory in his social and political philosophy (Shearmur, 1996: 65-66). In the next chapter I will discuss Hayek's 'twin idea of evolution' i.e. his theory of 'spontaneous order'. My main concern in this chapter and the next one is to show that evolution and scepticism are the two faces of the same coin in Hayek's thought. However, before I start, it seems necessary to explain why I think understanding the main aspects of Darwin's theory is important for making sense of Hayek's theory of mind and society.

The reason that I discuss Darwin's theory of evolution in a separate section is due to the importance of this theory to Hayek's way of thinking about the mind and society. Darwin's theory provides a simple and clear explanation of the underlying mechanism which works in both of the mentioned spheres. As I said earlier, although Hayek believes that such a mechanism can be found in the writings of social scientists before Darwin,

he still maintains that it was Darwin who expressed them in a simple and coherent package (Hayek, 1973/1998: 22-23). Hayek accepts the mechanism of evolution as it was expressed by Darwin with one qualification. Hayek argues that, for social scientists, it is a mistake to only concentrate on biological characteristics and their transmission by genetic inheritance, and that the transmission of culturally inherited characteristics should also be taken into consideration (Hayek, 1973/1998: 23). This is the main reason why Hayek once suggested that the mechanism of evolution in society is more akin to Lamarck than to Darwin (Hayek, 1988/1992: 25).

Nevertheless, as far as I am aware, regarding the evolution of social institution, Hayek only once mentioned Lamarck in his writings and that is in his *Fatal Conceit* (1988/1992: 25). Since there are some serious concerns about the authenticity of the ideas expressed in that book (see section 6.2), and also the fact that in his pre-*Fatal Conceit* writings, Hayek does not mention Lamarck even when he discusses culturally transmitted characteristics (Hayek, 1973/1998: 23), I think there is no value in discussing Lamarck's theory in detail.¹¹ The only common factor between Hayek and Lamarck is the transmission of acquired characteristics. However, Hayek does not accept other aspects of Lamarck's theory (especially his teleological view) and prefers to express his ideas in a more Darwinian way, though not necessarily Darwinian language. He maintains that although Darwin's theory is concerned with biological evolution and not social evolution, the underlying mechanism of evolution is 'still the same in both fields' (Hayek, 1973/1998: 23). In the following section, I outline the major

¹¹ I believe in discussions about the evolution of cultural (in contrast to biological) phenomena, one does not necessarily need to withdraw Darwin's theory and accept the Lamarckian one. Some scholars have discussed the mechanism of cultural evolution in a Darwinian way without necessarily endorsing Lamarck's theory. Richard Dawkins' conception of 'meme', I believe, is a successful attempt of such an endeavour (Dawkins, 1976/2006: 192-201). For similar attempts see (Dennett, 1995; Wright, 1994; Pinker, 2002; Henrich, 2017).

aspects of Darwin's theory of evolution in order to show how Hayek worked with these ideas in his theory of mind and society and also how he modified some aspects of Darwin's theory in order to make them more appropriate for his own project. Before proceeding to this discussion though some preliminary comments about the method that Darwin used in his evolutionary theory are required.

3.2. Preliminary Comments on Evolutionary Theory

Although it is possible to trace back the origin of evolutionary theory to pre-Socratic philosophers (Mayr, 1982: see also; Ruse, 2009: 3), it was Charles Darwin who for the first time articulated and explained the theory in full detail in his *Origin of Species* (1859/2008) and *The Descent of Man* (1871/1981). Although questions such as why did Darwin get interested in biology, how did he develop his ideas and why did evolutionary theory occur in the nineteenth century rather than earlier are of interest, they are not the subject of this chapter. I am more interested in his theory rather than his intellectual development.

Darwin was a naturalist who considered himself 'a true follower of Bacon' (Mayr, 2001: 488). He believed the right way of doing science is to build theory based on observations. Darwin argued that all the organisms on the planet emerged through a single, straightforward process that operated relentlessly from the dawn of life and that continues to shape the natural world. During his voyage on HMS Beagle, in 1831, Darwin hugely influenced by the Scottish geologist Charles Lyell and his three-volume book *Principles of Geology*. Regarding this influence, Michael Ruse says 'although he was no evolutionist, Lyell insisted that the physical world must be explained in terms of natural causes of a kind now still working. This had a great effect on Darwin, whose first systematic work was in geology, and prepared him to think about the organic world likewise less in biblical terms

and more in terms of natural causes' (Ruse, 2009: 6). Furthermore, 'Lyell had shown that all geological events might be explained by means of forces which are effective even today' (Wichler, 1961: 81). That meant the rejection of the theory of catastrophes which indicated geological changes happen because of some sudden 'catastrophes' in the past. Lyell on the other hand, emphasized the forces that have been effective over a long period of time (For an outline of Darwin's debts to other thinkers see: Francis, 2007: 48-51). So what Darwin intended to do in this theory, was not only to give an explanation, but also to provide a *causal explanation* of the emergence of different species. This causal explanation does not postulate any designer or intellect behind the scene. Everything is done 'by means of natural selection' as the subtitle of the book indicates. Darwin's theory is successful, it is claimed, because 'it supplies a framework for causal explanation of the evolution of complex, un-designed outcomes' (Aldrich et al., 2008: 589). 'For Darwin, science involved a commitment to causal explanations' his life work 'was marked by an ambition to extend the realm of causal explanation into areas that were deemed taboo by religious doctrine' (Hodgson, 2004a: 179).

It should be noted that Darwin's commitment to casual explanations wasn't always successful and Darwin himself was quite aware of this fact. In *Origin of Species*, he referred to a profound ignorance of the mechanisms that led to variations in organisms (Hodgson, 2004a: 179) and also in *The Descent of Man* he maintains that 'there is a large class of variations which may be provisionally called spontaneous, for they appear, owing to our ignorance, to arise without any exciting cause' (Darwin, 1871/1981: 131). In both cases, Darwin talked about the lack of evidence or 'ignorance' of the relevant cases. He never rejected the idea of casual explanation and even if the causal mechanism is unknown, he believed that it was the task of the

scientist to attempt to discover it. Darwin upheld that complex effects could be explained in terms of a detailed succession of step-by-step casual mechanisms. A process of change was an accumulated sequence of causal mechanisms. In the *Origin* he says 'as natural selection acts solely by accumulating slight, successive, favourable variations, it can produce no great or sudden modification; it can act only by very short and slow steps' (Darwin, 1859/2008: 346). Darwin did not simply argue that natural selection worked slowly, but more importantly, he maintained that the whole procedure was liable to causal explanation.

This position put Darwin in a very particular situation. On one hand, he argued against the creationists who believed that God created man with the consciousness and moral sense. In this regard, Darwin did not see any significant difference between humans and other animals. Like all human attributes, they must have been prefigured in the species from which humans are descended. Darwin thus wrote: 'a little dose...of judgement or reason often comes into play, even in animals very low in the scale of nature' (Darwin, 1859/2008: 155). And in the *Descent*, he claimed that 'besides love and sympathy, animals exhibit other qualities which in us would be called moral' (Darwin, 1871/1981: 78). So for Darwin, these adaptively idiosyncratic characteristics of humans, are in fact, the results of the long term evolution of instincts which are common between man and other animals.

Darwin's commitment to causal explanation, on the other hand, put his ideas in contrast to Comte's positivism which as Geoffrey Hodgson argues was highly influential among the scientists at the time (2004b: 89). Comte believed that science rested essentially on perceptible phenomena. For Comte the search for causes was futile, because they could not be discerned in our experience. Comte argued that such unobservables as causal

connections were 'metaphysical' and beyond science. For Comte, instead of causal explanation, science must search for empirical regularities to derive laws (Hodgson, 2004b: 89). So, Darwin's adherence to causal explanation was rejected by both sides. On the one side, the creationists rejected it in the name of religion, and on the other side, it was rejected by strict Comteans as 'metaphysical' and not 'scientific'.

This causal mechanism of evolution, Darwin argues, is not a uniform mechanism and has three major components, i.e. variation, selection and inheritance (Hodgson and Knudsen, 2010: vii; Schnellbach, 2014: 60).

3.3. Principles of Evolution

3.3.1. Variation

The first building block of Darwin's 'one long argument' (Darwin, 1859/2008: 338) is variation among the member of a same species. Variation includes any differences (even very small ones) in shape, size, colour, etc. among a member of a species. Every offspring is not completely identical with its parents. If every organism were exactly like its parents, then there could be no evolution. Darwin begins his *Origin of Species* with a discussion of artificial selection among animal and plant breeders. This strategy, as Ruse argues, is 'partly heuristic, to prepare the reader by following the path that Darwin himself had taken to discovery, and partly justificatory, suggesting that what we can do, nature can surely do better' (Ruse, 2009: 14). Although Darwin describes this 'great variability' among animals and plants, he was not able to explain the intrinsic mechanism of variation among different organisms. He confesses that 'variability is governed by many unknown laws' (Darwin, 1859/2008: 32). What he means here is not that we are not able to know these laws, but rather he means simply that we are ignorant of what they are, as they are 'due to causes far too intricate to be followed' (Darwin,

1871/1981: 231). Yet, these 'unknown laws' were not an obstacle to prevent Darwin from writing a chapter on 'Laws of Variation' in the *Origin*. At the beginning of the chapter, he exclaims 'I have hitherto sometimes spoken as if the variations—so common and multiform in organic beings under domestication, and in a lesser degree in those in a state of nature—had been due to chance. This, of course, is a wholly incorrect expression, but it serves to acknowledge plainly our ignorance of the cause of each particular variation'(Darwin, 1859/2008: 101). It was not until the mid-twentieth century that we became able to determine that a major source of variation in organisms has to do with genetic mutation (Rosenberg and Arp, 2009: 1-2).

Although Darwin could not resolve the cause of variation among organisms, due to his own experience in breeding the pigeons, he arrived at the idea that despite the many different varieties of pigeon and their significant defining characteristics, all the evidence points to the birds having a common origin in the rock pigeon of India: a cameo of diversification from a single earlier form. He wrote 'great as the differences are between the breeds of pigeons, I am fully convinced that the common opinion of naturalists is correct, namely, that all have descended from the rock-pigeon (*Columba livia*), including under this term several geographical races or subspecies, which differ from each other in the most trifling respects'(Darwin, 1859/2008: 20). What Darwin argues here is that despite the huge variation of pigeons, they all come from the same ancestor. The fact of a common ancestor, he argues, is as true for pigeons as for other species.

Darwin based his claim regarding a common ancestor on what was called 'natural history' and his studies of fossils. Fossils had been found before the sixteenth and the seventeenth centuries. However, after the

fifteenth century, voyages brought new fossils from different palaces all over the world. The fossils made scientists think about different extinct species in the past. Before this, based on Christian theology, scientists had thought species are fixed and because of God's benevolence, he would not let any creature become extinct. However, these new findings slowly changed scientists' conception of the world all around them (Mayr, 1982: 320). There were four major answers to the problem of extinct organisms before Darwin. One was that extinct animals are those that were killed by Noah's Flood or some other great catastrophe. A second explanation was that the supposedly extinct species might well be surviving in as yet unexplored portions of the globe. The third explanation explained extinction by saying that it is the work of man and not God. The fourth answer was speculated by Lamarck as he says: 'may it not be possible... that the fossils in question belonged to species still existing, but which have changed since that time and have been converted into the similar species that we now actually find?' (Quoted in: Stamos, 2003: 51). In other words, extinction is only a pseudo-problem. For Lamarck, the plenitude of nature is nowhere disrupted, the strange species which we only find as fossils still exist but have changed to such an extent that they are no longer recognizable except where we have a continuity of fossil horizons and, as we would now say, an exceedingly slow evolutionary rate. And all of these, Lamarck argues, demonstrate the harmony of nature that is created by God (Burkhardt, 2011: 35-36). Darwin's answer, in this respect, is more akin to the Lamarckian approach, although he had a major disagreement with Lamarck on other issues. Darwin also saw the link between fossils and huge variation among living organisms. However, his explanation is a pure causal one and has nothing to do with a designer or Creator. This mechanism is called 'natural selection', or a mechanism 'without miracles' as Czikó called it (Czikó, 1995).

3.3.2. Selection

Basically, it can be said that Darwin talks about three kinds of selection, i.e. artificial (or intentional or methodical) selection, unconscious selection and finally natural selection. Artificial selection is that which guides a man who systematically endeavours to modify a breed according to some predetermined standard. Unconscious selection is that which follows from men naturally preserving the most valued and destroying the less valued individuals, without any thought of altering the breed; and undoubtedly this process slowly works great changes (Darwin, 1859/2008: 29-36). Unconscious selection graduates into methodical, and only extreme cases can be distinctly separated; for he who preserves a useful or perfect animal will generally breed from it with the hope of getting offspring of the same character; but as long as he has not a predetermined purpose to improve the breed, he may be said to be selecting unconsciously. Darwin associates another meaning to unconscious selection. He also means that sometimes breeders bring on changes that they did not intend (Ruse, 2008: 23). I will get back to this process of 'unconscious selection' again in this chapter, since in some sense, it is very similar to what Hayek called the 'kosmos' order (Hayek, 1973/1998: 37). Lastly, we have Natural selection, which implies that the individuals which are best fitted for the complex, and in the course of ages changing conditions to which they are exposed, generally survive and procreate their kind. With domestic productions, natural selection comes to a certain extent into action, independently of, and even in opposition to, the will of man (Heiser, 1988).

Darwin argues that the mechanism of natural selection is triggered by some facts of population ecology that were discovered by Thomas Malthus. In his *Essay on the Principle of Population* (1798), Malthus proposes the principle that there is a tendency for human populations grow geometrically

(i.e., doubling with each cycle) while food production grows at an arithmetic rate. So, if Malthus's premises are accepted then we can deduce that human populations tendency to grow to outstrip the food supply (Lewens, 2007: 42). In his *Autobiography*, Darwin wrote 'In October 1838, that is, fifteen months after I had begun my systematic enquiry, I happened to read for amusement 'Malthus on Population,' and being well prepared to appreciate the struggle for existence which everywhere goes on from long-continued observation of the habits of animals and plants, it at once struck me that under these circumstances favourable variations would tend to be preserved, and unfavourable ones to be destroyed. The result of this would be the formation of new species. Here, then, I had at last got a theory by which to work' (Quoted in: Richards, 2010: 470-471). Based on this passage, it has usually been argued that it was Malthus who made the major influence on Darwin to formulate his concepts of natural selection and struggle for existence (Steffoff, 1996: 72-74). However, a recent interpretation, based on a closer examination of Darwin's earlier notebooks, offers strong evidence that 'Darwin had already arrived at a rudimentary theory of natural selection by February 1838 before reading Malthus' (Rogers, 1972: 269; and also: Schwartz, 1974). New historical materials suggest that although Malthus was not the source of Darwin's ideas regarding natural selection and struggle for existence, he definitely produced a strong catalyst that speeded up Darwin's thinking regarding natural selection (Hodge, 2009: 255).

By applying 'the doctrine of Malthus' to the 'whole animal and vegetable kingdoms' (Darwin, 1859/2008: 7), a struggle for existence will follow, since 'every being, which during its natural lifetime produces several eggs or seeds, must suffer destruction during some period of its life, and during some season or occasional year, otherwise, on the principle of

geometrical increase, its numbers would quickly become so inordinately great that no country could support the product'. Darwin argues, 'hence, as more individuals are produced than can possibly survive, there must in every case be a struggle for existence, either one individual with another of the same species, or with the individuals of distinct species, or with the physical conditions of life' (Darwin, 1859/2008: 51). Now in this condition that many more individuals of each species are born than can possibly survive, 'any being, if it vary however slightly in any manner profitable to itself, under the complex and sometimes varying conditions of life, will have a better chance of surviving, and thus be *naturally selected*' (Darwin, 1859/2008: 7).

The above passage shows one of Darwin's major points of departure from Lamarckian ideas. Darwin disagreed with Lamarck's idea of acquired characteristics of animals – although Lamarck never expressed himself in such terms (Corsi, 2011: 12). In his letter to J. D. Hooker dated January 11th, 1844 Darwin expresses his aversion of 'Lamarck nonsense of a 'tendency to progression,' 'adaptations from the slow willing of animals,' '(Darwin, 1887/2009: 23). However, Mayr argues that Darwin and many others misunderstood Lamarck on this point. This misunderstanding 'caused by the mistranslation of the word *besoin* into 'want' instead of 'need' and a neglect of Lamarck's carefully developed chain of causations from needs to efforts to physiological excitations to the stimulation of growth to the production of structures. Lamarck was not as naive to think that wishful thinking could produce new structures' (Mayr, 1982: 357).

Mayr is probably right about this misunderstanding, yet the roots of Darwin's disagreement with Lamarck go deeper than this. In Darwin's theory it is not the organism's 'want' or 'need' that gives it a better structure and, eventually, a better adaptability to survive and reproduce. It is, instead, in a given environment, a slight variation in an organism's structure which

would give it a competitive advantage over the others to survive and reproduce. To put it another way, according to Darwin, adaptation is the effect of the process of natural selection rather than its cause. As David Depew has put it 'adaptations are made out of heritable variations that arise independently of their utility in improving reproductive rates. Over multiple generations, variations that at first merely happen to have a positive effect on reproduction under competitive conditions are gradually shaped into adaptations. Natural selection thus shifts the locus of causality more completely than Lamarckism from inner drives to interactions between organisms and environments. All that remains of inner drives is the inertia-like tendency to reproduce' (Depew, 2010: 325). Darwin's claim, in contrast to Lamarck's, is that an organism's characteristics are not something that can be *acquired*, rather, they are *given* by pure accident (Darwin, 1859/2008: 73).¹² The accumulation of these beneficial accidents, in the long term, bestows an organism its particular characterisation.

To sum up what I have said so far, according to Darwin, in the course of thousands of generations, conditions of life that most likely affect the reproductive organs give rise to variations. Some of these give individuals a slight advantage to survive and produce offspring, thus passing on the adaptation. Others adversely affect the organism, and these are destroyed by virtue of the individual's not surviving or reproducing. 'This preservation of favourable variations and the rejection of injurious variations, I call Natural Selection' Darwin says (Darwin, 1859/2008: 63). It is very important to remember that variation is absolutely crucial for the occurrence of selection, because 'unless variations occur, natural selection can do nothing. But once they arise, this principle springs into action, acting analogously like

¹² By 'accident', I mean something that Darwin was unable to identify the cause(s) of. As I mentioned earlier, Darwin had a strong belief that there should be a cause, even if he was not able to identify it.

human breeders in choosing to promote a desirable trait' (Johnson, 2014: 56).

3.3.3. Inheritance

Darwin's position regarding inheritance is not quite clear since he never wrote a book specifically on hereditary (Olby, 2013: 116). 'The laws governing inheritance are quite unknown' Darwin writes in the *Origin* 'no one can say why a peculiarity in different individuals of the same species, or in individuals of different species, is sometimes inherited and sometimes not so' (Darwin, 1859/2008: 13). Darwin was troubled by these 'unknown' laws because of the lack of relevant knowledge of genetics in his time. His theory of inheritance suffers from two major problems. First, he was not aware of Mendel's work on inheritance and without a precise understanding of genetics and the laws of Mendelian inheritance, the causes and heritability of variation among individuals in natural and domesticated populations are bound to be a bit mysterious (see introduction to: Darwin, 1871/1981: xvii). Second, he did not fully comprehend the distinction between what we would call genetic inheritance and the inheritance of habits, customs, and behaviour. In the *Descent* and elsewhere, Darwin repeatedly says that if an animal behaves in a particular way for a number of generations, this will result in the behaviour becoming permanently fixed (Darwin, 1871/1981: xix-xx). Darwin's views in this respect are not valid anymore. Although now in scientific communities it is acknowledged that there are some types of behaviours that can become genetically fixed, the process of such mutations has nothing to do with learning and teaching as Darwin assumed (Moore, 2015: 145-155).

In order to understand what Darwin meant by inheritance, it is useful to recognise a distinction between the genotype and phenotype (Hodgson and Knudsen, 2006). The genotype is the descriptor of the *genome* which is

the set of physical DNA molecules inherited from the organism's parents. The phenotype is the descriptor of the *phenome*, the manifest physical properties of the organism, its physiology, morphology and behaviour (Lewontin, 2011). Now, inheritance means the transmission of genomes from parents to their off-springs. In biology, inheritance means more than merely 'passed on'. If it were merely 'passing on' then the spread of a virus among members of any species would be evidence of inheritance (Hodgson and Knudsen, 2006: 346).

Due to the lack of scientific knowledge regarding the mechanism of genetic inheritance, Darwin was not able to correctly explain the mechanism through which offspring inherit certain traits from their parents.¹³ Darwin proposed his ideas on hereditary in 1868 with the name of *Pangenesis* (Liu, 2008: 141). What Darwin suggested in his theory, as he himself admitted, was 'a very rash and crude hypothesis' (Irvine, 1955: 171). His theory was more based on speculation than on scientific observation and it was 'one of the few occasions when Darwin was completely wrong' (Price, 2008: 109).

In his theory, Darwin argued that each part of the body produced particles, called 'gemmules', which were of a character specific to that part. He thought that gemmules specific to each part of the body gathered in the sex cells, with the result that an embryo formed from the union of sperm and egg would contain a full set of different types of gemmules from each parent. Once an embryo is formed, gemmules can either develop to produce traits resembling those which produced them, or they can remain dormant for several generations. In these last respects gemmules are not entirely unlike genes. But Darwin's theory sought to explain many phenomena whose reality we no longer acknowledge. Darwin proposed that gemmules migrated

¹³ It should be noted that Gregor Mandel published his findings about pea plant experiments in 1866, but Darwin was not aware of Mendel's findings on the mechanism of inheritance.

from organs to the sex cells in order to explain how alterations to an organ during the life of an individual could result in alterations to the gemmules in that organ, ultimately changing the character of the gemmules transmitted to future generations (Lewens, 2007: 107-108; Johnson, 2015: 177-179). It seems that Darwin himself was not quite satisfied with the idea of Pangenesis since he admitted that his doctrine of pangenesis was 'provisional' and 'hypothetical'(Johnson, 2015: 178).

To summarise how these three principles work together, the whole mechanism of natural selection can be described as follows. There is variation among all organisms (principle of variation); because more organisms are born than can survive and reproduce there will therefore be a struggle for existence; some individual organisms will be better adapted to survive and reproduce (principle of selection); these individuals will pass on their traits to offspring (principle of inheritance); this will result in a gradual modification of the species.

3.4. Adaptation/Evolution and the Unit of Selection

Before I finish my discussion on Darwin, I would like to clarify my position regarding two important aspects of Darwin's work. One is Darwin's usage of the terms transmutation/evolution and the other one is about the unit of selection which is quite significant in the discussion of Hayek's thought.

One important aspect of Darwin's theory of natural selection and the evolution of organisms is their context-relatedness. Although Darwin never expressed them in these terms (he used the 'spatial' and 'temporal') (Herbert and Kohn, 2009: 19), it is rather obvious in his writing about the adaptation and evolution of an organism. As I explained before, natural selection occurs when in a particular environment an organism has a slight advantage over its competitors to survive and reproduce. After several

generations of successful reproduction, its off-springs will have a new feature which gives them a better adaptive ability toward that particular environment. If the adaptation goes on from one generation to the other, after a long period of time, it will result in a new species that in some aspects is different from the old one from which it was initially originated. Thus Darwin says 'one species does change into another' (Darwin, 2009: 63). This transmutation or evolution, however, does not necessarily imply, as Lamarck's theory of evolution suggested, that the new species is in general better than the old one (Mayr, 1982: 345-346). The reason for this, is that during the transmutation of the organism, its environment changes simultaneously. In Darwin's theory, it is nature that 'selects'¹⁴ (i.e. the natural environment) which trait is an advantage for an organism and which one is not. If the rate of change in the environment stays slow enough to give a sufficient time to the organism to reproduce and get adapted gradually, then it survives. But if the rate of change in the environment became so rapid that the organism could not adapt itself to the new changes, it will have no chance to survive, no matter how advanced it may seem. We may consider an organism as an advanced one. But it should be remembered that an advanced organism in a particular environment, or as Darwin would say in particular time and space, would have no chance of survival out of that particular environment.

One example of this issue is the case of Neanderthals' extinction. Clive Finlayson has argued that Neanderthals were 'highly successful people who managed to live in the increasingly inhospitable world of Europe and Asia for over 300 thousand years', he continues 'they had large brains, even bigger than ours [...]'. They could probably speak and they were highly adaptable;

¹⁴ I put *selects* in inverted commas because natural selection is not a conscious and intelligent process, rather it is an unconscious one which technically cannot select.

in some places they ambushed deer and even larger animals while in others they beachcombed or gathered pine nuts' (Finlayson, 2009: viii). However, they were living during the time when the Earth's climate became dominated by 100,000 year cycles that went from cold glacials to warm interglacials and back again. Overall, the world of the Middle Pleistocene was colder than before, especially after 400 thousand years ago, with brief interglacials that lasted, on average, about 10 thousand years (Potts, 2012: 160). By the time Neanderthals had emerged, during the last interglacial around 125 thousand years ago, they were already a people doomed to extinction or as Finlayson has put it 'the Neanderthals were a population of living dead, existing on borrowed time' (Finlayson, 2009: 116). The reason that they could not survive as a species was because of the rapid ecological changes that had happened in that time. *Homo neanderthalensis* was the product of several hundred thousand years of investment in the ambush hunting tradition within the temperate woodland of Eurasia. But when the Ice Age pushed the tundra south, Neanderthals were confronted by new species like woolly mammoth and reindeer. They were tough enough to do this but the lack of tree cover made their hunting techniques redundant. Finlayson argues that serendipity is central to *Homo Sapiens*, 'people, who were in the right place at the right moment, even though at the time they did not know it, got lucky' (Finlayson, 2009: 2).

The point that I have tried to make with the example of Neanderthals is that from the Darwinian point of view, adaptation and advancement are context-related concepts. A particular feature in an organism may help it to survive in a specific environment, but the same feature may seem redundant in another environment or even leads the organism directly to death. This context-relatedness is something which is almost entirely ignored by the nineteenth-century liberal thinkers. They, on the other hand, emphasised

the supremacy of the Western values and the importance of 'progress' and 'advancement' in all societies regardless of their differences. (Freeden, 1978/2011: . ch. III; Claeys, 2000: 228-229; Bowler, 2009b: 42-48, 119-121; Bowler, 2001: 130-146).

The second point is about the unit of selection. For Darwin, the unit of selection, i.e., the entity that subject to natural selection, was the individual, whereas for Alfred Russell Wallace, who had come to the same conclusion, the unit of selection was the group (Dunbar, 2007: 31). The reason why they had different views regarding the unit of selection, Michael Ruse argues, is their social backgrounds. Darwin came from a relatively wealthy family 'who takes Adam Smith's view of economics as gospel' (Ruse, 2013: 219). However for Wallace the ultimate origins of his beliefs lay in his boyhood exposure to the socialist Robert Owen, as well as in his experiences of the hardships caused by land enclosure (Ruse, 1999: 441). The debate between Darwin and Wallace was a scientific issue to be decided by theory and by empirical observation. However for their followers, there were 'extra-scientific factors driving people in their preferences' (Ruse, 2013: 223).

The reason that I made the above comments is to make it clear how Hayek uses different views in evolutionary theory and incorporates them in his own theory. For example, he took Lamarck's theory of 'acquired inheritance', Darwin's concepts of adaption and gradual change and Wallace's group selection and combines all of them in his theory of spontaneous order. In what follows, I explain his views on the formation of the mind and society through history.

3.5. Hayek's Evolutionary Epistemology

Hayek's theory of knowledge is not separate from his theory of society. The underlying mechanism for the formation and development of knowledge and

society, from Hayek's point of view, is the mechanism of evolution. Hayek repeatedly talks about 'the twin ideas of evolution and of the spontaneous formation of an order' in his writings (Hayek, 1967a/2014: 289; Hayek, 1966/1991: 76; Hayek, 1973/1998: 23; Hayek, 1979/1998: 158; Hayek, 1988/1992: 146). Although Hayek never explained in detail what exactly he meant by 'twin ideas', it seems that he believes the mechanism of evolution in both the natural and social spheres, works in a similar (but not identical) way. Hayek maintains not only that evolutionary logic works in both areas, but also mind and society have a mutual effect on each other (Hayek, 1983a: 38). According to Hayek, the human psyche is the product of two different and interacting evolutionary processes: genetic evolution and cultural evolution. This is what is nowadays called 'dual inheritance' (Richerson and Boyd, 2005: 237-257). In the previous chapter, I explained Hayek's theory of formation of the brain. Here I mostly focus on his ideas regarding evolutionary epistemology and the effect of the whole on its parts. I show how Hayek used different approaches of evolutionary theory and built a theory which in many respects is very fruitful. Although, as I said before, Hayek's approach to epistemology is not separate from his attitude to spontaneous order, I discuss them in separate chapters since I think in this way, I can avoid some misunderstandings that have usually been associated with his epistemology by some commentators (Gray, 1986/1998; Ebenstein, 2003; Crowley, 1987).

3.5.1. Evolutionary and Constructive Epistemologies

Hayek, alongside Karl Popper and Donal Campbell, has been considered as one of the advocates of evolutionary epistemology (Bartley, 1988: 21; Vanberg, 2013: 35). The beginning of evolutionary epistemology can be traced back to Darwin's own evolutionary ideas. At the end of the *Origin*, Darwin cautiously says that 'in the distant future I see open fields for far

more important researches. Psychology will be based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation. Light will be thrown on the origin of man and his history' (Darwin, 1859/2008: 359). In his later books, *The Descent of Man* (1871/1981) and *The Expression of the Emotions in Man and Animals* (1890/2009), Darwin suggested his own account regarding the evidence that humans stem from the animal kingdom and that even their mental capacities result from organic evolution. As he put it in his Notebook M (where M stands for Metaphysics): 'Plato says in *Phaedo* that our 'necessary ideas' arise from the pre-existence of the soul, are not derivable from experience.— read monkeys for pre-existence' (Darwin, 2009: 551). Darwin adopted a materialist view of the mind from the start of his evolutionary research (Bowler, 2009a: 568). He tried to show how some supposed human characteristics such as self-consciousness, language and morality are evolved by evolutionary process from other animals. Thus, he founded what nowadays is called evolutionary psychology. This evolutionary approach for understanding human cognition and knowledge in the nineteenth century was the beginning of evolutionary epistemology (Wuketits, 1990: 2).

The idea that evolution can occur outside of the biological field is present in Darwin's own works. In both the *Origin* and *The Descent of Man*, Darwin seems to endorse the view that selection occurs whenever there are entities that struggle for existence, regardless of what other properties they might have. He did not talk about theories, but rather words in a language. In *The Descent of Man*, he quotes the linguist Max Muller with approval 'a struggle for life is constantly going on among the words and grammatical forms in each language. The better, the shorter, the easier forms are constantly gaining the upper hand, and they owe their success to their own inherent values'. Then he summarizes the point 'the survival or preservation

of certain favoured words in the struggle for existence is natural selection' (Darwin, 1871/1981: 113). So from the Darwinian point of view, it is possible to use the method of evolution outside of the field of biology. In this regard, evolutionary epistemology claims that the production and the development of human knowledge proceeds through some natural selection process, the best example of which is Darwin's theory of biological natural selection (Stein, 2010: 354).

Michael Bradie has distinguished between two interrelated but separate programs which go by the name 'evolutionary epistemology' one is *Evolution of Epistemic Mechanism* (EEM) and the other is *Evolution of Epistemic Theories* (EET) (Bradie, 1986: 403). The difference between these two goes as follow: 'EEM projects address questions concerning the evolution and development of brain structures and psychological mechanisms involved in epistemic processes. EET projects address questions concerning the growth of human knowledge and the development of epistemic norms' (Bradie, 2011: 849). Although both approaches deal with their questions from the evolutionary perspective, neither of them necessarily implies the other. In the case of Hayek, he believes in both EEM and EET. What Hayek did in *The Sensory Order* and his other works on theoretical psychology was to explain in detail his theory of the formation of *EEM*. Yet it is important to remember that for Hayek the formation of mind is not just a matter of biology, but also some other non-biological aspects of human life such as language and culture are influential for the cognitive development of the human mind. I will explain this point in the section on 'downward causation' of this chapter and especially in the next chapter. Regarding the EET, Hayek is also an evolutionist. It has usually been said that Hayek's view on evolutionary epistemology is very similar to Popper's. However, I will argue that the source of Hayek's evolutionary epistemology is in the works of

another Austrian thinker, Konrad Lorenz. Hayek and Lorenz both believe that human knowledge and human reason is the result of millions of years of evolution and they are against any kinds of endeavour for transcending and defining human reason outside of the evolutionary process.

I would like to emphasise that this view is in contrast with both religious and some secular views which advocate a special place for man or *cogito* over natural phenomena. In this view, even reason and the ability of reasoning - the most idiosyncratic characteristic of humans - are seen as a 'branch of biology' (Cooper, 2001). Therefore, as Michael Ruse says, 'if you take Darwin seriously [...] then the special status of *Homo sapiens* is gone for ever. Any powers we have are no more than those brought through the crucible of evolutionary struggle and consequent reproductive success. It is true that, as a species, we are unique, with our own special combination of powers and abilities. But then, so also is *Drosophila melanogaster* (a species of fruit-fly)' (Ruse, 1986: 104).

Hayek was aware of this distinction between evolutionary and non-evolutionary approaches to epistemology and the social sciences. What he seeks in his 'Individualism: True and False' (1945/2010), *The Counter-Revolution of Science* (1952/1964), 'Kinds of Rationalism' (1965/2014) and 'Errors of Constructivism' (1970/2014) is to elucidate this division between two kinds of epistemology. Hayek considers 'constructive rationalism' as a view which conceives human reason as 'the Cartesian *esprit géométrique*, a capacity of mind to arrive at the truth by a deductive process from a few obvious and undoubtable premises' (Hayek, 1965/2014: 42). According to this view, to use David Hume's formulation, reason appears to be 'in possession of the throne, prescribing laws, and imposing maxims, with an absolute sway and authority' (Hume, 1738/2002: 125). Hayek argues that this account of reason is concerned with the universal and eternal laws which

are applicable in all times and places and is, therefore, 'blind to the forces of historical evolution' (Hayek, 1965/2014: 43).

Moreover, this account of reason assumed an inventor or a designer for all human institutions such as language, morals and money. In respect of this view, Hayek says, 'since man has himself created the institutions of society and civilization, he must also be able to alter them at will so as to satisfy his desires or wishes' (Hayek, 1970/2014: 338). Hayek is extremely sceptical of such a notion of reason. For him, reason is the result of civilisation and not its cause. Although Hayek acknowledges the importance and limited role of reason in society, he rejects the idea that all social institutions ought to be judged by the method explained above. Reason for Hayek is 'like a dangerous explosive which, handled cautiously, will be most beneficial, but if handled incautiously may blow up a civilization' (Hayek, 1965/2014: 52). From Hayek's point of view, such explosion happened when some eighteenth century French philosophers, who, according to Hayek, had taken their ideas from Descartes and Rousseau, decided to design their society based on a mistaken notion of reason. The result was the French Revolution and the reign of terror (Hayek, 1945/2010: 56).

According to Hayek, all the catastrophes that followed from the French Revolution were due to the erroneous emphasis on the capacity of reason in creating new social institutions. I assume Hayek would be partially in agreement with Carl Becker's argument in *The Heavenly City of the Eighteenth Century Philosophers* (1932) suggesting that some eighteenth century philosophers merely substituted a new deity for the existing deity, they just replaced the Christian God with reason, or as Becker himself put it, they 'demolished the Heavenly City of St. Augustine only to rebuild it with more up-to-date materials' (Becker, 1932: 31). John Gray also in the same line has argued that many 'modern' conceptions such as humanism,

progress and trust in the capacity of human reason have their own origin in Christianity and in the end, like Christianity, are myth and superstition (Gray, 2004; Gray, 2002).

Likewise, Hayek also argues there was one tradition of thought in the age of Enlightenment which was enthusiastic for the scientific reconstruction of society. This 'intellectual *hubris* which is at the root of the demand for comprehensive direction of the social process' (Hayek, 1944/2007: 180) misunderstood the limit of human reason and its role in society. For Hayek this confusion between 'constructive' and 'evolutionary' rationalisms was not only an intellectual dispute without any connection to the real world. It should be added that although Popper did not agree with Hayek's terminology regarding 'rationalism', he approved Hayek's distinction between two different kinds of thinking (Notturmo, 2015: 29-30). Hayek, like Popper, believes that any misapprehension about the sphere and the limit of our knowledge has huge social and political consequences. Beside all the differences between Hayek and Keynes, he is in agreement with Keynes when he says 'the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back'(Quoted in: Hayek, 1944/2007: 32). For Hayek, the attempt to replace God with 'Reason' or the 'State' had devastating consequences for human society and as Alan Ryan captured Hayek's view on this point 'the search for heaven on earth under the aegis of the omniscient state infallibly leads to hell on earth' (Ryan, 2013: 454).

In this respect, Hayek has neither optimism nor ambition to put human reason in the place of God. Unlike 'constructive rationalists', he does not consider human reason as something 'omnipotent' or 'omniscient'. Although he acknowledges the advancement of science and technology in the modern age, what strikes him the most is our inevitable and 'irremediable ignorance' (Hayek, 1973/1998: 13; Hayek, 1968/1978: 71) because it is 'due to the natural limits of the human mind' (Papaioannou, 2012: 100). Norman Barry rightly argued that although Hayek does not base his political ideas as firmly on a concept of man as does Hobbes, or Bentham, 'his concept of constitutionally ignorant man may well be considered something of an equivalent to Hobbes's egoistic man' (Barry, 1979: 9). The inevitability of our ignorance cannot be altered by some technological advance, rather it is a 'philosophical thesis about the form in which knowledge exists in the world and about the way in which the mind becomes aware of this knowledge' (Barry, 1979: 10).

3.5.2. Ignorance and Evolutionary Epistemology

The concept of ignorance plays a crucial role in evolutionary epistemology. Popper argues that all of our knowledge consists of 'tentative theories' and what we do is to critically challenge them to find the weak points and resolve them (Popper, 1984: 239). According to Popper, we cannot be totally sure about the truth of our theories as the final products; the best that we can do is to submit our tentative theories to the critical 'method of elimination' (Popper, 1959/2002: 116), or 'error elimination' (Popper, 1975: 119), and make them less erroneous. This procedure, i.e. having a problem, providing a tentative theory to resolve it, critically examine the theory in order to find the weak points, and finally having a new tentative theory, is in general, Popper maintains, a Darwinian method. He says 'the evolution of scientific knowledge is, in the main, the evolution of better and better theories. This

is a Darwinian process. The theories become better adapted through natural selection: they give us better and better information about reality. (They get nearer and nearer to the truth.) All organisms are problem solvers: problems arise together with life' (Popper, 1984: 239; also: , 1961/1991: 3-30). Donald Campbell claims that 'Popper's first contribution to the evolutionary epistemology is to recognize the process of the succession of theories in science as a similar selective elimination process' (Campbell, 1988: 49). So, Popper's theory of knowledge is very close to Darwin's theory of evolution, 'problem solving is the primal activity: and the primal problem is survival' (Magee, 1975: 57).

It has usually been argued that Popper had a great influence on Hayek after the 1940s. Hayek himself was aware of Popper's influence on his understanding of the natural sciences (and not his economics) and in his letter to Bruce Caldwell, dated 29th September 1984, he clearly expresses his gratitude to Popper (Caldwell, 2009: 324). However, I agree with Caldwell –though for different reasons- that in terms of the social sciences, Hayek never became a falsificationist (Caldwell, 1992). Ignorance plays a much more important role in Hayek's thought and he is more sceptical than Popper and seems to follow the evolutionary method to a greater extent.

As I explained in the previous chapter, Hayek's view regarding *a priori* concepts is an evolutionary one. This does not mean that he did not endorse *a priori* concepts. Hayek admits that there are some pre-sensory categories in our mind and in his essay 'The Primacy of the Abstract' he clearly stated that he takes Kant's conception of categories 'for granted'(Hayek, 1969/2014: 323). But this view is misleading if we accept it at its face value. Here again, it is important to remember the distinction between the *ontogenetic* and *phylogenetic* processes. In terms of ontogeny, Hayek *does* believe in an *a priori* concepts, whereas in terms of phylogeny he *does not*.

To put it in a different way, Hayek accepts some *a priori* concepts in the mind of individuals, but he does not admit for any *a priori* concepts for the species. In this regard, Hayek's view is different from Popper's evolutionary epistemology which claims that 'the *a priori* knowledge had never been *a posteriori*' (Popper, 1984: 242). Popper maintains that, in contrast to Hayek, the mechanism of selection happens among *a priori* concepts (not in the Kantian sense). Any *a priori* concept 'becomes adapted to the environment by natural selection: the apparent *a posteriori* knowledge is always the result of the elimination of badly fitting *a priori* invented hypotheses, or adaptations' (Popper, 1984: 242). Popper did not explain how *a priori* concepts come into existence. However, this is the question which fascinated Hayek. To put it in a different way, Hayek and Popper are in more agreement on *EET* than about *EEM*. Hayek's view about *EEM* is more attached to the evolutionary method than Popper's (Popper, 1984: 239-240). He tries to *explain* the way that mind works by the mechanism of selection without postulating any *a priori* concepts. In this regard, Hayek's ideas are closer to Darwin's method than to Popper's and he is more sceptic and places more emphases on ignorance for casual explanation of mind. As Darwin conducted a 'natural explanation' of evolution, Hayek sought do to the same thing for the human mind. In this regard, Hayek was influenced not by Kant, but by Konrad Lorenz, another Austrian thinker who 'naturalised Kant'. It is worth discussing Lorenz's idea about the mind briefly, since it can help to clarify Hayek's account in evolutionary epistemology.

3.5.3. The Influence of Konrad Lorenz

I have discussed Kant's view regarding *a priori* concepts and its difference with Hayek's view in the previous chapter and I am not going to repeat it again here. But Hayek's understanding of *a priori* concepts in terms of phylogeny is also different from Popper's and closer (if not similar) to Konrad

Lorenz's (Lorenz, 1977), who was a friend of Hayek and Popper and like them another evolutionary theorist (Evans, 1975: 93-97; Lorenz, 1981: 12). Lorenz proposed that Kantian *a priori* concepts may be sensual impulses that were, some thousands or millions of years ago, first acquired *a posteriori* (Lorenz, 1941/2009), and became later genetically fixed by natural selection. What Lorenz did in 'Kant's Doctrine of the A Priori in the Light of Contemporary Biology', was to give an empirical or naturalistic interpretation of Kant's transcendental concepts (Falk, 1993: 154; Burkhardt, 2005: 264). He proposed a solution to the question of how internal representations in the mind come to correspond to outer reality, how the *a priori* of Kant arose, a question not addressed by Kant himself (Krebs and Sjölander, 1992: 220-221). Lorenz maintains that the *a priori* structures of human thought and experience remained for Kant as 'things that had not *developed* but were *necessarily* as they were things that belonged not to the external objective world but to another, supranatural 'intelligible' world' (Lorenz, 1997: 15). However, he argues that the human being, 'along with his perceptual structure, belongs to the *same* objective world as the things that are depicted in his perception. For us, the innate forms of thought and intuition are determined by organic structures in exactly the same way as the peculiarities of seeing and hearing are determined by the architecture of our eyes and ears' (Lorenz, 1997: 16).

Lorenz claims that just our bodies and their physiology show a noticeable similarity to with those of other animals, so our mental and behaviour patterns are fundamentally similar (Lorenz, 1963/2002: , Ch. 12-13). To think of ourselves as different in kind, whether in virtue of our consciousness or our supposed free will, is an illusion. Our behaviour is subject to the same causal laws as is all animal behaviour, and it will be the worse for us, he suggests, if we fail to recognize this. Lorenz writes in *On*

Aggression that 'human behaviour, and particularly human social behaviour, far from being determined by reason and cultural tradition alone, is still subject to all the laws prevailing in all phylogenetically adapted instinctive behaviour' (Lorenz, 1963/2002: 229). Lorenz does not maintain that we are not different from animals, but the distinction between humans and animals is a matter of *degree*, and not *kind* (Stevenson and Haberman, 1998: 215). He contends that it is a 'paradox' that human reason which has raised men high above all other creatures, is not altogether a blessing since it could also lead men to extinction. He says 'there is much truth in the parable of the tree of knowledge and its fruit, though I want to make an addition to it to make it fit into my own picture of Adam: that apple was thoroughly unripe! Knowledge springing from conceptual thought robbed man of the security provided by his well-adapted instincts long, long before it was sufficient to provide him with an equally safe adaptation'(Lorenz, 1963/2002: 230). Lorenz also had some ideas about social change which are less sophisticated but still quite similar to Hayek's. However, since the concern of this chapter is about Hayek, I will not discuss them in detail (Nisbett, 1976: 168-183; See: Lorenz, 1974).

3.5.4. Hayek's anti-a priorism

Hayek's view regarding *a priori* concepts is quite similar to that of Lorenz. In *The Sensory Order*, Hayek cites Lorenz's article 'Die angeborenen Formen möglicher Erfahrung' (Lindemans, 2011: 158).¹⁵ Hayek sees biological evolution as the 'experience of the race' or *phylogenetic* process, whereas individual learning is the 'experience of the individual' or *ontogenetic* process (Hayek, 1952/1976: 106). Like individual pre-sensory experience, 'racial experience' is a physical rather than conscious event. But it is a kind of experience or 'undergoing' nevertheless. Again, Hayek confirms that

¹⁵ 'The Congenital Forms of Possible Experience' (1943)

knowledge is based on 'experience in the wider sense,' in which it includes experience of the individual as well as the race.¹⁶ Hayek's objection to the empiricists before him was that they had not pushed the naturalist explanation of the human mind to its logical conclusion (Birner, 2015: 170; Birner, 2014: 273). If we very simply say that rationalists are those who believe that there are some *a priori* or inborn concepts in the human mind, and empiricists are those who argue there are none, then we can say that strangely enough Hayek was against both of these camps. Regarding rationalists, Hayek argues that although they are right to think that there are some *a priori* concepts in the human mind, they are unable to properly explain the origin and formation of these *a priori* concepts. On the other hand, empiricists are right to maintain that everything should be explained empirically, but they are wrong for imagining the human mind as a *tabula rasa* (Caldwell, 2004a: 273).

The problem of both traditions is that they just consider an individual being. If we just consider individuals, then rationalists are right that there are some pre-sensory concepts in our minds. But if we study the evolution of the human race, then we learn that all *a priori* concepts are derived *a posteriori*. The *a priori* concepts, Hayek argues, are 'semi-permanent' since they evolve with each additional sensory experience, their contents and the relations among them are continually being updated with the introduction of each new bit of sensory information (Dempsey, 1996: 21). Hayek's point in this regard is akin to Darwin and Lorentz's views about *a priori* knowledge. Darwin's Notebook M entry, Lewens says, 'suggests that perhaps individual humans have inherited knowledge acquired by their simian ancestors' (Lewens, 2013: 453). Although Hayek's rejection of non-evolutionary *a priorism* is explicitly expressed in his post-1950s works, it was one of

¹⁶ Hayek used the term race whereas I think species would be a better term.

Hayek's concerns in 1930s and what distinguished him from his mentor Ludwig von Mises (Caldwell, 1994: 306). In his letter to T. W. Hutchison dated May 15, 1983, Hayek says 'certainly 1936 was the time when I first saw my distinctive approach in full clarity – but at the time I felt it that I was merely at last able to say clearly what I had always believed – and to explain gently to Mises why I could not accept his a priorism' (quoted in: Caldwell, 2009: 324). Mises' notion of *a priori* concepts is essentially a Kantian one which treats *a priori* concepts as infallible and absolute (Scheall, 2015: 89-90). However, as I have discussed in chapter two, Hayek has a different view regarding *a priori* concepts. Hayek's contention with Mises was that though he agreed with the criticisms that Mises had raised against socialism, from Hayek's point of view, Mises' arguments were based on the same grounds that socialists and 'constructive rationalists' made their own. 'Mises himself was still much more a child of the rationalist age of enlightenment and of continental rather than of English liberalism, in the European sense of the word, than I am myself' Hayek claims (Hayek, 1983a: 18).

3.6. 'Emergence' and 'Downward Causation'

3.6.1. Emergence

Hayek's argument regarding the mind is grounded on a similar Darwinian method since he tried to explain how the mind works based on purely naturalistic causes. Moreover, in terms of biology, Hayek's explanation of the mechanism of the mind postulates the elements of variation, selection and heredity. Although in *The Sensory Order* he never put them in a simple line or section, they are dispersed all over the book. Hayek's theory of mind can be described in terms of 'emergence' where 'the concept of *emergence* refers to the possibility that, when certain elements or parts stand in particular relations to one another, the whole that is formed has properties (including

causal powers) that are not possessed by its constituent elements taken in isolation' (Lewis, 2012b: 369). The properties that arise when the elements are arranged in the requisite way are known as *emergent properties*, while any whole that possesses an emergent property is known as an *emergent* or 'higher-level' entity. Emergent properties are structural or *relational* in the sense that their existence depends not only on the presence of their ('lower-level') constituent parts but also on those parts being organized or arranged into a particular structure that involves them standing in specific relations to one another (Elder-Vass, 2007: 28-29).

The fact that the existence of emergent entities depends not only on the presence of particular elements but also on their standing in certain relations to one another implies that such entities cannot be entirely eliminated from causal explanations that involve the exercise of the entity's causal powers. Although the classical example of the emergence properties can be find in J. S. Mill's case of water (Elder-Vass, 2010: 5; Elder-Vass, 2012: 85; Stephan, 1992: 25), Campbell argued that it is much more explicit in Darwin's works (Campbell, 1974). The properties of water are clearly very different from those of its components, oxygen and hydrogen, when these are not combined with each other in the specific form that constitutes water. We can, for example, put out a fire with water, but the outcome would be very different if we tried to do the same with oxygen and hydrogen (Beckermann, 1992: 105).

For sure, it may be possible to achieve an explanatory reduction of the emergent properties, in the sense that one can explain how the properties or causal powers of an emergent entity like water result from the properties of its parts and the interaction that takes place between them when they are arranged the specified way (i.e. one can identify and illuminate the working of the causal mechanism responsible for the existence of the emergent property). However, this is not the same thing as an eliminative reduction in

which the properties of the emergent entity itself can be explained away and, therefore, entirely eliminated from causal explanations involving the emergent causal powers of that entity. Moreover, Hayek also thinks that the matter of explanation gets even more difficult about 'organized complexity', or the phenomena that social sciences deal with. 'Organized complexity' he says 'here means that the character of the structures showing it depends not only on the properties of the individual elements of which they are composed, and the relative frequency with which they occur, but also on the manner in which the individual elements are connected with each other' (Hayek, 1975/2014: 365).

Another thing to remember is the matter of ignorance and scepticism in Hayek's theory. As I have said before, Darwin was aware about the limitation of his explanation, but he was optimistic that some of the problems may be solved in the future due to the growth of knowledge. Nevertheless, Hayek does not have Darwin's confidence in the future for solving the problems. Hayek maintains that the way in which the human mind works cannot ever be *fully* explained. Here, it is not the problem of knowledge that can be solved by acquiring more knowledge; rather, it is a matter of probability that makes us unable to know the mind *completely* (Steele, 2005: 576-578). In the previous chapter, I discussed Hayek's distinction between mental and conscious events. To recall very briefly, mental events refer to a wider domain than the conscious level and it includes not only conscious events but also supra-conscious events. This theory as it stands is not novel. Some thinkers, such as Popper, acknowledge the existence of a 'submerged' portion of mind and argue that the unconscious aspects of mind can be accessed or recalled from the surface of consciousness (Popper and Eccles, 1985: 129-132). However, Hayek rejects this view. He maintains that everything that is conscious belongs only to the surface, 'but like any

surface, it reveals something, but *conceals* even more' (Dempsey, 1996: 22).

In Hayek's view, what we call the conscious mind is generated from the micro level interactions or connections of new and old sensory information. The mind that arises from this micro level activity has its roots therein, and it emerges therefrom, but does not belong to it. It instead constitutes a new order of complexity that cannot retrospectively describe or recall its own construction as Popper argued.

Hayek uses a calculator example in order to illustrate his idea. Suppose the highest value a calculator can display is 999,999,999. There are 500,000,000 sums of two positive numbers that equal 999,999,999. Moreover, there are 499,999,999 combinations of two positive numbers that equal 999,999,998; and so on. As a result, the total number of summations the calculator can perform is greater than the largest number it can display. To this number would have to be added all the combinations of three numbers, four numbers, and so forth. Ultimately, the total number of distinct combinations the calculator can perform far exceeds its display capacity (Hayek, 1952/1976: 188).

By applying this principle to the human mind, Hayek concludes that 'even though we may understand its *modus operandi* in general terms, or, in other words, possess an explanation of the principle on which it operates, we shall never, by means of the same brain, be able to arrive at a detailed explanation of its working in particular circumstances, or be able to predict what the results of its operations will be. To achieve this would require a brain of a higher order of complexity, though it might be built on the same general principles. Such a brain might be able to explain what happens in our brain, but it would in turn still be unable fully to explain its own operations, and so on' (Hayek, 1952/1976: 188-189). Now the difference

between Hayek and Darwin (and Popper) can be seen clearly. It is not a lack of knowledge that prevents us from fully understanding the mechanism of the human mind; rather this is a *logical impossibility*, since we need a brain more complex than ours to fully explain the operations of our mind. There is a 'permanent cleavage'(Hayek, 1952/1976: 191), Hayek argues, that cannot be crossed, no matter how knowledgeable we get. 'The limitation of knowledge with which we are concerned is therefore not a limitation which science can overcome' he says (Hayek, 1973/1998: 15). This 'inevitable ignorance' is in the nature of our knowledge about the human mind. From Hayek's perspective, although our knowledge of the human mind has been and will be increased, in the end we cannot fully explain its operations. Hayek contends that 'the whole idea of the mind explaining itself is a logical contradiction—nonsense in the literal meaning of the word—and a result of the prejudice that we must be able to deal with mental events in the same manner as we deal with physical events (Hayek, 1952/1976: 192).

From Hayek's point of view the human mind is and will remain *Terra Incognita* (Dempsey, 1996). We can map out its general structure, but it is impossible (logical impossibility) to fully explain it in detail. According to Hayek, although we can outline the general functioning of our mental activity, the knowledge that each individual possess in society is particular to that person. This knowledge, Hayek argues, is not 'scientific knowledge' in a sense that it is not generalizable or even articulable. This kind of knowledge, Hayek maintains, is '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' (Hayek, 1945/2014: 95). Each individual has a unique stock of knowledge that is not *completely* comprehensible either for the person or for the others. Hayek

argues that 'neural structures governing how people perceive and respond to the world are malleable in the sense that they are shaped by the context in which people find themselves' (Lewis, 2015: 1183). So, people who live in the same environment will develop a similar – but not identical- mental map or knowledge of the external world. This map or knowledge is subject to constant change (Friedman, 2013: 282). There are two reasons why one person's mental maps or knowledge is not identical to another's. One is that 'complete identity of the maps would presuppose not only an identical history of the different individuals but also complete identity of their anatomical structure' (Hayek, 1952/1976: 110). And the other reason is the fact of the constant changing nature of an individual's knowledge makes it impossible to compare two individuals' knowledge about the world (Hayek, 1952/1976: 110).

Hayek's account of the human mind and its function fits perfectly with the field of emergence theory. From Hayek's point of view, there is no doubt that our mind is caused by some biological and cultural elements, but the mind as a whole, is not reducible to those parts. Our mind is an immensely complicated composition of factors that came together in a specific manner which is particular to each individual. Our mind belongs to a different ontological level that is caused by, but not reducible to, the biological level. Biological information about cells, molecules, DNA, tissues, etc. are necessary, not sufficient, for the explanation of our minds. To have a sufficient explanation of a mind, except from biological information, we also need the particular *relational* position of each factor in shaping the whole. To make this matter clear, take the example of a watch. A particular watch (the whole) is made of, let is say, steel, plastic, titanium and other elements (the parts). However, the study of the properties of these elements even in the smallest scale would not help us to explain how the watch (as a whole)

works. Our watch is a composition of these elements which are put together in a particular relational pattern in order to perform a function, namely, to show the right time. The property of those parts is necessary for making our watch (the whole). For example we cannot use wood for making a spring in the watch; we should use steel or other similar materials which have the same property. But, the study of these elements, without having knowledge about their relational/functional position in the whole, is not enough (sufficient) for making a watch. So, our watch belongs to a different ontological level that although caused by its parts, is not reducible to them. Or as Samir Okasha has put it; sometimes 'the whole may exhibit 'emergent properties' that could not have been predicted from knowledge of the constituent parts' (Okasha, 2012: 49).

The same method applies to all complex phenomena. According to Hayek, our mind as a whole has biological and cultural foundations but it is not reducible to the properties of those parts. Also, the number of influential factors (biological and cultural) and their relational combinations in shaping the mind is enormous that makes it impossible to *fully* explain the mind by studying its parts. The best we can do, according to Hayek, is to outline the pattern that these parts can come together. No complex phenomena, either mind or society, is *fully* explainable by the properties of its composing parts since the whole belongs to different ontological level.

3.6.2. Downward Causation

Now the question that can be asked is if the whole belongs to a different ontological level, is it possible that causal influence runs from whole to part, i.e. down the hierarchy? It was Donald Campbell who for the first time formulated the principle of downward causation (Campbell, 1974), however, since then, it has been used in other fields of knowledge. Jonardon Ganeri argues that 'downward causation is causal influence going down from the

higher level of the mental to the lower level of the physical' (Ganeri, 2011: 688). Yet the concept of 'downward causation' does not necessarily need to deal with the distinction between 'mental' and 'physical'. It may also happen in purely physical form (Humphreys, 1997: 7-8). Downward causation can be defined as a converse of the reductionist principle: the behaviour of the parts (down) is determined by the behaviour of the whole (up), so determination moves downward instead of upward. The important factor is that, this determination is not *complete* (Humphreys, 2009: 642). To illustrate this with an example, let's take a look the case of a snowflake. It is well-known that snow crystals have a strict 6-fold symmetry, but at the same time that each crystal has a unique symmetric shape. The symmetry of the crystal (whole) is clearly determined by the physico-chemical properties of the water molecules which constitute it. But on the other hand, the shape of the complete crystal is not determined by the molecules. Once a shape has been formed, though, the molecules in the crystal are constrained: they can only be present at particular places allowed in the symmetric crystalline shape (Murphy, 2009: 7). The whole (crystal) constrains or 'causes' the positions of the parts (molecules).

Now for Hayek, such a downward causation is important for both acquiring and using knowledge. I have already explained in detail Hayek's theory about the way in which the new impulses are classified based on previous 'linkages' in the human mind. The human psyche, according to Hayek, is not the realm of 'everything goes', rather, it is the 'architecture of the human mind' (Cosmides et al., 1992: 7), that defines the place of the new impulses. Hayek's discussion of the use of knowledge in society (Hayek, 1945/2014) is important for explaining this point. There Hayek outlined the mechanism of adjusting and cooperation based on free market prices (Kukathas, 1989: 133-134). When individuals in society act based on their

own subjective knowledge, Hayek argues, 'they generate changes in relative prices that indicate the consequences of their actions for the scarcity of various goods and thereby convey to others hints about the (at times tacit and always dispersed or local) knowledge that informs those actions, thereby enabling people successfully to co-ordinate their plans' (Lewis, 2015: 1170). However, Hayek maintains that people can cooperate on a background of 'a fairly constant framework of known facts' (Hayek, 1976/1998: 125), that is, against the relatively stable background provided by various social rules and norms. The fact that people act in accordance with the same general guidelines about how to interpret and behave in various kinds of situation makes it possible for them to form reasonably accurate expectations of each other's future conduct, thereby enabling them to formulate plans that have a reasonable chance of coming to fruition. Hayek writes 'what makes men members of the same civilization and enables them to live and work together in peace is that in the pursuit of their individual ends the particular monetary impulses which impel their efforts towards concrete results are guided and restrained by the same abstract rules. If emotion or impulse tells them what they want, the conventional rules tell them how they will be able and be allowed to achieve it' (Hayek, 1976/1998: 12). This means that from the Hayekian point of view, although individuals' thoughts and actions should be considered as the starting point of any social analyses, they are not free to act as they wish in society. The norms and the convictions of a given society, to some extent define and limit the individual's actions and responses, just as the grammatical rules of a language define the place of a given word in a sentence. And this is done at the very early ages without we being able to express the abstract grammatical rules of the language clearly (Pinker, 2002: 60). These 'abstract' rules are in fact the 'rules which we are able to apply, but do not know explicitly' (Hayek, 1970/2014: 344) and are not just limited to the

language. Hayek maintains that in the social life 'whenever a *type* of situation evokes in an individual a *disposition* towards a certain *pattern* of response, that basic relation which is described as 'abstract' is present' (Hayek, 1973/1998: 30).

Individuals' knowledge of the circumstance is knowledge of 'how' and not knowledge of 'that', that is to say, their knowledge is not expressible in words. As Fleetwood has nicely put it 'when agents know 'how' but not 'that', they are able to act yet at the same time are ignorant in a sense. *They are simultaneously, and paradoxically, knowledgeable and ignorant* (Fleetwood, 1995: 100). I will discuss the formative role of 'abstract rules of just conduct' in the next chapter, yet for now it is sufficient to say that what Hayek's abstract rules of just conduct in a society is to provide a general framework for individuals to pursue their own interests (Kukathas, 2015: 288-289).

So, for Hayek, although social and cultural norms are made by human agents, they belong to different ontological levels (emergence). Moreover, they have some sort of impact and put a framework in the minds of the people who are living under their influence (Downward Causation). Having said that, it seems this interpretation of Hayek's thought is in contrast to his methodological individualism. It may be objected that since Hayek endorsed methodological individualism, either he could not have accepted 'emergence' and 'downward causation' in his theory as I claimed, or, he could have, but then he would have faced some contradictions in his theory because emergence and downward causation are not compatible with methodological individualism. In the next chapter, I will discuss Hayek's particular understanding of methodological individualism and why I think it is compatible with the concept of emergence.

3.7. Conclusion

In this chapter I have outlined the major characteristics of evolutionary theory as it was presented by Darwin. Hayek grew up in a family where biology was the dominant interest amongst its members and he himself entertained the idea of becoming a biologist (Hayek, 1994: 34).¹⁷ The influence of biology, however, remained central in Hayek's mind. He accepted the main features of Darwin's theory of evolution and tried to drive it to its logical conclusion. Hayek's theory of mind is the best example of such endeavour which both represents the use of evolutionary theory in explaining complex phenomena and at the same time the limitation of such fully-fledged explanation. I have also tried to show that Hayek's particular take on evolutionary theory and his deep-seated scepticism about '*complete explanation*' in the case of complex phenomena, made him different from Popper and Campbell than has usually been assumed and closer to his friend Konrad Lorenz. Hayek's epistemology is marked by 'permanent cleavage' of ignorance which is 'logically impossible' to be filled by knowledge. I have also argued that it's not easy to categorise Hayek's position in epistemology as rationalist or empiricist. Hayek's notion of 'pre-sensory linkages' or *a priori* concepts is close to rationalists with respect to an individual's mind, however, his theory is distinctively empiricist regarding the formation of such concepts and linkages in species. I have contended that the concepts of 'emergence' and 'downward causation' as have been suggested by some scholars, are useful conceptual devices which rightly capture Hayek's notion of 'complex phenomena'. In the next chapter, I'll turn my attention to

¹⁷ 'Such interest in biology was shared by my father August Edler von Hayek, my two younger brothers (one an anatomist and the other a chemist), and reappeared in my daughter (an entomologist)', Hayek says (Hayek, 1994: 32). And again 'I grew up with biology in my background, I think it was purely an accident that I did not stick to it. I was not satisfied with the sort of taxonomic work in botany or zoology. I was looking for something theoretical at a relatively early stage' (quoted in: Dimmick et al., 2013: 231-232).

Hayek's social theory and the way in which he used the main components of evolutionary theory to comprise his own social philosophy.

Chapter IV: Hayek's Theory of Social Institutions

4.1. Introduction

In the previous chapters, I mainly focused on Hayek's theory of knowledge. I have tried to provide the main characteristics of Hayek's 'evolutionary epistemology' and the role that ignorance plays in his epistemological writings. In this chapter, I make a specific case for his social theory. My main claim is that Hayek's social theory is based on the evolutionary theory of knowledge discussed in the previous chapters. Hayek's account of evolutionary theory represents his deep scepticism towards rationalism or what he called 'constructive rationalism'. As I discussed in section 3.5.1, Hayek argues that abstract reasoning is unable to fully explain the underlying mechanism of society. He maintains that social institutions are not formed based on some axioms or rational grounds and cannot (and ought not to) be constructed on those grounds. Social order and institutions, Hayek argues, have evolved throughout history and proved their *usefulness* over time. Although Hayek doesn't reject the possibility of criticising and improving social order, he sets some limitations on such endeavours. The whole rational criticism of social norms is a logical impossibility for Hayek and he maintains that reason cannot criticise *all* the social institutions because reason itself is the product of those institutions. Over the course of history, human beings have created rules, norms, institutions and in general, an order, whose function exceeds the understanding of one person. Hayek calls this order the 'spontaneous order'. The underlying mechanism of spontaneous order, I propose, is an evolutionary one. I intentionally do not use 'social Darwinism' since it has a particular resonance that does not match well with Hayek's social theory. Moreover, as I said in the previous chapter, Hayek believes that it was Darwin who applied to biology a concept which he had learned from social scientists whom Hayek calls 'Darwinians before Darwin' (Hayek, 1973/1998: 23; Hayek, 1988/1992: 24). These social

scientists are in general the members of the Scottish Enlightenment movement what flourished in the eighteenth century and Hayek's notion of spontaneous order can be classified as a contribution to that tradition (Barry, 1982).

It seems necessary to clarify what Hayek means by rule and order before I start my discussion. Hayek makes a distinction between 'the systems of rules of conduct which govern the behaviour of the individual members of a group (or of the elements of any order)' on the one hand, and, on the other hand, 'the order or pattern of actions which results from this for the group as a whole' (Hayek, 1967a/2014: 278). The rules that govern an individual's conduct can be divided into two kinds. First, the innate or genetically inherited rules of human behaviour, which have been formed through the process of biological evolution of the human species. Owing to the fact that there have not been significant changes in human biology over the last ten thousand years, it can be said that these rules are universal and homogenous. Second, the learned and culturally transmitted rules which, in contrast to biological rules, are exceptionally variable. These two kinds of rules are not completely separated but they often interact (Vanberg, 1986: 77). To maintain that human behaviour is governed by certain rules is to say that individuals in their conducts show some patterns or regularities that can be stated in terms of 'rules' irrespective of whether individuals are aware of these regularities and whether they have been explicitly expressed as rules (Hayek, 1967a/2014: 279).¹⁸ What Hayek means by saying that individuals

¹⁸ Hayek maintains that 'man is a rule-following animal' and not always a 'purpose seeking' one (Hayek, 1973/1998: 11). Then, in support of his claim, Hayek quotes the following passage from R. S. Peter's *The Concept of Motivation* 'his actions are not simply directed towards ends; they also conform to social standards and conventions and unlike a calculating machine he acts because of his knowledge of rules and objectives. For instance, we ascribe to people traits of character like honesty, punctuality, considerateness and meanness. Such terms do not, like ambition, or hunger, or social desire, indicate the sort of goals that a man tends to pursue; rather they indicate the type of regulations that he imposes on his conduct whatever his goals may be' (Hayek, 1973/1998: 139).

are governed by cultural rules is that they display (knowingly or unknowingly) some particular regularities in their conduct which are specific to their social communities. These cultural rules when expressed verbally, usually take the form of prescriptive or normative formulae. That is to say, if an individual in a social community is confronted with situation A, he or she should, have to or be expected to display the behaviour type B. These cultural rules, constrain or limit the possible range of an individual's expected behaviour in dealing with a particular situation.¹⁹

Hayek argues that sometimes in response to their particular environment, an order can emerge out of the multiple interactions of individuals who are governed by these rules. Although certain general features of overall order are determined by the rules, the specific content of the order is always dependent on the particular circumstances to which the individuals respond (Hayek, 1973/1998: 39-40). Hayek maintains that not 'every system of rules of individual conduct' will inevitably produce 'an order of action'. It is possible that individuals act in a way that no order can be conceived, or rather, their behaviours create 'disorder' (Hayek, 1967a/2014: 279).

Before I discuss Hayek's notion of Spontaneous Order, an important question should be answered. In the previous chapter, I discussed the emergent properties and downward causation in Hayek's thought. If we agree that Hayek's notion of spontaneous order – which includes phenomena

¹⁹ Viktor Vanberg has rightly pointed out that cultural rules as normative or prescriptive statements expressing regularities in a particular situation do not 'constrain' or 'restrain' individuals' behaviour; rather, 'it is only certain *social facts* that can exert an influence on people's behavioural choices, e.g. the fact that other people will react negatively in case of rule-violating behaviour, or the *fact* that certain persons explicitly articulate a rule. Thus, it is not 'the rule,' as such, that can explain behavioural regularities, but the social facts or constraints that induce individuals to act in accordance to the rule' (Vanberg, 1986: 77-78). It should be noted that sometimes 'cultural rules' may reflect a particular feature of one specific social community. However, these cultural rules may also represent some 'universal' aspect of human social life in general (Brown, 1999; Brown, 2000). As far as I am concerned, Hayek never systematically discussed such differences.

such as the state, language, market, law, etc. - is an emergent order and it can have downward causal effect on its constituent elements (i.e. individuals), then how are we able to reconcile that with Hayek's methodological individualism? In order to answer this question, we need to understand Hayek's peculiar take on methodological individualism.

4.2. Hayek's Methodological Individualism

The origin of methodological individualism in the modern era can be traced back to the writings of Thomas Hobbes. In his discussion of government and society, Hobbes' method is to decompose or analyse civil society to its components i.e. individuals. Hobbes argues that 'it is necessary that we know the things that are to be compounded, before we can know the whole compound' for 'everything is best understood by its constitutive causes' (Quoted in: Lukes, 1973: 110). This view that social phenomena can be explained by regarding them as the outcome of the conduct of individual human beings and, furthermore, by understanding or explaining the conduct of the individuals in question, was common amongst the eighteenth-century philosophers. In the nineteenth-century, its most adamant exponent in the English-speaking world was arguably J. S. Mill. In his *System of Logic*, Mill writes 'The laws of the phenomena of society are, and can be, nothing but the laws of the actions and passions of human beings united together in the social state. Men, however, in a state of society, are still men; their actions and passions are obedient to the laws of individual human nature. Men are not, when brought together, converted into another kind of substance, with different properties' (Mill, 1843/1974: 879). The list of the names who subscribed to methodological individualism during the nineteenth and early twenty centuries is a long one which includes thinkers such as Carl Menger, Max Weber, Vilfredo Pareto, Ludwig von Mises and Joseph Schumpeter among many others. Schumpeter is an interesting case. He is probably the

one who coined the phrase 'methodological individualism' (Machlup, 1978: 454) for the first time. However, he neither practised nor advocated it as a prescriptive principle. In a speech which he delivered in Japan in 1931, he states 'the individual is only a product of the social environment and therefore it is wrong to start from him. We know that every individual is fashioned by the social influences in which he grows up. In this sense he is the product of the social entity or class and therefore not a free agent.' However, in the same speech he continues 'in some problems of sociology or political life and so on we have no choice but to start from the social whole. In other cases, such as market phenomena and most problems of modern industry, there is no choice but to start from the individual' (Schumpeter, 1991: 286). This passage indicates that Schumpeter was not a methodological individualist but rather a methodological pluralist. In this respect, Lars Udehn argues that 'Schumpeter did not follow Weber in his attempt to build an individualistic sociology. With respect to sociology, Schumpeter sided with Weber's methodological opposite Emile Durkheim' (Udehn, 2001: 106).

The important factor that distinguishes Hayek's methodological individualism from his predecessors is his emphasis on unintended consequences. The methodological individualists before Hayek had discussed the significance of individuals' actions in society. For them, social institutions and traditions are the results of the accumulation of individuals' actions throughout the history. According to this view, before individuals take any action, there is a particular goal in their mind that they would like to achieve. They are fully aware of what they want and consequently they devise a way of achieving it. The goals and the ways of achieving them may change during the time, but the mechanism itself remains constant. In other

words, there is always a goal(s) in the mind of an individual that is *followed* by an action(s) for achieving it.

Although Hayek did not reject this view, he believes that in terms of social sciences, it pays too much credit to intentions. What interested Hayek as a social scientist, however, was the unintended consequences of human actions. He maintains that the task of the social sciences is not to deal 'with the relations between things, but with the relations between men and things or the relations between man and man. They are concerned with man's actions, and their aim is to explain the unintended or un-designed results of the actions of many men' (Hayek, 2010: 88). Also, as the passage implies, Hayek's methodological individualism is not about individuals *per se*, but individuals in society. Hayek's methodological individualism deals with an individual as a *social agent* and does not attempt to fully understand individuals' conscious actions, since from his point of view, this is not the task of social scientists. 'It is a mistake' he says 'to which careless expressions by social scientists often give countenance, to believe that their aim is to *explain* conscious action. This, if it can be done at all, is a different task, the task of psychology' (Hayek, 2010: 103). The last sentence clearly indicates Hayek's scepticism regarding the possibility of explaining action. As I showed in the previous chapters, Hayek is not optimistic about the possibility of a complete explanation of the human psyche. It is in contrast with Steven Lukes' criticism against methodological individualism when he attributes this idea to Hayek that individuals are easy to understand but social phenomena are not (Lukes, 1977: 181) and Goldstein's view that 'methodological individualism cannot be separated from psychologism' (Goldstein, 1956: 806). In the case of Hayek, he discards the ideas that human actions should be reduced to psychology. With respect to Hayek's methodological individualism, he is neither interested in explaining

individuals' psyche since he thinks that is a task for psychology, nor does Hayek think that such a full psychological *explanation* is even possible.

The idiosyncratic character of Hayek's methodological individualism is that it is not interested in the conscious actions of individuals but rather in 'the unintended consequences of countless numbers of human actions' (Paul, 1988: 251). If all social phenomena were designed consciously, 'there would indeed be no room for theoretical sciences of society and there would be, as is often argued, only problems of psychology' Hayek argues (Hayek, 2010: 103). Hayek's concern with the unintended consequences of human actions, gives him a particular place among other adherents of methodological individualism. For Hayek, the unintended consequences of human actions is the official birth certificate of social sciences.²⁰ Although Hayek is very sympathetic to other supporters of methodological individualism such as Weber and Mises, in the case of the methodology of the social sciences, he is rather critical of Mises' *a priorism* (Hodgson, 1986: 215) and Weber's 'means-ends rationality' which 'consists in choosing the most adequate means to reach an end' (Udehn, 2001: 95-96). In this case, Weber and Mises' versions of methodological individualism are quite similar since in methodological matters in general and methodological individualism in particular, Mises was influenced by Weber (Boettke and Storr, 2002: 175). He was personally acquainted with Weber and frequently discussed methodological issues with him (Mises, 1978/2013: 3). In some important respects, however, Hayek is different from Weber, Mises and Popper.

In contrast to Mises, Weber and other supporters of methodological individualism, what interests Hayek are those actions and consequences that

²⁰ I borrow the phrase 'official birth certificate' from Professor Jack Birner. In a private correspondence with me (dated: 18th Nov 2017), after mentioning unintended consequences, Birner writes 'if there were no emergent phenomena psychology plus arithmetic would be sufficient to explain social phenomena'. I totally agree with Birner's point in this regard.

fall outside the sphere of means-ends rationality. Watkins' argument for methodological individualism as 'an analogous principle' of mechanism (Watkins, 1957: 105) or Galilean Newtonian physics in social science (Watkins, 1952b: 188), I believe, is not quite applicable to Hayek's methodological individualism. Watkins is absolutely right to argue that all supporters of methodological individualism are critical about methodological holism (Watkins, 1952a: 28 & 32), but his account of methodological individualism does not do justice to the crucial differences that exist between the varieties of methodological individualism. According to Hayek, means-ends rationality, is unable to understand some of the major concepts and issues in social sciences such as 'language or the market, of law and most other human institutions' (Hayek, 1943/2014: 78). Such delicate and immensely complicated systems 'worked and solved problems, frequently by means which proved to be the only possible means by which the result could be accomplished, but which could not possibly be the result of deliberate regulation because nobody understood them' (Hayek, 1933/1991: 22). As I said before, this does not mean that Hayek is completely against Mises's or Weber's version methodological individualism, but rather, he is sceptical about the explanatory rigour of their theories in clarifying the issues which he considers as the major questions of the social sciences. Hayek was acquainted with Mises and Weber's methodological individualism since his early intellectual life in Vienna (Dekker, 2016: 124-128), and it is my conjecture that Hayek's scepticism towards this kind of methodological individualism made him reluctant to fully support it and directed him to seek an alternative and refined version of methodological individualism which could help him to answer his own questions.

As he shows in his essay 'Individualism: True and False' (1945/2010), Hayek is much more inclined to associate himself with another intellectual

tradition which includes 'Bernard Mandeville and David Hume, and achieved full stature for the first time in the work of Josiah Tucker, Adam Ferguson, and Adam Smith and in that of their great contemporary, Edmund Burke' (1945/2010: 48). More than a decade later in *The Constitution of Liberty*, Hayek posits his 'antirationalistic position' which is not 'an abdication of reason but a rational examination of the field where reason is appropriately put in control' (Hayek, 1960/2011: 131). Again, he associates himself with the above intellectual tradition and argues that 'we must continue the efforts which David Hume commenced when he 'turned against the enlightenment its own weapons' and undertook 'to whittle down the claims of reason by the use of rational analysis' ' (Hayek, 1960/2011: 131). In his essays on Bernard Mandeville (1966/1991), David Hume (1963/1991) and Adam Smith (1976/1991), Hayek praises these men's efforts to establish the right method of social sciences and the true aim(s) of social scientists.

Hayek's methodological individualism is mostly a re-articulation of that intellectual tradition. Hayek is in agreement with Weber and Mises (and other supporters of methodological individualism) that a social scientist should always start from the individuals and not the collective concepts or wholes such as the 'state', 'class', 'society', etc. because, as Weber said, 'the use of the undifferentiated collective concepts of everyday speech is always a cloak for confusion of thought and action' (Weber, 1949: 110). But for Hayek, starting from the individual does not mean that the social sciences should be reduced to psychology or humans' intentions because first, methodological individualism is the method of studying individual's actions in *society* and not in *isolation* and second, even psychology as a scientific discipline is not able to fully understand the human psyche. Moreover - and it is what distinguishes him from Weber and Mises on the one hand and allies him with what he called 'true individualists' on the other hand - the task of

the social scientist is the study of the unintended consequences of the actions of individuals. Over the course of history, some of these unintended consequences of individuals' actions have spontaneously turned into the orders and practices that, although are not the result of anyone's intention or 'means-ends rationality', are immensely useful as a framework for individuals to conduct their actions in society and pursue their own goals. According to Hayek, these spontaneous orders are what a social scientist should study and that is what I now turn my attention to.

4.3. Spontaneous Order

Hayek's idea of spontaneous order (SO) plays a crucial role in his social philosophy and his emphasis on the limitation of social planning. Christina Petsoulas and Struan Jacobs have argued that it was Michael Polanyi who first coined the phrase 'spontaneous order' but it was Hayek who developed it into an elaborate explanatory theory (Petsoulas, 2001: 2; Jacobs, 1999: 116). Hayek became initially acquainted with the notion of SO through one of his Viennese contemporaries, Carl Menger. Menger's book *Principles of Economics* (1871/2004) was a textbook during the inter-war period and Hayek studied it as a student in the University of Vienna (Caldwell, 2004a: 19) and later on in his life, he wrote an introduction to it (Menger, 1871/2004: 11-36). Although the book - as its title implies - is on economics, Menger's writing deals with some aspects of the methodology of social science. Discussing non-economic issues in economic textbooks was not something exceptional among the Viennese intellectuals and in this respect, Menger's book fits quite well among his circle of students and friends. In his discussion about the intellectual atmosphere among the members of the Austrian School of Economics, Erwin Dekker writes 'with the possible exception of perhaps Böhm-Bawerk all subsequent members of the school have published widely on methodology, economics, political philosophy and

sociology. This is not surprising given the fact that the training at the university in Vienna and especially the intellectual conversations in Vienna were never restricted by disciplinary boundaries' (Dekker, 2016: 4).

One of the important insights of Menger in the book is the notion of unintended consequences of human action. He argued that there are numbers of economic practices and institutions that can be explained as the unintended consequences of intended human actions. This is especially the case when one seeks to explain the origin of money and the formation of prices (Menger, 1871/2004: 257-280; Aydinonat, 2008: 31-35). 'People in pursuing their own interests' Caldwell writes about Menger's work 'do not set out to create such institutions; they emerge, rather, as unintended, and in that sense spontaneous, orders' (Caldwell, 2010: 15). In his discussion about the nature and origin of money, Menger explains how the concept of money came into existence. According to Menger, if people barter, it is very difficult for them to get what they need in one or two transactions. If they have lambs and want corn, for example, they will not easily be able to exchange lambs with corn. They need to make some other intermediate trades - like lambs for fish, fish for chairs, chairs for cloths and cloths for corn - to finally get what they want. This is a hassle. But people notice that the hassle is much less when they trade what they have for good that is widely accepted. The good that is more saleable, eventually, becomes money. As societies became more complex and diverse, people start using precious metals (gold, silver, etc.) as money. 'Money is not the product of an agreement on the part of economizing men', Menger writes, 'nor the product of legislative acts. No one invented it. As economizing individuals in social situations became increasingly aware of their economic interest, they everywhere attained the simple knowledge that surrendering less saleable commodities for others of greater saleability brings them substantially closer

to the attainment of their specific economic purposes' (Menger, 1871/2004: 262). It is important to remember, however, that Menger limited his discussion in the book just to the 'economizing individual' (Menger, 1871/2004: 257) and he did not generalise his method to the other fields of social science. This was a task that was taken up by Hayek.

As I mentioned before, Hayek became acquainted with Menger's ideas in the early years of his intellectual life. But he developed and generalised Menger's notion of unintended consequences to the other fields of social science. According to Hayek, not only money, but also the other important social institutions such as law, language and market have come to existence by the same procedure. All of these social institutions, Hayek maintains, are 'the result of human action but not of human design'(Hayek, 1967/2014). The process that creates these institutions is what he calls 'spontaneous order'. Failing to appreciate the importance of this kind of order in society, Hayek argues, can lead to catastrophic consequences for a given society. Hayek's notion of spontaneous order is deeply connected to his understanding of the evolutionary theory as I have explained in the previous chapters. I shall make this connection clearer in the following pages, but before that, I would like to dwell a bit on Hayek's definition of SO.

4.3.1. 'Natural' vs. 'Artificial': A False Dichotomy

Hayek starts his discussion of SO by pointing out the old dichotomy between the natural and artificial. According to Hayek, it was ancient Greeks who first divided all the phenomena into either natural or *physei* and artificial or *nomos* or *thesei*. 'The distinction', Hayek writes, 'intended may be either between objects which existed independently and objects which were the results of human *action*, or between objects which arose independently of, and objects which arose as the result of, human *design*' (Hayek, 1973/1998: 20). Although this approach had received some criticisms over time, with the rise

of constructive rationalism in the sixteenth and seventeenth centuries, it became the dominant view. In his discussion of natural law, Hayek argues that before the sixteenth and seventeenth centuries, all the schools of natural law agree that 'positive law derives its validity from some rules that have not in this sense been made by men but which can be 'found' and that these rules provide both the criterion for the justice of positive law and the ground for men's obedience to it' (Hayek, 1960/2011: 356). The role of reason in this interpretation was to study established rules in order to reveal or distinguish the underlying 'laws' that govern them. During the sixteenth and seventeenth centuries, however, both the terms 'reason' and 'natural law' completely changed their meaning. 'Reason', which had included the capacity of the mind' Hayek maintains 'to distinguish between good and evil, that is between what was and what was not in accordance with established rules, came to mean a capacity to construct such rules by deduction from explicit premises. The conception of natural law was thereby turned into that of a 'law of reason' and thus almost into the opposite of what it had meant' (Hayek, 1973/1998: 21). According to Hayek, natural law theorists such as Grotius and his successors, shared with their positivist antagonists the conception that all law was made by reason or could at least be fully justified by it, and differed from it only in the assumption that law could be logically derived from *a priori* premises, while positivism 'regarded it as a deliberate construction based on empirical knowledge of the effects it would have on the achievement of desirable human purposes' (Hayek, 1973/1998: 21).

Although Hayek does not reject the dichotomy between natural and artificial in principle, he argues that there are social institutions such as money, language, market and morals that belong neither to natural nor to artificial types, but rather, to a different category. Like his methodological individualism, Hayek is more interested in those institutions which are the

result of human action but not of human design. Such institutions, according to Hayek, are orders which have been *grown* over the course of history and not deliberately *made* at some point by human agents. 'It would be no exaggeration to say', Hayek argues, 'that social theory begins with—and has an object only because of—the discovery that there exist orderly structures which are the product of the action of many men but are not the result of human design' (Hayek, 1973/1998: 37). Hayek uses the term *Cosmos* (originally from Greek *Kosmos*) for the grown order and *Taxis* for the made order. By order, he means '*a state of affairs in which a multiplicity of elements of various kinds are so related to each other that we may learn from our acquaintance with some spatial or temporal part of the whole to form correct expectations concerning the rest, or at least expectations which have a good chance of proving correct*' (Hayek, 1973/1998: 36). Hayek's definition of order as stated above, is different from his notion of rules. He specifies a rule of conduct as a regularity in the behaviour of an individual human or animal, regardless of whether the individual is aware of the regularity or not and whether the rule is inherited or learned (Hayek, 1967a/2014: 278-279). Instead of rules, Hayek occasionally uses the terms 'customs', 'norms', 'practices', 'habits', and 'traditions'. And instead of orders, he sometimes writes 'system', 'structure' or 'pattern'. Although Hayek's definitions of 'rules' and 'order' remained unclear, for my purpose it suffices to note that a rule is a property of the individual, while an order is a property of the group.

According to Hayek, by the rise of 'constructive rationalism' in the seventeenth century, most of the social scientists completely ignored this third conception of order. The advocates of constructive rationalism and social contract theorists believed that social order and its institutions are *made* orders and since human agents deliberately design all social

institutions, therefore they are subject to change and improvement by individuals' will. Hayek believes that this kind of mentality led to the extensive use of anthropomorphic language in the social sciences. This anthropomorphic language embraces two closely related views. One 'primitive attitude which *personifies* such entities as society by ascribing to them possession of a mind which is properly described as *anthropomorphism* or *animism*, and the slightly more sophisticated interpretation which ascribes their order and functioning to the design of some distinct agency, and which is better described as *intentionalism*, *artificialism*, or, as we do here, *constructivism*' Hayek writes (Hayek, 1973/1998: 27). Hayek argues that the SO (or grown order or Cosmos), has its own distinguishing properties which are absent in the made order or Taxis.

4.3.2. Hayek's Definition and Properties of Spontaneous Order

Hayek points out that the 'spontaneous formation of order' is not just limited to the social realm. For Hayek, the spontaneous order of the market is only one example of the general principles of spontaneous order, examples of which can be found in the physical as well as biological and certainly in the social sphere. The peculiar feature that all spontaneous orders have in common is that they emerge out of the interaction of a multiplicity of elements which, in their responses to their particular environment, are governed by certain general rules (Hayek, 1964: 6). As I mentioned above, these rules may be inherited or learned and the elements involved in it may be aware of them (human individuals) or not (animals, physical and chemical components). It is the character of these rules that is crucial for the character of the overall order or pattern that will emerge out of the interaction of the elements (Hayek, 1973/1998: 43). In other words, the character of these rules will determine certain general features of the overall

order, while the particular content of the resulting order will always be dependent on the specific circumstances to which the elements respond (Vanberg, 1986: 77). Hayek numerates three properties for spontaneous orders.

First, *complexity*: Hayek maintains that made order or *Taxis* is much simpler in comparison with grown order or *Cosmos*. Made orders are 'relatively *simple*', he writes, 'or at least necessarily confined to such moderate degrees of complexity as the maker can still survey' (Hayek, 1973/1998: 38). Although in this passage Hayek discusses the simplicity of the made order in comparison with the grown order, he believes that what in general distinguishes complex phenomena from the simple ones is our capacity to *explain* and *predict* their behaviour with a high degree of *probability* (Hayek, 1955/2014a: 199-200). It seems that Hayek suggests that even in physics, the best that we can do is to achieve a high degree of probability and not total certainty. 'Explanation' and 'prediction', of course, do not refer to an individual event but always to phenomena of a certain kind or class' he writes in his article 'Degrees of Explanation', 'they will always state only some and never all the properties of any particular phenomenon to which they refer. In addition, each property stated will be expressed not as a unique value or magnitude but as a range, however narrow, within which the property will fall. Because of the limitations of the possible precision of measurement, this is true even of the most exact predictions of physics, which, strictly speaking, never say more than that the magnitude in question will fall within a certain interval' (Hayek, 1955/2014a: 201). In simple phenomena (physics), it is possible to identify and observe all the variables that are to be explained and it is assumed that any important factor which determines the observed event will itself be directly observable and measurable; but this is not true of complex

phenomena (social) where large numbers are involved. In his Nobel Prize lecture, 'The Pretence of Knowledge' (Hayek, 1975/2014), Hayek argues that the differences between the scientific disciplines is one of degree rather than of kind and the difficulty of a science of society stems not so much from the subjective nature of our knowledge of social affairs but from the complexity of those affairs which makes it impossible for the observer to reproduce their elements in a manageable form. Because of that, it is only possible to have verifiable/refutable *laws* for simple phenomena and not for the complex ones. The discovery of laws, Hayek maintains, is not the hallmark of all scientific procedure, but rather it is only appreciate for study of simple phenomena. In the field of complex phenomena Hayek argues 'the term 'law' as well as the concepts of cause and effect are not applicable without such modification as to deprive them of their ordinary meaning' (Hayek, 1964/2014: 277).

Hayek maintains that the most important example of this sort of complex phenomena in the natural sciences is Darwin's theory of evolution (Hayek, 1955/2014a: 203; Hayek, 1964/2014: 266). In dealing with complex phenomena, the best that a scientist can do is to provide theories for 'pattern prediction'(Hayek, 1964/2014: 266). By pattern prediction, he means 'the general attributes of the structures that will form themselves, but not containing specific statements about the individual elements of which the structures will be made up' (Hayek, 1975/2014: 365). Hayek argues that the complexity increases as we proceed from the inanimate to the more highly organized animate and then social phenomena (Hayek, 1964/2014: 261). The use of 'pattern prediction' for complex phenomena is to 'ascertain only some but not all the particular circumstances which determine the outcome of a given process; and in consequence we are able to predict only some but not all the properties of the result we have to expect' (Hayek,

1975/2014: 371). It seems that Hayek's theory in this respect, is an extension of his theory of mind (Papaioannou, 2012: 38). As I explained in chapters two and three, one of the implications of Hayek's theory of mind was that it is logically impossible to fully explain the mechanism of the human mind since 'any apparatus of classification must possess a structure of a higher degree of complexity than is possessed by the objects which it classifies' (Hayek, 1952/1976: 185).

Hayek believes that society, law, language and the market are also some examples of complex phenomena. Although partial theories can be produced to shed some light on such complex phenomena and bestow us with a range of expected results, it is impossible to have knowledge of *causal laws* which make us able to provide a total explanation of such phenomena. This difficulty stems from the fact that each of these complex phenomena are composed of many elements and variables which relate them to some other variables. In a market and society, it even gets more complex since individuals have different views, intentions, purposes and knowledge about themselves and the world around them. The very insight which this theory provides is that 'almost any event in the course of a man's life' Hayek writes 'may have some effect on almost any of his future actions, makes it impossible that we translate our theoretical knowledge into predictions of specific events' (Hayek, 1964/2014: 269). With such complexity, Hayek argues, no person or group of people would be able to know and provide a *total causal explanation or predict the precise result* of such phenomena. 'The number of separate variables which in any particular social phenomenon', Hayek argues, 'will determine the result of a given change will as a rule be far too large for any human mind to master and manipulate them effectively. In consequence our knowledge of the principle by which these phenomena are produced will rarely if ever enable us to predict the

precise result of any concrete situation' (Hayek, 2010: 106). Although this might cause some frustrations among economists such as Mark Blaug, who said 'in roughly 10,000 pages that Hayek wrote after 1934, I do not recall a single page in which we are told what we can or cannot predict in economics'(quoted in: Steele, 1993/2007: 81), pattern prediction can give us an *orientation* that 'will still make the world around us a more familiar world in which we can move with greater confidence that we shall not be disappointed because we can at least exclude certain eventualities. It makes it a more orderly world in which the events make sense because we can at least say in general terms how they hang together and are able to form a coherent picture of them. Though we are not in a position to specify precisely what to expect, or even to list all the possibilities, each observed pattern has meaning in the sense that it limits the possibilities of what else may occur' (Hayek, 1955/2014a: 209).

Second, the *abstract* character of spontaneous order. Hayek argues that made orders (Taxis) are concrete, that is to say, they present themselves to our sense and can thus be intuitively perceived by inspection. On the other hand, spontaneous orders such as the mind, market or society consist of 'a system of abstract relations between elements which are also defined only by abstract properties' (Hayek, 1973/1998: 39). Unlike made orders, the spontaneous orders cannot be perceived intuitively and are recognizable only 'on the basis of a theory accounting for their character' (Hayek, 1973/1998: 39). According to Hayek, the significance of the abstract character of such orders is that they may persist even if all the composing elements change. All that is necessary to maintain such an abstract order is that 'a certain structure of relationships be maintained, or that elements of a certain kind (but variable in number) continue to be related in a certain manner' (Hayek, 1973/1998: 39). This view is also

related to Hayek's notion of mind as a complex *relational* structure of sensations (Hayek, 1952/1976: 170). In later reminiscences about his project in *The Sensory Order*, Hayek pointed out that he was finally 'forced to conclude that the whole structure of the sensory world was derived from 'relations' and one might therefore throw out altogether the concept of pure and simple sensations, which plays such a large role in Mach' (Caldwell, 2004b: 242). For Hayek, the rules which determine the spontaneous order, whether it is the mind, market or language, determine only its abstract character, while the detail depends on the particular circumstances known only to its individual members or components (Hayek, 1965/2014: 50).

For Hayek, we can only hope to discover the rules which bring about the order, but we will not be able to know all the elements comprising it, or the particular circumstances in which they are placed. We can influence only the general character rather than the particular details of spontaneous orders (Petsoulas, 2001: 14; Papaioannou, 2012: 95). This aspect of spontaneous order is deeply related to the first one, i.e. complexity. Due to the complexity of spontaneous order, neither observer nor the individual who is involved in the order, are not able to know all the variables and their inter-relations. What a scientist can do, Hayek maintains, in dealing with spontaneous orders such as the market or biological evolution, is to provide an abstract relational framework which outlines the general functions of the order. Hayek's scepticism becomes more obvious when he argues that perfect knowledge about the details and particular circumstances is not and cannot be achieved and embedded in the theory. In his essay 'The Use of Knowledge in Society' (1945/2014), Hayek argues that if the assumptions of perfect knowledge of the market mechanism are granted, then there is no problem for conducting rational planning in economics. As Louis Hunt says 'the practical difficulty of solving a large number of complex equations

remains, but this is a *technical* rather than an *economic* problem' (Hunt, 2007: 48). The genuine economic problem arises, according to Hayek, when one recognises that 'the knowledge of the circumstances of which we must make use never exists in concentrated or integrated form but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess' (Hayek, 1945/2014: 77). Thus, the problem of economics is 'the utilization of knowledge which is not given to anyone in its totality'(Hayek, 1945/2014: 78).

The abstract character of spontaneous order, like Darwin's theory of evolution, provides a relational framework in which one can make sense of reality. The composing parts of this framework may change, Hayek maintains, but the framework itself remains permanent. As I said above, there are some astonishing similarities between Hayek's theory of spontaneous order and his theory of mind in chapters two and three. In order to explain such complex and grown orders such as the mind or society, this abstract and general characteristic of spontaneous order becomes very helpful 'since we can know at most the rules observed by the elements of various kinds of which the structures are made up, but not all the individual elements and never all the particular circumstances in which each of them is placed, our knowledge will be restricted to the general character of the order which will form itself' (Hayek, 1973/1998: 41).

Third, the *purpose*. Hayek argues that the SO does not seek any purpose 'since such an order has not been created by an outside agency, the order as such also can have no purpose, although its existence may be very serviceable to the individuals which move within such order' (Hayek, 1973/1998: 39). Although the SO does not have any purpose, its constituent elements show purposive actions. In this respect, 'an action is 'purposive' when it tends to preserve the order to which the element belongs'

(Petsoulas, 2001: 13). So 'purposive' is a 'teleological shorthand' for Hayek which indicates that 'the elements have acquired regularities of conduct conducive to the maintenance of the order presumably because those who did act in certain ways had within the resulting order a better chance of survival than those who did not' (Hayek, 1973/1998: 39). Hayek rather prefers to use the term 'function' instead of 'purpose' (Hayek, 1973/1998: 39). It is important to remember that the common feature of all spontaneous orders is that 'they emerge out of the interaction of a multiplicity of elements which, in their responses to their particular environment, are governed by certain general rules. It is the character of these rules that is crucial for the character of the overall order or pattern that will emerge out of the interaction of the elements' (Vanberg, 1994b: 78). So for Hayek, the constituent elements of a given spontaneous order are first and foremost, rule governed and second, they may follow some purposes for their own sake (in case of market or society). But the overall constitution of the spontaneous order does not seek any end or purpose since there is no head or centre of command in charge of overall order.

As many scholars have pointed out, Hayek's view in this regard is quite similar to Darwin's theory of evolution and Adam Smith's notion of the 'invisible hand' (Hunt, 2007: 43-44; Krstić, 2012: 124; Tomlinson, 1990: 43; Barry, 1979: 114; Butler, 1987: 116; Barry, 1984: 263; Skarbek, 2013: 105-107). According to Hayek's reading of Adam Smith (Hayek, 1968/2014: 309; Hayek, 1967/2014: 297; Hayek, 1961/2014: 383; Hayek, 1976/1991), the notion of the 'invisible hand' explains the way in which the market coordinates the activity and behaviour of many individuals without the need of any central control. The order here is the result of the interaction of self-interested individuals pursuing their own gain without any necessary concern for the good of the whole (Hunt, 2007: 44). 'The immediate cause, the

impulse which drives them to act', Hayek says in explaining the process, 'will be something affecting them only; and it is merely because in doing so they are restrained by rules that an overall order results, while this consequence of observing these rules is wholly beyond their knowledge or intentions' (Hayek, 1967a/2014: 289).

As I explained in the discussion on Darwin's theory of evolution, Hayek maintains that the lack of intention and purpose is also evident in Darwin's theory. The theory of evolution argues that there is no intelligent designer responsible for creating such a wide variety of organisms. The whole notion of design in Darwin's theory can be reduced into a series of elementary and un-designed processes. In both theories, i.e. Smith's notion of the 'invisible hand' and Darwin's theory of evolution, the overall order of things neither have a head nor seeks a purpose. Hayek's criticisms against constructive rationalists for using the 'anthropomorphic' language (Hayek, 1967/2014: 299-300; Hayek, 1973/1998: 26-29) should be seen as a continuation of his discussion on the social spontaneous order. In his article 'The Confusion of Language in Political Thought' (1968/1978), Hayek clearly express his reservation about the use of 'anthropomorphic' language in social sciences. 'The important problems are', he says, 'in large measure obscured by the use of words which imply anthropomorphic or personalised explanations of social institutions. These explanations interpret the general rules which guide action directed at particular purposes' (Hayek, 1968/1978: 72). In the same article, Hayek argues that the anthropomorphic connotations of the term 'order' 'are apt to conceal the fundamental truth that all deliberate efforts to bring about a social order by arrangement or organization (i.e. by assigning to particular elements specified functions or tasks) take place within a more comprehensive spontaneous order which is not the result of such design' (Hayek, 1968/1978: 73).

These reflections lead Hayek to make a distinction between economics and *Catallaxy* in his writings (Hayek, 1968/2014: 307-308; Hayek, 1968/1978: 90; Hayek, 1976/1998: 70-71). Hayek argues that the term 'economics' is misleading in explaining the mechanism of the market since economics in the strict sense of the word 'consists of a complex of activities by which a given set of means is allocated in accordance with a unitary plan among the competing ends according to their relative importance' (Hayek, 1976/1998: 107). For Hayek, however, the market order 'serves no such single order of ends' (Hayek, 1976/1998: 107). To argue that the economic activities of the individual members of society 'are or ought to be part of one economy in the strict sense of this term' Hayek maintains 'and that what is commonly described as the economy of a country or a society ought to be ordered and judged by the same criteria as an economy proper, is a chief source of error in this field' (Hayek, 1976/1998: 108). In contrast to this view of the market order, Hayek suggests his notion of Catallaxy in which 'the cosmos of the market neither is nor could be governed by such a single scale of ends; it serves the multiplicity of separate and incommensurable ends of all its separate members' (Hayek, 1976/1998: 108). Hayek uses the example of games to illustrate his point. According to Hayek, Catallaxy proceeds like all games 'according to rules guiding the actions of individual participants whose aims, skills, and knowledge are different, with the consequence that the outcome will be unpredictable and that there will regularly be winners and losers' (Hayek, 1976/1998: 71). As far as the game is played by the rules and no one cheats, the result should be accepted by all participants. Hayek argues that 'it would be nonsensical to demand that the results for the different players be just' since 'they will of necessity be determined partly by skill and partly by luck' (Hayek, 1976/1998: 71). For Hayek, the notion of Catallaxy provides a wide framework which does not seek any purpose but rather let the individual members of society follow

their own different and sometimes contradictory purposes. As Milos Krstic has put it, the functioning of Catallaxy shows that firstly, 'the outcome of Catallaxy is, to a large extent, unpredictable, because of the unpredictability and flexibility of the conditions under which Catallaxy occurs' and secondly 'Catallaxy is a neutral process, based on abstract and universal rules. Universal rules have not been invented or planned; their practical rationality has not been examined, and then applied' (Krstić, 2012: 129). Hayek does not limit his notion of SO to the market mechanism, but rather, he extends its application to rules outside the field of economics. He argues that both the rules that individuals follow in society and the laws that govern such societies are evolved through an evolutionary or spontaneous process.

4.4. Spontaneous Order and the Cultural Evolution

Hayek maintains that 'man is as much a rule-following animal as a purpose-seeking one' (Hayek, 1973/1998: 11). What he means is that human beings do not only act purposefully to achieve what they want, but they also act in a particular fashion by following some rules. These rules, according to Hayek, have played an important role throughout history in making humans more cooperative and therefore increased their chance of survival. Ulrich Witt argues that the concept of social and cultural evolution started to appear in Hayek's writings from the 1960s onwards. He maintains that the idea of evolution is 'totally absent' in his earlier works and he never 'made an effort to reconsider his approach to economics in evolutionary terms' (Witt, 1994: 224). Although it is true that Hayek did not *explicitly* formulate his ideas on the evolution theory in his pre-1960s works, that does not imply that the idea is 'totally absent' in his writings. It should be remembered that Hayek takes the idea of spontaneous order and evolution as 'twin concepts' (Hayek, 1976/1998: 158). It can be said that in the modern era, the idea of spontaneous order is expressed in two major traditions, one is Austrian

economics and the other one is Scottish moral philosophy (Smith, 2014: 224). As I have tried to show so far, Hayek was quite aware of both traditions and he launched his criticism against 'constructive rationalists' and 'socialism' from such standpoints. Moreover, what Hayek attempted to do in *The Sensory Order* (1952/1976) was to provide an evolutionary explanation of the function and formation of the mind. In this respect, his effort was intentionally based on the principles of evolution. Later in his life, when he reminisced on his work on *The Sensory Order*, he said 'my conception of evolution, of a spontaneous order and of the methods and limits of our endeavours to explain complex phenomena have been formed largely in the course of the work on that book [*The Sensory Order*]. As I was using the work I had done in my student days on theoretical psychology in forming my views on the methodology of the social science, so the working out of my earlier ideas on psychology with the help of what I had learnt in the social sciences helped me greatly in all my later scientific development' (Hayek, 1976/1998: 199-200). So, in contrast to Witt's claim, Hayek was aware of the idea of evolution and used it in his writings even before the 1960s.

Hayek came to *explicitly* express his ideas on cultural evolution after the 1960s and especially in *The Constitution of Liberty* (1960/2011), *Law, Legislation and Liberty* (1973/1998; 1976/1998; 1979/1998) and *The Fatal Conceit* (1988/1992). Hayek's writings on cultural evolution are by no means neutral. As Michael Oakeshott says in his review on *The Constitution of Liberty*, Hayek 'is recommending at the same time as he is explaining' (Oakeshott, 1960/2004: 301). Hayek's theory of cultural evolution simultaneously explains how order can appear without being the result of human intention and how such an order can be seen as a superior to artificial ones. Anna Galeotti captures the core of Hayek's idea of cultural evolution

as the following: 'from casual human interactions in the various spheres of social interchange, patterns emerge unintentionally. Given the human need for rules, there is a tendency to repeat those patterns as a guideline for action in future instances of similar behaviour. Then, among the number of spontaneous patterns that emerge in a given community at a given time, the most successful one has a chance to be repeated until it rules out the others' (Galeotti, 1987: 171). Now, there are several points that should be emphasised. First, the mechanism of cultural evolution for Hayek, is a Lamarckian rather than a Darwinian one. In this respect, Hayek writes '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, 1988/1992: 25). For Hayek, cultural evolution is brought about through the transmission of habits, rules and information not only through one's biological parents, but from an 'indefinite number of 'ancestors'' (Hayek, 1988/1992: 25). Since the mechanism of cultural evolution is Lamarckian and based on the transmission of learned characteristics, it moves incomparably faster than biological evolution. Second, although Hayek makes it clear that the transmission (both genetic and to large extent the cultural) of the rules of conduct takes place from 'individual to individual', the natural selection of rules operates 'on the basis of the greater or lesser efficiency of the resulting *order of the group*' (Hayek, 1967a/2014: 279). That is to say, in Hayek's theory of cultural evolution, the 'unit of selection' is the group rather than the individual. Hayek quotes Alexander Carr-Saunders that 'those groups practising the most advantageous customs will have an advantage in the constant struggle with adjacent groups' (Hayek, 1967a/2014: 279). This means that groups with more efficient rules and orders, are more likely to survive and grow, while groups with less efficient rules and order are in danger to perish and disappear.

Now the issue of group selection raises a crucial question about Hayek's compliance with his methodological individualism. If Hayek sees individuals as the only real actors in society, how is it possible for him to consider the 'group' as the unit of selection in his theory of cultural evolution? Hayek himself is not quite clear on this matter. Viktor Vanberg has suggested that in terms of 'group selection' Hayek was obviously influenced by such discussion in biology and notably by V. C. Wynne-Edwards' treatise on the subject (Vanberg, 1986: 85-86). In his lecture 'The Rules of Morality Are Not the Conclusions of Our Reason' Hayek notes that civilization was made possible 'at least as much if not more than by the growth of knowledge or intelligence, by some moral beliefs that asserted themselves, not by men increasingly understanding their advantages, but simply and solely by the selection of those groups which by adhering to them became able to build much better than they knew ... It had been mystical or supernatural beliefs that made groups stick to the traditions of certain practices long enough to give natural selection time to pick from the great variety of groups those with customs which most effectively assisted the growth of their numbers' (Hayek, 1983b: 5 & 7). The above passage and many others (see also: Hayek, 1970/2014: 344; Hayek, 1979/1998: 5; Hayek, 1976/1998: 155), indicate that Hayek excessively used the concept of group selection in his later works. Such a shift from his early methodological individualism to a sort of collectivism has puzzled many of Hayek's scholars. Some have suggested that there is no contradiction between Hayek's methodological individualism and his conception of group selection (Ebenstein, 2001: 232; Gaus, 2013: 63-64; Caldwell, 2004a: 314-316). Ebenstein quotes a passage from Hayek's *Denationalisation of Money* (1976), that it is 'always the new ideas of comparatively few which shape evolution People who have the better ideas will determine developments because they will be imitated' (Ebenstein, 2001: 232). According to this

interpretation, it is the individual who initiated an idea into a group and then if the idea was successful, it will be slowly accepted and imitated by the other members of his/her group. Such is, Hayek says, our heritage. This is the way that has made possible our civilisation and which is 'literally, responsible for the fact that so many people can be alive today' (Shearmur, 1996: 83). Those groups and societies which are more open to new ideas, have a better chance to survive and flourish. Ebenstein even maintains that 'Hayek's argument for liberty was in largest part that it allows successful development to occur within and among societies' (Ebenstein, 2001: 233). The above interpretation poses us a question. If Hayek's theory is based on individuals' innovations and imitations, then as Vanberg has rightly observed (Vanberg, 1986), there is no need for such an emphasis on group selection. The whole procedure of selection can be explained in terms of individuals who either find a new way for solving their problems or imitate the successful examples in a particular matter. Moreover, Ebenstein does not explain the situations in which some behaviours may be beneficial for an individual who is practicing them but disadvantageous for the group. In such scenarios, what would be the unit of selection? The individual or the group? In such cases it seems that Hayek's answer tends to lean towards the group, since if a given action is only beneficial for the private individual and not for social interaction, then it cannot be considered as 'rules of just conduct'. Hayek writes 'individual would succeed in rationally constructing rules which would be more effective for their purpose than those which have been gradually evolved; and, even if he did, they could not really serve their purpose unless they were observed by all' (Hayek, 1960/2011: 128).

Roland Kley, on the other hand, has argued that although Hayek is a methodological individualist, his social evolutionary story 'has been told in collectivist terms, and I think it is this version to which he actually

subscribes' (Kley, 1994: 162). Kley associates Hayek's idea of group selection with a commitment to functionalist explanation (Kley, 1994: 161-163). According to Kley, Hayek's notion of group selection leads him to holistic functionalism. He maintains that for Hayek, rules 'must be seen as being integrated into a complex body of rules which as a *whole* serves the group's existence and determines its survival chances' (Kley, 1994: 170). The problem with Hayek's holistic functionalism, Kley suggests, is that he is not able to provide an explanation which is in accordance with his methodological individualism. In the same way, Vanberg (1986) has also argued that Hayek's notion of group selection contradicts his methodological individualism. After discussing the different problems of the notion of group selection, Vanberg concludes 'the notion of cultural group selection is theoretically vague, inconsistent with the basic thrust of Hayek's individualistic approach, and faulty judged on its own grounds' (Vanberg, 1986: 97).

Horst Feldmann rejected Vanberg's conclusion and has tried to resolve the tension between Hayek's methodological individualism and his cultural group selection by suggesting two different levels of selection. He maintains that Hayek differentiated 'between the rules that guide the behaviour of individual members of a group, and the overall order of actions that results from these rules for the group as a whole. According to Hayek, the whole order of actions is crucial for a group's productivity and survival' (Feldmann, 2005: 16). The rules of the group, Feldmann argues, are 'welfare-increasing, depending on how well the rules of conduct are adapted to the environment and to what extent the members of the group can be made to act efficiently, using the knowledge dispersed throughout society' (Feldmann, 2005: 16). So, if the order of actions is relatively efficient in comparison to that of other groups, the needs of its members can be satisfied relatively well, and

therefore they will have better chances of survival. For the same reason, members of other groups are attracted to it. Feldmann concludes that Hayek's explanations 'are fully in line with methodological individualism' (Feldmann, 2005: 16). In his attempt for resolving the problem of Hayek's collectivism with his methodological individualism, Feldmann – like Hayek himself - neglects the fact that for a methodological individualist, the very existence of a collective concept such as a 'group' is problematic, or at least needs more explanation. For a methodological individualist, a 'group', 'community', 'state' and all the other collective concepts, don't actually exist. They are, as Weber said, 'always a cloak for confusion of thought and action'. Moreover, Feldmann's account is unable to answer one of the big questions in case of group selection, i.e. the issue of the free rider.

Hayek's notion of cultural group selection (like its counterpart, group selection in biology) is unable to provide an adequate answer to the question of free riders in society. This problem arises when we consider some behavioural patterns that are advantageous to the group in which they are practiced, but disadvantageous on the part of the individuals exhibiting them. In such cases, those bearing the costs of socially beneficial but self-sacrificing behaviour would be relatively worse off than those who free ride, who enjoy the group advantage without sharing the costs of its production. It can be said that in the case of cultural evolution, such problems can be easily overcome by deliberately devising some constraints that prevent free riders from those socially disadvantageous behaviours. Including such mechanisms in a theory of cultural evolution, however, would mean to assign a significant role to organized, political processes and would not seem 'to leave much room for some autonomous process of group selection operating beyond the level of man's choice' (Vanberg, 1986: 88). It seems that Hayek never seriously tried to tackle these issues in his late writings on cultural

evolution. Whether Hayek was aware of the incompatibility of his methodological individualism with his notion of cultural group selection remains unclear to me. Even when he discusses the differences between the processes of cultural evolution with the Darwinian theory of evolution, he neither implicitly nor explicitly mentions the dissimilarity between the unit of selection in Darwin's theory and his own theory. In the end, I agree with Victor Venberg that there is a 'tacit shift' in Hayek's argument 'from the notion that behavioural regularities emerge and prevail because they benefit the individual practicing them, to the quite different notions that rules come to be observed because they are advantageous to the group' (Vanberg, 1986: 83), though the reason of this shift is unknown to me.

4.5. Conclusion

In this chapter I have discussed Hayek's account of the evolution of social institutions. I have tried to outline Hayek's particular understanding of methodological individualism and have pointed out some differences between him and other advocates of methodological individualism. Although Hayek is a methodological individualist, what makes him different from other advocates of methodological individualism is that he is not primarily concerned about individuals' intended actions. Hayek believes that the main task of social scientists is to explain the unintended consequences of human action. Such explanation, according to Hayek, cannot be complete since all the relevant factors and their inter-relationship are unknown to us. What can be done, however, is to provide a 'pattern prediction' of unintended consequences. Hayek maintains that many great achievements of human civilisation are the result of human action but not human design. Some of these achievements are language, morality, law and market.

For Hayek, these social institutions are 'spontaneous orders'; they act orderly but they are not intentionally designed by anyone. They have, like

the mind, spontaneously evolved over the course of history. I have mentioned three major characteristics of such spontaneous order as complex, abstract and non-purposeful. It can be said that the same characteristics can be applied to Hayek's notion of the mind. The reason for such similarity lies in the fact that from Hayek's point of view, both the mind and society have evolved by almost the same mechanism. As I have shown above, Hayek believes that the spontaneous formation of social institutions is similar to biological evolution. There are, however, two major differences between Hayek's theory and Darwin's. Hayek explicitly says that cultural evolution is a Lamarckian one, that is to say it is not limited to biological traits but also takes into account acquired characteristics. Moreover, the unit of selection in Hayek's theory of cultural evolution is not the individual but rather the group. The issue of 'group selection' is one of the most discussed problems in Hayek's thought. The question is whether Hayek's notion of 'group selection' is consistent with his methodological individualism or not. Hayek's response to this issue remains unclear to me. As far as I am concerned, he did not express his view on this matter. Some scholars have tried to defend Hayek by showing that there is no inconsistency between Hayek's methodological individualism and his notion of 'group selection'. Although such endeavours provide an answer to some issues in Hayek's thought, they simultaneously raise other (and I assume more serious) questions. Hayek's notion of 'group selection', I believe, is problematic and it is not clear to me why Hayek decided to employ such a notion in his theory. In the next chapter, I shall argue that despite what Hayek said about his position, his reliance on evolutionary theory made him close to the conservative mode of thinking.

Chapter. V: Conservatism

Ideology is not the quasi-divine parent of political activity;

It turns out to be its earthly step-child

Michael Oakeshott (1962/1991: 51)

5.1. Introduction

In this chapter, I seek to achieve two goals. First, I will present an account of conservatism and second, I shall discuss Hayek's relation to my reading of conservatism. In order to perform the first task, after discussing different approaches to the study of conservatism, I shall argue that the main doctrines of conservatism are scepticism/pessimism, traditionalism and an organic view of society. By pursuing each doctrine in the writings of major conservative thinkers, I will make a connection between these three doctrines. My main argument in this section is that scepticism is at the core of political conservatism. Then I turn my attention to Hayek's writings and try to identify these main doctrines in Hayek's thoughts. I shall propose that there are many similarities between the main doctrines of conservatism and Hayek's political thought.

As I discussed in previous chapters, the concept of evolution is at the heart of Hayek's writings. From Hayek's point of view the process of evolution is the best methodological tool that can be used for explaining complex phenomena such as the mind and society. In both spheres, Hayek is a determinist but not a reductionist. That is to say, according to Hayek, the existence of the mind and society is determined by their components but they are not reducible to them. The reason for such irreducibility is that these components stand in particular relations to one another that form an emergent whole with specific characteristics. Both the mind and society are the emergent orders which have evolved through the process of evolution (biological and cultural) over time and they have their own particular

characteristics which cannot be found in their components when taken in isolation. Hayek explicitly expresses his doubt about the reductionism in his 'The Theory of Complex Phenomena' (1964/2014). There, regarding the reductionist explanation of mind, he says, 'a full reduction would be achieved only if we were able to substitute for a description of events in biological or mental terms a description in physical terms which included an exhaustive enumeration of all the physical circumstances which constitute a necessary and sufficient condition of the biological or mental phenomena in question' (Hayek, 1964/2014: 274).²¹ However, Hayek believes that such a full explanation is not possible, neither for mind nor for society. Hayek's alternative way of dealing with complex phenomena is the mechanism of evolution.

Understanding the mechanism of evolution, Hayek maintains, can provide us with an 'explanation of principle' or a 'general pattern whose detail we can never fill in' (Hayek, 1964/2014: 266). The reason that we cannot fill in all the required details is that, unlike the explanation of simple phenomena in physics, it is impossible to identify and control all the determining factors that have an effect on the overall order of complex phenomena (Hayek, 1955/2014a: 196). The lack of knowledge and the ability to control the determining factors in dealing with complex phenomena such as society have made Hayek sceptical and pessimistic about the claims of social planning. From Hayek's point of view, the main problem of social planning is an epistemological one, that is to say, those who advocate social planning, e.g. 'constructive rationalists', socialists and Marxists, hold an

²¹ Hayek adds, 'In fact such attempts always consist—and can consist only—of the illustrative enumeration of classes of events, usually with an added 'etc.', which might produce the phenomenon in question. Such 'etc.-reductions' are not reductions which enable us to dispense with the biological or mental entities, or to substitute for them a statement of physical events, but are mere explanations of the general character of the kind of order or pattern whose specific manifestations we know only through our concrete experience of them' (Hayek, 1964/2014: 266).

erroneous theory of knowledge. They give too much credit to human knowledge and underestimate an extremely large amount of human ignorance in dealing with complex phenomena (Hayek, 1968/2014). In the following pages, I argue that such a sceptical view about the role of reason in society is at the core of the conservative way of thinking in politics. In his late works, Hayek became closer to such a way of thinking, although he never accepted such a view. Before I start my discussion about Hayek, it is necessary to clarify what I mean by conservatism.

5.2. What is Conservatism?

Questions about the true nature of political ideologies have always been challenging. As O'Sullivan says, 'the everyday meaning of the word [conservatism] consequently gives no indication about where a study of conservatism should begin, or about who should be included in it, or excluded from it' (O'Sullivan, 1976: 9). It has been argued that there are some core concepts or issues that have been usually addressed by conservative thinkers. Russell Kirk provides six 'canons of conservative thought', which he believes identifies conservatism and differentiates it from other ideologies. First, 'belief in a transcendent order, or body of natural law, which rules society as well as conscience.' Second, 'affection for the proliferating variety and mystery of human existence, as opposed to the narrowing uniformity, egalitarianism, and utilitarian aims of most radical systems'. Third, 'conviction that civilized society requires orders and classes, as against the notion of a 'classless society' '. Fourth, 'persuasion that freedom and property are closely linked'. Fifth, 'faith in prescription and distrust of 'sophisters, calculators, and economics' who would reconstruct society upon abstract designs' and sixth, 'recognition that change may not be salutary reform'(Kirk, 1953/1995: 8-9). In the same way, Kekes argues that there are four basic beliefs for conservatism, namely: pluralism,

scepticism, traditionalism and pessimism (Kekes, 1998/2001: 190-219). Robert Eccleshall maintains some commentators, alert to differences within conservatism, 'write as if the representative of its various strands are distant cousin, members of an extended family with nothing in common beside surname' (Eccleshall, 1984/2003: 49). Even in that case, Eccleshall suggests that there are 'enough resemblances among members of a conservative family' which distinguish them from other ideologies, one of which is 'the vindication of inequality' (Eccleshall, 1984/2003: 49).

Anthony Quinton and Noel O'Sullivan have suggested that the most important characteristic of conservatism is 'a belief in the imperfection of human nature' morally and intellectually (Quinton, 1976: 13; O'Sullivan, 1976: 14). Quinton also argues that traditionalism, organicism and political scepticism derived from a belief in human imperfection are the three central doctrines of conservatism (Quinton, 1993/2007: 294-298; Quinton, 1976: 16-17).²² Andrew Vincent believes that there are three broad approaches to the study of conservatism; 'the historical nation state, chronological and conceptual approaches' (Vincent, 1992/2010: 62). The ideas of the first approach is that we can have a proper understanding of conservatism, once we have considered the particular socio-historical background within which it occurs. Karl Mannheim is the best known advocate of this approach. In his mind, conservatism had taken different forms in different nation states. He suggests that British conservatism is more flexible and more sceptical than its German counterpart. Mannheim argues that German conservatism is based more on metaphysical and historical vision 'which emphasized a

²² When Quinton mentioned imperfection of human nature as a core component of conservatism, he was speaking about conservative thought in England (Quinton, 1976: 10). Later when he wrote again about conservatism in general, however, he did not explicitly mention human imperfection, although maybe he had such a notion in mind while he was writing about it (Quinton, 1993/2007: 285-310). Still, in both of his writings about conservatism, he enumerates traditionalism, organicism and political scepticism as central doctrines of conservatism.

strong philosophical theory of history' (Mannheim, 1986: 46). German thinkers, Mannheim argues, took conservatism from the writings of Burke and then combined it 'with genuinely German elements' (Mannheim, 1986: 47). Mannheim claims that both the Enlightenment and counter-Enlightenment movements have their origins in England and remain somehow moderate movements there. But the progressive Enlightenment in France found 'its most radically abstract and atheistically materialist form. The counter-revolutionary critique similarly originated in England, and achieved its most consistent exposition on German soil' (Mannheim, 1986: 47).

The second approach for the study of British conservatism, according to Vincent, is chronological, whereby 'the classification follows the fracture-line and fortunes of the conservative party' (Vincent, 1992/2010: 63). In this second approach, conservative thinking associates with the conservative party. Such association, I believe, creates some problems. First: it is unable to fully trace back the roots of conservative thought before the 1830s, the time that the British conservative party took hold for the first time (O'Sullivan, 1976: 10; Nisbet, 1986: 3; Leach, 2002: 47). Thus, many major political thinkers such as Hume and Burke who were influential in forming conservative thought are being neglected. Second, in the British context, the conservative party has been in favour of different things in different times. There is a huge difference between Harold Macmillan's 'middle way' in 1950s and Thatcher's policies in 1980s. So, as Vincent rightly said, such chronology 'despite being more easily grasped, can obscure potential ideological coherence' (Vincent, 1992/2010: 63).

Vincent's third approach to conservatism is conceptual classification. Here, there are two general positions. The first suggests that there is 'one pure doctrine of conservatism. There are no conservatisms, even if there are

different philosophical roots' (Vincent, 1992/2010: 63). But the second argues that there are different conservatisms; there might be a unity 'on values and ideas' (Vincent, 1992/2010: 63), however, the interpretation of those ideas may take different forms and result in totally different conclusions. This second view is historical and rejects any 'essentialist' definition of conservatism. In what follows, I shall not take the historical approach to study conservatism(s), but rather I will focus on the more general and abstract level and try to identify the main doctrines of conservative political thought.

5.3. The Central Doctrines of Conservatism

Although 'conservatism is one of the three major political ideologies in last two centuries in the west' (Nisbet, 1986: vii),²³ it has been said that conservatism is not an ideology and 'because there is no universal conservative policy, the illusion has risen that there is no conservative thought, no set of beliefs or principles, no general vision of society, which motivates conservatives to act. Their action is mere reaction, their policy procrastination, their belief nostalgia' (Scruton, 1980/2001: 1). Their characterization as French political scientist Maurice Duverger has said is 'to preserve the existing order' (Eatwell, 1992: 49) it is 'more reactive than proactive'; the conservative party is the 'stupidest party' (Mill, 1861/1977: 452) and as F. J. C. Hearnshaw remarked: 'it is commonly sufficient for practical purposes if conservatives, without saying anything, just sit and think, or even if they merely sit' (Freedon, 1996: 318). If the only criterion for defining conservatism is 'to preserve existing order' then the Communist Party in Soviet Russia was as conservative as Margaret Thatcher's government in 1979.

²³ The other two are Socialism and Liberalism.

Some conservatives have argued, however, that conservatism is not an ideology at all. Michael Oakeshott, for example, maintains that ideologies are the by-products of the rationalist way of thinking, which seeks to reduce the richness and diversity of human experience to cold and colourless abstractions (Nardin, 2001: 132; Botwinick, 2011: 121).²⁴ Although Oakeshott argues that this kind of abstraction may be beneficial in some circumstances and provide us with 'sharpness of outline and precision to a political tradition' (Oakeshott, 1962/1991: 55), he is reluctant to establish the ways in which ideologies may be useful. It seems that from Oakeshott's point of view, eventually, the dangers of ideologies outweigh their benefits. For Oakeshott, conservatism is not an ideology, creed or doctrine that can be articulated in the 'idiom of general ideas', but rather, it is a disposition or temperament (Oakeshott, 1962/1991: 407). According to Oakeshott, owing to the abstract nature of ideologies, they unavoidably represent a distorted picture of the world and therefore, they are better avoided (Franco, 1987: 130).²⁵ I believe Oakeshott is right in saying that conservatism is not (and he does not want it to be) an ideology based on his definition of ideology. This view is not limited to Oakeshott, but is the view that is usually held by other conservatives. Conservatives have represented their position as one of opposition to abstract and general principles, something that is contrary 'to prescriptive formulae, and is at its most resplendent when it can be set

²⁴ I agree with David Corey, who has argued that Oakeshott understood rationalism and ideology as distinct phenomena. Although they are affiliated, rationalism has a broader meaning for Oakeshott. Oakeshott considers ideology as a tool or instrument in the hands of the Rationalist. Or, as Corey puts it is 'a weapon in the Rationalist's arsenal, one of the means by which he makes war on traditional ways of life' (Corey, 2014: 270).

²⁵ I do not think that Oakeshott was so naïve to think that it is possible to escape from all abstractions. What he has in mind, I believe, is that there are different 'modes' of experiencing the world. Each of these modes has its own right and should be understood by its own logic. For Oakeshott, it is a mistake, for example, to impose or judge a piece of art by 'scientific' principles. In order to have a rich experience of the world around and inside us, he maintains, there needs to be a 'conversation' between different modes of experience and not a monologue (Oakeshott, 1948/2004; Plotica, 2015: 130-132; Oakeshott, 1962/1991: 488-541; Franco, 2004: 116-124; Isaacs, 2006: 91-99; Williams, 2012).

forth in logical fashion' (Nisbet, 1986: 32). They consider ideologies and ideologues as the emblem of dogmatic and intolerant ways of thinking, which is in contrast to the conservative way of thinking. Instead of abstract formulas, conservatives place emphasis on pragmatism, flexibility, adaptability, spontaneity and so on (O'Sullivan, 1976: 130; Scruton, 2015: 125).

Therefore, if by ideology we mean 'an a priori, abstract, closed, and total system of mass consumed political thinking' (Freeden, 1996: 317), then conservatism is not an ideology. As Michael Freeden has suggested, however, an ideology can be considered as 'a structural configuration of political concepts-the inevitable accompaniment to entertaining ideas about the political world' (Freeden, 1996: 317). In this sense, it is conceivable to study conservatism as an ideology like other political ideologies such as socialism and liberalism.

Those concepts and arguments which are building blocks of the conservative ideology have not been shaped in vain. As Nisbet says 'there is a relationship between practical politics and ideology' (Nisbet, 1986: viii). Historically speaking, the relationship between practical politics and ideology can be seen much clearer in conservative ideology than in any other ideologies. Edmund Burke, the 'archetype' of conservatism (Huntington, 1956: 456), wrote his *Reflections on the Revolution in France* (1790/1993) in response to a concrete social and political event in his time. Moreover, many other conservative thinkers in history were also great politicians and had first-hand experience in real politics. So, it is not surprising that the relationship between real politics and political thinking is quite obvious in conservative ideology. But this relation should not be over emphasized. Conservatives are not the passive agents of social, economic or historical forces, they also believe in some ideals and ends. What concerns

conservatives is how to adapt the means with ends in the safest possible way. Or in other words, how to make change safely? As Burke said, they are 'philosopher[s] in action', it is the task of 'the speculative philosopher to make the proper ends of government; it is the business of politician, who is the philosopher in action, to find out proper means towards those ends, and to employ them with effect' (Canavan, 1960: 5-6).

5.3.1. Scepticism and Pessimism

The first underlying characteristic of conservative thought which I discuss here is scepticism or mistrust towards the role of abstract reason in politics. Although the idea of forming a society based on abstract reason is usually associated with some Enlightenment thinkers, it can be traced back to the writings of Plato. Despite all the differences that can be found in their writings, they all believe that society should be governed by principles of reason which are, as Toulmin says, universal, general and timeless (Toulmin, 1992: 31-35). Conservatives are sceptical about such claims and argue that the complexity of social life and politics cannot be reduced to some abstract principles. The origin of conservative ideas can be seen in the writings of Aristotle and especially his distinction between Theoretical and Practical Knowledge (Aristotle, 2004). According to Aristotle, theoretical knowledge aims at contemplation, that is, at knowledge for its own sake, whereas practical knowledge is directed to action, and seeks knowledge in order to achieve some further end. Theoretical knowledge is principally concerned about the necessary and essential elements in things, but practical knowledge (politics and ethics) is concerned with the contingent and variable element (Hughes, 2001: 83-116; Wilson, 1964/1971: 341). In other words, 'the theoretical sphere does not deal with action, but with understanding; the practical sphere, by contrast, concerns what is to be done, what action is to be taken and when' (Shields, 2007: 325). The same distinction can also

be found in the writings of other conservatives such as Burke and Oakeshott.²⁶ Burke, for example, criticises the use of abstract reason in politics and he proposes the concept of 'prudence' (Canavan, 1960: 15-27). He believes that abstract reason is not able to provide a complete answer to practical questions and also, it is not a good criterion for making political judgment. 'I cannot stand forward, and give praise or blame to anything which relates to human actions, and human concerns, on a simple view of the object as it stands stripped of every relation, in all the nakedness and solitude of metaphysical abstraction' he says in *Reflections on the Revolution in France* 'circumstances (which with some gentlemen pass for nothing) give in reality to every political principle its distinguishing colour, and discriminating effect' (Burke, 1790/1993: 7).²⁷ In the same spirit, Oakeshott makes a distinction between two types of knowledge, i.e. *technical knowledge* and *practical knowledge* (Oakeshott, 1962/1991: 12). He describes technical knowledge as a knowledge that is 'formulated into rules which are, or may be, deliberately learned, remembered, and, as we say, put into practice; but whether or not it is, or has been, precisely formulated, its chief characteristic is that it is susceptible of precise formulation' (Oakeshott, 1962/1991: 12). Practical knowledge, on the other hand, exists 'only in use, is not reflective and (unlike technique) cannot be formulated in rules' (Oakeshott, 1962/1991: 12). Oakeshott does not reject the fact that these two types of knowledge are always involved in any actual activity. The

²⁶ Robert Nisbet also appeals to the distinction that William James made between 'Knowledge of' and 'Knowledge about'. Nisbet writes 'the first [knowledge of] is the knowledge we acquire simply through experience, through direct exposure to life or at least major areas of life. Its essence is practically. [...] The second type of knowledge [knowledge about] James adduced is that we acquire from the textbook, from learning *about* something that can be presented in the form of abstract or general principle, something that is susceptible to prescriptive formulae, and is at its most resplendent when it can be set forth in logical fashion' (Nisbet, 1986: 31-32).

²⁷ Joseph de Maistre made the similar claim in his *Considerations on France* when he says 'our ideas on good and evil, on innocence and guilt, are often affected by our prejudices. If two men fight each other with three-inch daggers, they are judged guilty and shameful; but if they use three-foot blades, the combat becomes an honourable contest' (Maistre, 1797/2006: 10).

relation between these two types of knowledge is not of binary logic, but rather more similar to a spectrum. In some activities such as engineering, technical knowledge plays a more important role than the practical one. But in other activities, such as cooking, politics and sailing, it's the practical knowledge that has the upper hand.

It's important to remember that conservatives do not deny the importance of abstract reason in human life. What concerns them mostly, is the usage of such principles outside the fields that they have associated with abstract reason. As O'Sullivan has put it, they 'quest for a more profound conception of rationality than what which characterized the prevailing view of reason. The rationalism of the Enlightenment, Novalis wrote, ignored the deeper strings of human conduct, and failed to do justice, in particular, to the creative side of human spirit. [...] A true concept of rationality, by contrast, will do justice to the diversity and complexity of the universe, the social order, and human nature itself' (O'Sullivan, 1976: 69-70). Conservatives are sceptic about the use of theoretical reason in practical matters, as Burns says 'they are sceptical about the enlightenment emphasis on the claims of individual reason as a source of knowledge in the area of moral and politics' (Burns, 1996: 101). For them, a society is something altogether too complex to lend itself to theoretical simplification (Quinton, 1976: 17; Eccleshall, 1990: 3). The distinction between two kinds of reason and the dislike of systematic philosophy 'has led conservatives from Burke to Oakeshott to repudiate the exclusive role of reason in politics' and instead they have endorsed 'a more pragmatic, sceptical and expedient approach to politics' (Vincent, 1992/2010: 70). So, conservatives are sceptics and do not take the approach to study human beings and their society as a package of coherent ideas, but rather, they prefer the method of knowing reality through experiencing it. Such an experience may be quite alien to non-

participants and it is not transmittable through formulae or abstract ideas, because the full significance of the experience inevitably escapes in any process of abstraction (Oakeshott, 1962/1991: 25-27). Thus, the world of the conservative, as Freeden has rightly said, 'is unsystematic and contingent, through there is within experience an inner, self-contained, coherent world' (Freeden, 1996: 321) and they offer no universal pattern of politics for adoption everywhere (Kirk, 1982: xiv-xv).

The other aspect of scepticism amongst conservatives is about their view on social and political values and ends. Conservatives maintain that political ends are not limited to liberty and equality (the most common ones), but also there are other similarly important values such as security (internal and external) and prosperity (Quinton, 1993/2007: 296; Scruton, 1980/2001: 9; Eatwell, 1992: 52). Moreover, none of these values are supreme in the sense that they can override the others. 'There is no universal and objective standard that could be appealed to' Kekes argues, 'in resolving disagreements about the identity and importance of the satisfactions and benefits that form the substance of values' (Kekes, 1998/2001: 33). Over the last decade, some psychological researches have been conducted amongst people with different ideological perspectives which support the above claim (Lakoff, 2002; Hibbing et al., 2013; Jimenez, 2009; Smith et al., 2012). In three studies (Graham et al., 2009; Haidt and Graham, 2007; Haidt, 2007), Jonathan Haidt and his colleagues broadly identified five psychological systems that provide the foundations for the world's many moralities. The five foundations are psychological preparations for detecting and reacting emotionally to issues related to harm/care, fairness/reciprocity, in-group/loyalty, authority/respect, and purity/sanctity. The findings of these two pieces of research indicate that liberals steadily show greater endorsement and use of the harm/care and fairness/reciprocity

foundations compared to the other three foundations, whereas conservatives endorse and use the five foundations more equally. These psychological findings support Anthony Quinton's claim that according to conservatives, 'there is an irreducible plurality of political values, none is an inalienable right, none should be pursued at the expense of all the rest' (Quinton, 1993/2007: 296).

Conservatives' scepticism is not just limited to the role of abstract reason in society and the primacy of social values, but they are also sceptical about the optimism which has been advocated by other ideologies (mainly socialism and liberalism). So, as Kekes maintains, it is 'one of the safest generalisations about conservatism' to say that conservatives tend to be pessimists (Kekes, 1998/2001: 41). Although there is some evidence of optimism in the writings of conservatives such as Montaigne, Hume and Oakeshott, they still retained their doubts about the possibility of significant improvement in the human condition. Although conservatives do not deny the progress in science which has made human lives better, they also point out the downside of such progress. For conservatives, advances have been both beneficial and harmful and because of that, they doubt that more advancement will make lives better for human beings on the whole. This pessimistic view about human perfectibility is deeply connected to their scepticism about the human reason which I have discussed earlier. Conservatives are sceptical (or maybe realistic) about the limited control that a society has over its future. This does not mean that there should not be any control over society, rather, they argue that a society can get better and worse but it cannot be perfect. 'Even under the best conceivable political arrangements a great deal of contingency will remain, and it will place beyond human control much good and evil' Kekes says (Kekes, 1998/2001: 43). Such a pessimism can also be seen vividly in the writings of John Gray,

a contemporary conservative thinker (Gray, 2002; Gray, 2004; Gray, 2014). One of Gray's claims in his book *Straw Dogs: Thoughts on Humans and Other Animals*, is that there is no guarantee that technological advancements won't lead to human extinction. 'Humans are no more masters of machines than they are of fire or the wheel' he writes 'the forms of artificial life and intelligence they are constructing today will elude human control just as naturally occurring forms of life have done. They may even replace their creators' (Gray, 2002: 185). The sceptical attitude towards the role of abstract reason in making human beings and their societies perfect, has made conservatives focus on another alternative resource, i.e. tradition.

5.3.2. Traditionalism

The second important idea in conservative thought is traditionalism. What I mean by traditionalism is, on one hand, conservatives' attachment to the established customs and institutions of their societies and, on the other hand, their hostility to sudden and revolutionary changes. As Oakeshott famously said, to be a conservative 'is to prefer the familiar to the unknown, to prefer the tried to the untried, fact to mystery, the actual to the possible, the limited to the unbounded, the near to the distant, the sufficient to the superabundant, the convenient to the perfect, present laughter to utopian bliss' (Oakeshott, 1962/1991: 408). The hostility towards the 'unknown' and rapid change and also the importance of established traditions and customs, have made conservatism a 'positional' ideology (Huntington, 1956: 467-468) or as Oakeshott has said, not an ideology altogether, but rather a 'conduct' (Oakeshott, 1962/1991: 407). That means that although other ideologies are concerned with what should be done, conservatives are cautious about doing anything too different from what already has been done. Therefore, for conservatives, 'politics is not the science of setting up a permanently impregnable society, it is the art of knowing where to go next

in the exploration of an already existing traditional kind of society' (Oakeshott, 1962/1991: 406).

Due to their mistrust and scepticism about abstract reason, conservatives rely heavily on established social traditions and conducts as the best alternative. As Edmund Burke said, 'we are afraid to put men to live and trade each on his own private stock of reason; because we suspect that this stock in each man is small, and that the individuals would do better to avail themselves of the general bank and capital of nations, and of ages' (Burke, 1790/1993: 87). Individuals cannot be successful, according to conservatives, if they only limit themselves to their own personal knowledge about the world. They can do much better off, however, if they rely on their inherited traditions and customs. In this sense, tradition contains the accumulated wisdom of the past and therefore can provide a guide for the future. The institutions and practices of the past have been tested successfully over the course of history, according to conservatives, and therefore they should be preserved. Social institutions are sophisticated devices that have been refined and polished by the past experiences of a particular society. Andrew Heywood has suggested that such interpretation of tradition 'reflects an almost Darwinian belief that those institutions and customs that have survived have only done so because they have worked and been found to be of value' (Heywood, 2012: 66). In this Darwinian view of tradition, the established social institutions, by just existing, have 'demonstrated their fitness to survive'. In his book *Darwinian Conservatism* (2005), Larry Arnhart has provided the same argument about the relation between conservatism and Darwinism. He argues that 'Darwin saw evidence for the idea of property in the possessive behaviour of animals' (Arnhart, 2005: 61) and therefore, Darwin maintained that 'no human society could survive without prohibiting theft' (Arnhart, 2005: 61). Although I agree that

conservatism can be interpreted in Darwinian terms, that doesn't mean that Darwin's theory necessarily implies conservatism and rejects 'those on the political left—socialists and welfare-state liberals' as Arnhart argues (Arnhart, 2005: 4). I will explain this matter in more detail when I discuss Hayek's conservatism later on in this chapter.

Conservatives also respect tradition because it generates a sense of identity both for the individual and society. Established customs and practices provide a sense of familiarity and reassure the individuals that they are not monades and belong to a durable tradition. So, for conservatives to be 'free' from all traditions and customs that gave them their identity is 'an entirely frightening sense' (Schwarzmantel, 1998: 115). Individuals must see themselves, conservatives believe, as a 'part of an order that is greater than themselves, in the sense of transcending anything that could have been brought about through their own voluntary agreement' (Scruton, 1980/2001: 60). Conservatives from Burke to Scruton have been quite keen about the concept of belonging and have observed that under the rationalist form of government, individuals have become more and more 'alienated' from their social traditions and such non-belonging has made them anxious and vulnerable to unbearable risks (Leach, 1996: 125-126). Being 'free' from all conventions and traditions, José Ortega y Gasset argues, has made individuals' lives empty and since it has to be filled with something, individuals have invented 'frivolities' and have given themselves 'false occupations' which 'impose nothing intimate, sincere. Today it is one thing, tomorrow another, opposite to the first' (Gasset, 1929/1993: 142). So, tradition is important for conservatives because it provides a sense of 'rootedness' in individuals and also gives meaning to their lives in the sense that it connects their mortal lives to the immortal life of the tradition. Social tradition then is a refined and diligent phenomena which is not the creation

of those who are living, but rather, as Edmund Burke famously said, it's a continuous partnership between 'those who are living, those who are dead, and those who are to be born' (Burke, 1790/1993: 96).

5.3.3. Organicism

The last aspect of conservatism that I would like to discuss here is organicism. Conservatives object to an 'atomistic' picture of society in which, society is seen as an 'artificial' and 'contractual' phenomenon that arises from the actions of individuals each pursuing his/her self-interest. As I discussed in the section before, conservatives argue that individuals do not and cannot exist outside society, but they need to belong to or have 'roots' in a society. Being part of social groups such as family, friends, workers and even the nation, nurture a person's character and gives meaning and a sense of security to an individual's life. If people are cut off from such roots, conservatives believe, they will feel unease and agitation. 'People are not' Quinton says 'exportable, like bicycles, which function just as well in Denmark as in Thailand' (Quinton, 1993/2007: 297). So things that constitute an individual's identity are rooted in a particular culture that he/she belongs to, therefore, any process of universal abstraction will lose those small and seemingly trivial elements which are the real building blocks of person's identity (Scruton, 1988: 9; Scruton, 2015: 130-131). For conservatives, any discussion about human beings should seriously take into account the social roots of their life and be dismissive about generalised abstraction of their characters. As Maistre says, 'in my lifetime I have seen Frenchmen, Italians, Russians, etc.; thanks to Montesquieu, I even know that one can be Persian. But as for *man*, I declare that I have never in my life met him; if he exists, he is unknown to me' (Maistre, 1797/2006: 53). General abstractions and laws, are valuable tools for mechanistic explanations but society, according to conservatives, is organic.

Organisms such as the human body are different from artefacts and machines in two important respects (Heywood, 2012: 69-70). First, unlike machines, organisms are not simply a collection of their constitutive parts, that is to say, an organism is more than a collection of its individual components. An organism is sustained by a delicate set of relations amongst its components which, once damaged, can result in an organism's death. So, unlike a bicycle, an organism such as the human body, cannot be stripped down to its smallest parts and reassembled again and expected to be the same thing. Now, for conservatives, society should be seen as an organism which 'has personality, and will. Its history, institutions and culture are the repositories of human values – in short, it has the character of end as well as means' (Scruton, 1980/2001: 13). In contrast to machines, social organic reality can be best understood through a historical approach, 'we cannot know where we are, much less where we are going, until we know where we have been' (Nisbet, 1986: 25). From a conservative perspective, it's a mistake to assume that a change can be successfully implemented in every society irrespective of their traditions and historical contexts, because each society has its own particular organic fabric which is different from the other ones and gives it a particular and distinguishing character. The second difference between an organism and a machine is that organisms are shaped by natural factors rather than human ingenuity (O'Sullivan, 1993: 53; O'Sullivan, 2005: 152). In the same manner, conservatives believe that human society is an organic entity because it is not the result of human design. From conservatives' point of view, there is always an underlying mechanism in society which does not yield to human's will; such underlying mechanism might be something with religious, historical, economical or biological nature. Whatever their content might be, they have been (and still are) forming the very core of society and thus to impose upon them a given

set of purposes or attempt to change their 'natural' direction, will result in a catastrophic failure.

The implication of this organic view is that since a society and its institutions and traditions have been formed by the forces that are beyond human control, then its delicate structure should be preserved and respected by the individuals who live within it. All existing social institutions and traditions have been evolved throughout time because they were able to maintain the larger whole. So any attempt to change them should be done gradually and with respect to the functioning of the whole.

5.4. Hayek and Conservatism

In his famous postscript to *The Constitution of Liberty*, 'Why I am not a Conservative' (Hayek, 1960/2011: 519-533), Hayek disavows the characteristically conservative view of using the power of the state to protect endangered moral traditions. He states that 'the decisive objection to any conservatism which deserves to be called such' is that 'by its very nature it cannot offer an alternative to the direction in which we are moving. It may succeed by its resistance to current tendencies in slowing down undesirable developments, but, since it does not indicate another direction, it cannot prevent their continuance' (Hayek, 1960/2011: 520). Although in the postscript Hayek tries to detach himself from the conservatives, what he actually does is to separate himself from the policies of the conservative *parties*. At the time when Hayek expressed these ideas, he expressed an understandable distrust of European conservative parties. From Hayek's perspective, the main concern of conservatives at the time was to 'rescue from the jaws of the socialist machine as many of their privileges as they could, but who had no adequate rival notion as to how we should be governed' (Scruton, 2006: 208). In what follows, I try to illustrate that Hayek's core arguments and ideas belong to the conservative tradition of

thought outlined above. I shall argue that especially in his late writings, Hayek became closer to the conservative tradition of political thought while suggesting that he remained reluctant to adopt such a position.

5.4.1. Hayek on Scepticism and Pessimism

Walter Weimer once argued that 'Hayek is at all times an epistemologist, especially when doing technical economics, and even in his historical and popular writings' (quoted in: Wenzel, 2010: 330) and also Hayek 'was primarily an evolutionary epistemologist usually mistaken for either an economist or political philosopher' (Weimer, 2011: xxv). Although Weimer's latter claim is an exaggeration, it depicts a very important point about the role of epistemology in Hayek's thought. Hayek's writings on epistemology and methodology of social sciences play a crucial role in understanding his political thought. One of the key aspects of Hayek's epistemology is his scepticism about the notion of absolute and total knowledge which can be seen in his emphasis on our 'irremediable ignorance' (Hayek, 1973/1998: 12) both as a social actor and social theorist. The root of Hayek's scepticism can be traced back to his idea of mind which I have described in chapter two. Without going into detail, it is sufficient to remember that one of the 'philosophical consequences' of *The Sensory Order*, according to Hayek, is the logical impossibility of acquiring a total and comprehensive understanding of the human mind. 'The whole idea of the mind explaining itself is a logical contradiction [...] All we can hope to do in this field is to aim at an explanation of the principle such as is attempted by the general theory of knowledge or epistemology' Hayek writes (Hayek, 1952/1976: 192-193). Hayek's writings on the philosophy of the mind, epistemology and philosophy of social sciences are to large extent an attempt to provide a general outline of the limitations and scope of human knowledge. John Gray has suggested that Hayek's writings in this regard 'bears the imprint of the Viennese critics

of language' and especially, Hayek's cousin, Ludwig Wittgenstein (Gray, 1988: 250). Gray even argues that the influence of Wittgenstein 'runs deep, and is seen not only in the style and presentation of *The Sensory Order*, which parallels in an obvious way that of Wittgenstein's *Tractatus*, but in many areas of Hayek's system of ideas' (Gray, 1986/1998: 12).²⁸ Saul Kripke has also found some similarities between 'Wittgenstein's private language argument and Ludwig von Mises's celebrated argument concerning economic calculation under socialism' (Kripke, 1982: 112). On several occasions, Hayek himself acknowledged his relationship with the Wittgenstein family in general and Ludwig in particular (Hayek, 1977/1992). He was even about to write a biography of Ludwig Wittgenstein. Recalling his past, he says that Bertrand Russell gave him 'the whole set of letters which Wittgenstein had written to him, and I had started writing a biography on Wittgenstein around these letters when the literary executors stopped me. They didn't give me permission to publish his letters before they had published them, and in the meantime I lost interest' (Hayek, 1978e). So, Gray is right observing some similarities between Hayek's works and Wittgenstein's, nevertheless, he is wrong supposing that Hayek's thought 'bears the imprint' of Wittgenstein. Hayek was aware of Wittgenstein's *Tractatus Logico-Philosophicus* (1922/2001), yet he never showed any sign of sympathy with Wittgenstein's idea either in *Tractatus* or in his other posthumously published works.²⁹ It is true that both Hayek and early

²⁸ Gray overlooks the fact that Hayek's *The Sensory Order* was based on the ideas of his student paper which he wrote in 1920 before the publication of *Tractatus* in 1922. Moreover, Gray maintains that there are, 'many evidences that Wittgenstein's work reinforced Hayek's conviction that the study of language is a necessary precondition of the study of human thought, and an indispensable prophylactic to the principal disorders of the intellect' (Gray, 1986/1998: 13). Nevertheless, despite claiming for many evidences, Gray is only able to name Hayek's 'The Confusion of Language in Political Thought' (1968/1978) for supporting his claim. Be that as it may, it seems to me, what Hayek does in that article is not a Wittgenstein attempt at clarifying language.

²⁹ In a footnote to his 'Rules, Perception and Intelligibility', Hayek made a contrast between what he is suggesting and Wittgenstein's ideas in *Philosophical Investigations* (Hayek, 1962/2014: 234).

Wittgenstein were interested in the questions of knowledge (although from different angles), but they arrived at very different conclusions. For example, Hayek is in fundamental disagreement with Wittgenstein's claim in the *Tractatus* that 'the limits of *language* (of that language which alone I understand) mean the limits of *my world*' (Wittgenstein, 1922/2001: 68). Quite contrary to what Wittgenstein said, Hayek argues that 'we always know not only more than we can deliberately state but also more than we can be aware of or deliberately test; and that much that we successfully do depends on presuppositions which are outside the range of what we can either state or reflect upon' (Hayek, 1962/2014: 251).

Hayek adopts Gilbert Ryle's distinction between 'knowing how' and 'knowing that' (Ryle, 1945; Ryle, 1949/2009: - Ch. II) and later on uses Polanyi's conception of 'tacit knowledge' (Polanyi, 1958/2005; Polanyi, 1966/2009).³⁰ For Hayek, 'knowing that' means that the agents are able to articulate and express the rules of their actions whereas 'knowing how' consists of 'the capacity to act according to rules which we may be able to discover but which we need not be able to state in order to obey them' (Hayek, 1962/2014: 233). This is the knowledge of how to do things instead of knowing about somethings. Again, the roots of this distinction can be seen in Hayek's earlier paper 'Contributions to a Theory of How Consciousness Develops' (1920/2017), and later on in a more extensive way, in *The Sensory Order*.³¹ Even in his writings before *The Sensory Order* and especially in his articles on the social calculation debate (Hayek, 1937/2014; Hayek, 1945/2014), the concept of 'tacit knowledge' and 'knowing how' played an important role, though Hayek did not express them

³⁰ Although there are some differences between Polanyi's notion of tacit knowledge and Ryle's know how, such differences do not concern me here. Both Polanyi and Ryle were in Oxford during 1960s, but they did not have any substantial exchange of ideas (see: Oğuz, 2010: 147-148; Zmyslony, 2010; Mirowski, 1998).

³¹ In *The Sensory Order*, Hayek cited Ryle several times yet it seems that he was not aware of Polanyi's work at that time.

clearly (Lavoie, 1985: 158-173). Karen Vaughn has suggested that although Hayek, perhaps unconsciously, used the concept of 'tacit knowledge' in his criticisms against socialism, he did not 'actually think of the problem in that connection until he wrote *Competition as a Discovery Procedure*' (Vaughn, 1994: 122). Although I think it may not be possible to say exactly when Hayek started to think about that idea, it can be shown that he clearly used the distinction between 'knowing how' and 'knowing that' before writing '*Competition as a Discovery Procedure*' (1968/2014). I believe Hayek started to consciously articulate his ideas on such matters almost three decades before the time that Vaughn suggested. Hayek proposes a new understanding of what economics is all about in his '*Economics and Knowledge*' (Hayek, 1937/2014). There Hayek argues that dissemination of knowledge is central to economic phenomena. So, from this perspective, economics is not simply pure logic of choice in equilibrium situations, but rather it should take into consideration the 'relevant knowledge'³² which each individual has at his/her own disposal when making an economic choice. In '*The Use of Knowledge in Society*', Hayek maintains that it is a mistake to assume that there is only one kind of knowledge, i.e. scientific knowledge, and instead he argues that there is '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' (Hayek, 1945/2014: 95).³³ Then ten years later in the '*Degrees of Explanation*', Hayek discusses his theory of complex phenomena and he proposes that the theories in the social sciences cannot be articulated in the same way as they are in the physical sciences because

³² Hayek defines relevant knowledge as the knowledge which is relevant to a particular person (Hayek, 1937/2014: 72).

³³ Hayek discussed such knowledge in *The Sensory Order* when he made a distinction between the map and model. Since I have discussed the matter in Chapter II, I do not discuss it here again.

it's impossible to formulate a law in natural science terms since 'the number of significantly interdependent variables is very large and only some of them can in practice be individually observed' (Hayek, 1955/2014a: 200). It is clear that from the late-1930s to 1950s, Hayek was engaged about such issues and he addressed them in his writings. Moreover, in 'Rules, Perception and Intelligibility', Hayek explicitly uses the terms 'knowing how' and 'knowing that' and also cited Gilbert Ryle's distinction (Hayek, 1962/2014: 233). So, it seems that Hayek was actively involved in thinking and writing about the two kinds of knowledge at least in late-1930s and not in late 1960s as Vaughn has suggested.

Hayek's major criticism against 'constructive rationalists' in general and socialists in particular, is that, they believe there is only one kind of genuine knowledge, i.e. 'scientific knowledge' that can be expressed and articulated in law-like formulae (Hayek, 1970/2014: 348). However, Hayek maintains that knowledge of 'particular circumstances of time and place' is as genuine as scientific knowledge but it is 'generally regarded with a kind of contempt and that anyone who by such knowledge gains an advantage over somebody better equipped with theoretical or technical knowledge is thought to have acted almost disreputably' (Hayek, 1945/2014: 96). The core theme running through all of Hayek's epistemological work is the importance of 'tacit knowledge' and his scepticism about any claims for 'absolute knowledge' (Hayek, 1942-44/2010: 152). In this respect, Hayek is in accord with many conservatives since he also believes that it is a mistake to assume that complex phenomena such as the mind, society, economics, etc. can be reduced and explained by general laws such as those of physics. In his epilogue to *Law, Legislation and Liberty*, Hayek wrote in a Burkean spirit that 'if the Enlightenment has discovered that the role assigned to human reason in intelligent construction had been too small in the past, we

are discovering that the task which our age is assigning to the rational construction of new institutions is far too big' (Hayek, 1979/1998: 176). For Hayek, the 'constructivistic'³⁴ approach to the formation of social institutions is not merely a 'harmless philosophical speculation', but rather an assertion of a position that 'both the explanation of social processes and the opportunities for political action' can be easily derived (Hayek, 1970/2014: 342). The 'intellectual hubris' of achieving total and complete knowledge about the function and formation of complex phenomena such as society and the market has devastating consequences since it deludes us that reason can judge all the values, rules, institutions, etc. that govern those phenomena. The view that human beings, thanks to their reason, are able to 'rise above the values of his civilization, in order to judge it from the outside, or from a higher point of view' is an illusion and ignores the fact that 'reason itself is part of civilization' (Hayek, 1970/2014: 354).

The above passages indicate that Hayek is sceptical about the role of abstract reason in politics. Hayek tries to make it clear that 'theoretical knowledge' or 'knowing that' is not the only genuine knowledge but there is also another kind of knowledge, i.e. 'knowing how', which plays a crucial role in explaining human action in society. Moreover, Hayek shows great scepticism and mistrust towards the attempts to reduce the complexity of such phenomena to simple 'law-like' formulae. Amongst all the 'isms' that he attacks, i.e. 'constructive rationalism', positivism, scientism, socialism and behaviourism, Hayek sees one common error; they all wrongly assume that the whole complexity and peculiarity of human beings can be explained in general formulas. Hayek's scepticism, as Barry has rightly observed, is

³⁴ In the footnote to 'Errors of Constructivism', Hayek writes 'perhaps, to show that we use the term in a critical sense, constructivistic is better than constructivist' (Hayek, 1970/2014: 338).

quite similar to Hume's scepticism; that is to say, Hayek uses reason to show its own limitation (Barry, 1979: 14).

Hayek's scepticism in this regard paves the way for his pessimism.³⁵ Hayek's epistemology has been described by a number of scholars as 'epistemological pessimism'³⁶ (Kukathas, 1989: 206; Gissurarson, 1987: 23; Caldwell, 2004a: 359; Caldwell, 1997: 1871; Harnish, 2010: 185; Caldwell, 2002: 295; Caldwell, 2000: 5; Gamble, 2006: 118; Sabooglu, 1996: 349). According to Hayek, it is *logically* impossible for humans to provide a full explanation of the way in which their mind works. Hayek extends the implications of his psychological and epistemological ideas to his philosophy of social science. Although Hayek does not reject advancement in sciences, he argues that 'science cannot significantly help us to ascertain all the widely dispersed and rapidly fluctuating particular circumstances of time and place which determine the order of a great complex society' (Hayek, 1970/2014: 347). In dealing with any complex phenomena, it is impossible to collect all the relevant data and possible scenarios that might happen in one centralised place because knowledge is dispersed in time and space. Any attempt to do such thing, according to Hayek, is doomed to failure. It is important to be remembered that Hayek never claimed that market can assure efficiency in an optimum sense. As Gamble has rightly said, Hayek never maintained that the market is perfect, but rather 'it was less imperfect than any available alternative, and certainly less imperfect than what would result from the attempt to centralize knowledge required by a socialist economy' (Gamble, 1996: 69). The same applies to other social institutions and even rules. Rule selection takes place and the new rules and practices are tried out and they either succeed or fail. But there is no guarantee that

³⁵ Gerald O'Driscoll has rightly pointed out that whether Hayek's position reflects pessimism or realism depends on one's own view (O'Driscoll, 1989: 349).

³⁶ Epistemological pessimism is Popper's term (Popper, 1961/1991: 6), which has been borrowed by other scholars.

the successful rules will succeed again in new situations (Caldwell, 2002: 295). Hayek shows his scepticism and pessimism regarding the concept of progress in the sense of accumulative knowledge and power over nature 'says little about whether the new state will give us more satisfaction than the old' (Oakeshott, 1960/2004: 95).³⁷ Such scepticism and pessimism about the future is one of main factors which makes Hayek different from other evolutionists such as Popper (O'Hear, 2006: 142-144). Hayek became even more pessimistic in his last work which was written during the time that the support for his works was increasing all over the world (Jackson, 2010: 151; Caldwell, 2002: 295). In the late 1960s and 1970s, Hayek was even more pessimistic about the future of Western democracies than in any other time (Caldwell, 2008: 702). In an interview with Armen Alchian, an American economist, Hayek says, 'I am pessimistic in the short run, optimistic in the long run. If the politicians do not destroy the world in the next thirty years, I think there's good hope for it'. Then, he adds, 'but the chances are not very good' (Hayek, 1978a). Such despair comes from the fact that Hayek does not believe in the utopia that some agreement can be made about the fundamental ends and also, as Barry says, Hayek 'does not trust politicians to do anything but impose their conception of the good life on others' (Barry, 1979: 195).

5.4.2. Hayek on Traditionalism

Another main aspect of Hayek's political thought is the importance of tradition in his theory. In this regard, Hayek's discussion is even more radical in comparison to other conservatives. He not only credits traditions as the

³⁷ Hayek continues 'the pleasure may be solely in achieving what we have been striving for, and the assured possession may give us little satisfaction. The question whether, if we had to stop at our present stage of development, we would in any significant sense be better off or happier than if we had stopped a hundred or a thousand years ago is probably unanswerable (1960/2011: 95). And in *Errors of Constructivism*, he writes in spite of all the advance of our knowledge, the results of our endeavours remain dependent on circumstances about which we know little or nothing, and on ordering forces we cannot control' (1970/2014: 347).

accumulation of past experiences, but Hayek also maintains that the whole concept of reason cannot exist without tradition. Human beings 'did not possess reason before civilization. The two evolved together', Hayek writes (Hayek, 1970/2014: 339). As I mentioned in my discussion of Hayek's theory of mind and society, this view came to be known as 'dual inheritance' amongst evolutionary theorists. In his epilogue to the third volume of *Law, Legislation and Liberty* (1979/1998), which is named 'Three Sources of Human Values', Hayek maintains that social traditions are the result of cultural evolution process which 'took place not merely after the appearance of *Homo Sapiens*, but also during the much longer earlier existence of the genus *Homo* and its hominid ancestors' (Hayek, 1973/1998: 156). Although Hayek acknowledges that due to the lack of fossil evidences, the precise reconstruction of such development is not possible, he still believes that a sort of 'conjectural history in the sense of the Scottish moral philosophers of the eighteenth century' (Hayek, 1973/1998: 156) can be offered. Since Hayek wrote those lines, there have been many researchers in this field who, as far as I am concerned, support Hayek's key points about the bio-cultural origin of reason and the evolution of social traditions (Richerson and Boyd, 2005; Laland, 2017; Mercier and Sperber, 2017; Foley et al., 2016; Joyce, 2006; Krebs, 2011; McClennen, 1998; Alexander, 2007; Cooper, 2001; Tomasello, 1999; Diamond, 1999; Flannery and Marcus, 2012; Ridley, 1996; Bowles and Gintis, 2011; Boehm, 2001; Waal, 1989/2002; Henrich, 2017).

According to Hayek, traditions are inevitable structures or frameworks in the sense that it is not possible for humans to use their reason without or outside such frameworks. Here again Hayek extends his psychological ideas to the realm of the social sciences. For Hayek, 'the mind is embedded in a traditional impersonal structure of learnt rules, and its capacity to order experience is an acquired replica of cultural patterns which every individual

mind finds given. The brain is an organ enabling us to absorb, but not to design culture' (Hayek, 1979/1998: 157). Humans cannot detach themselves from their given tradition as a whole and redesign it from the scratch, but rather, they can 'absorb and modify parts of it' (Hayek, 1979/1998: 158). So for Hayek, rationality consists in accepting tradition, the position which Jack Birner calls 'conservative rationalism' (Birner, 2014: 268). Tradition or 'superindividual wisdom' (Hayek, 1960/2011: 176) is the result of cultural evolution process in the Lamarckian sense of the word which has made civilisation possible. From Hayek's point of view, reason hasn't played a very important role in such processes, since 'man has certainly more often learnt to do the right thing without comprehending why it was the right thing, and he still is often served better by custom than by understanding' he writes (Hayek, 1979/1998: 157). Hayek maintains that social traditions must be saved from the spell of two other factors, that is 'the revolt of instinct and reason' (Hayek, 1988/1992: 48). As Erwin Dekker has rightly suggested, the concept of 'restraint' is common amongst many of Hayek's Viennese contemporaries (Dekker, 2016: 7-8). For Hayek, as for Freud (1930/2002) and Elias (1939/2000), civilisation implies obedience and submission to some restraints. But Hayek, unlike Freud, does not think that such restraints and repressions should be cured since 'you can only become civilized by these repressions which Freud so much dislikes' (Hayek, 1978b).³⁸ One of these 'instincts' which should be restricted, according to

³⁸ When in an interview, Hayek was reminded that his position is Freudian, he replied 'In a way. Well, it's Freudian and anti-Freudian, because Freud, of course, wanted to relieve us of these repressions, and my argument is that by these repressions we became civilized' (Hayek, 1978e). I do not think, however, that this is a correct representation of Freud's position, not at least the ideas that expressed in *Civilization and Its Discontents* (1930/2002) and 'Why War?' (1933/1964). Freud believed that civilization, that is the whole complex structure of culture, religion, law and society, 'arose through the learned repression of individual instinctual urges' (Thurschwell, 2000: 103). Although civilization creates some discontents in individuals, Freud suggests, it also controls our destructive instincts. 'Civilization has to use its utmost', Freud says, 'in order to set limits to man's aggressive instincts and to hold the manifestations of them in check' (Freud, 1930/2002: 50). Robert Bocoock has argued that in *Civilization and Its Discontents*, Freud uses 'the notion of the superego

Hayek, is our notion of social justice. Hayek wrote a whole volume of his trilogy *Law, Legislation and Liberty* about 'the Mirage of Social Justice' (1976/1998). There Hayek argues that 'we have inherited from tribal society' our sense of distributive justice and 'unitedness in the pursuit of known common goals' (Hayek, 1976/1998: 111). Hayek maintains that although such 'instincts' were useful in tribal societies, they are no longer plausible in the Great Society. Over time, human beings learnt how, through trial and error, to tame and discipline their natural instincts (Gamble, 2013: 348). According to Hayek, such instincts should remain repressed otherwise they will clash with the whole foundation of civilisation.³⁹

The other danger of civilisation and social traditions is the hubris of reason. Hayek argues that social traditions are not arbitrary bodies that can be understood and shaped by human reasons and wills. Like scientific theories, Hayek maintains that social institutions are persevered by proving themselves useful. But unlike scientific theories and what constructive rationalists think, such a proof is not and cannot be presented to anyone, because 'the proof manifests itself in the resilience and progressive expansion of the order of society which it makes possible' (Hayek, 1970/2014: 345). Hayek criticizes constructivists for not being able to truly understand the meaning of the 'wisdom of our ancestors' which embodied in inherited institutions and 'plays such an important role in conservative thought' (Hayek, 1970/2014: 345). In his 1964 lecture, 'Kinds of Rationalism' which was delivered at the Rikkyo University, Hayek argues that inherited and grown institutions 'which nobody has invented may provide a

developed in 1923 and draws on the analysis of religions made in *Totem and Taboo* and in *The Future of an Illusion*' (Bocock, 1983/2002: 78). If Bocock's claim is true, then there will be some serious doubts about Hayek's reading of Freud in this respect.

³⁹ I believe Hayek's notion of social justice is somehow problematic. In this thesis, however, I do not discuss Hayek's theory of justice in detail. I provide some reflections about his theory of justice in the final chapter.

better framework for cultural growth than more sophisticated designs' (Hayek, 1965/2014: 53).

This aspect of Hayek's thought represents his scepticism towards the use of abstract reason in society and his reception of evolutionary thinking with regards to social institutions. Hayek acknowledges that in comparison to humility and reverence of the evolutionary approach, the constructive rationalist way to shape society by pure reason is a fascinating and exciting one (Hayek, 1965/2014: 53). But such fascination is delusionary because it is based on a mistaken understanding of human nature. The evolutionary approach, on the other hand, is 'a view of mind and society which provides an appropriate place for the role which tradition and custom play in their development' (Hayek, 1965/2014: 53). From 1960 onwards, Hayek constantly and intentionally stresses on the explanatory capacity of the evolutionary approach in discussing both the mind and society (Hayek, 1964/2014: 269; Hayek, 1965/2014: 53; Hayek, 1966/1991: 264; Hayek, 1963/2014a: 429; Hayek, 1973/1998: 15 & 47).

From Hayek's point of view, social traditions should be protected against the 'abuse of reason', that is to say, against the extreme use of reason in social issues. Hayek is sceptical about the excessive confidence of modern sensibility to construct a completely new social order based on abstract schemes.⁴⁰ The 'irremediable ignorance' (Hayek, 1955/2014b: 161) of any one person or group of people at a particular time and place is the major obstacle for constructing such a social order. The alternative, then, is to rely on the traditions which have proved their usefulness over the time and try to make some gradual changes within the limits of those traditions.

⁴⁰ For a concise comparison of Hayek's thought and Burke's conservatism, see: (Raeder, 1997).

5.4.3. Hayek on Organicism

With respect to organicism, Hayek believes that society is an organic whole which is not reducible to its components. As I have explained in chapter three and at the beginning of this chapter, Hayek's notion of spontaneous order and the concept of 'emergent order' are crucial for understanding Hayek's position in this regard. Although Hayek is a methodological individualist, he does not believe that social theory can be reduced to psychology (Hayek, 1963/2014b: 222; Hayek, 1969/2014: 316; Hayek, 1967a/2014: 284). Unlike Galeotti, who argues that 'individualism proposes an atomistic view of social reality' and therefore rules are justified insofar as they serve 'the private aims and ends of individual members' (Galeotti, 1987: 163-164), Hayek's methodological individualism, does not postulate an atomistic view of human beings. On the contrary, he maintains that when individuals stand and act in particular relation to one other according to their own purposes, a whole is formed which has properties that are not possessed by its component individuals taken in isolation. 'The overall order of actions in a group is [...] more than the totality of regularities observable in the actions of the individuals and cannot be wholly reduced to them' Hayek says in 'Notes on the Evolution of Systems of Rules of Conduct' (1967a/2014: 281). It has been argued that Hayek's support of methodological individualism is in contrast with his conception of the 'wholes' since, based on Hayek's theory, the properties of the wholes should be reducible to the properties of their components (diZerega, 1997: 129; Zouache, 2008: 111; Beck, 2011: 421; Khalil, 1997: 304; Levy, 2008: 103). As I have outlined in the previous chapters and the beginning of this chapter, such an understanding of Hayek's theory overlooks his scepticism for providing a complete explanation of complex phenomena like society. According to Hayek, this is the case not only for society or market but also for all the complex systems such as mind, language and law. Such complex

orders, Hayek maintains, have two main characteristics. First is that 'the number of significantly interdependent variables is very large and only some of them can in practice be individually observed' (Hayek, 1955/2014a: 200) and second the way in which 'a certain combination of [...] structures produces an overall structure possessing distinct characteristic properties [...] the 'emergence' of 'new' patterns as a result of the increase in the number of elements between which simple relations exist, means that this larger structure will possess certain general or abstract features which will recur independently of the particular values of the individual data, so long as the general structure (as described, e.g., by an algebraic equation) is preserved' (Hayek, 1964/2014: 261-262).

Many scholars have rightly observed that Hayek's account of complex phenomena (such as society, market, mind, language, etc.) is not a reductionist one at all (Lewis, 2017a; Lewis, 2012b: 173; Lewis, 2016; Rosser, 2012; Lewis, 2015; Burczak, 2008: 37; Boettke and Storr, 2002: 187; Pennington, 2003: 726; Birner, 2015: 175; Butos and Koppl, 1995: 337; Zwirn, 2007; Migone, 2011: 376; Ambrosino, 2014: 43; Caldwell, 2004b: 246; Herrmann-Pillath, 1992: 148; van den Hauwe, 2011: 338). Hayek's criticisms of constructive rationalists and even his mentor Ludwig von Mises are based on their mechanistic view of complex phenomena such as society and the market. Moreover, due to his evolutionary approach to the formation of social institutions, Hayek maintains that certain social institutions are rooted in particular societies and thus cannot be successfully transferred to other places. In his lecture in Japan, he warns his audiences about the 'extreme rationalism of the Descartes- Hegel- Marx school' and encourages them to adopt the evolutionary approach which 'provides a true theory of human nature' and offers 'foundation to the development of which *your own experience should enable you to make important contributions*'

(Hayek, 1965/2014: 53. my emphasis). He praises Edmund Burke for defending the American Revolution and rejecting the French Revolution; since from Hayek's point of view, Burke was able to acknowledge the fact that unlike the French Revolution, the American Revolution was rooted in their particular tradition and experience and not on some abstract notions of justice and liberty (Hayek, 1973/1978: 125).⁴¹ Moreover, social institutions, for Hayek, are like living organisms. They both evolved through the evolutionary process. Throughout his writings, Hayek consistently refers to 'Darwinians before Darwin' in order to emphasise the point that many social philosophers had elaborated - the evolutionary process before Darwin exercised that in his theory (Hayek, 1973/1998: 23; Hayek, 1988/1992: 24; Hayek, 1963/1991: 112; Hayek, 1966/1991: 92; Hayek, 1967/2014: 301).

As we have seen, such an organismic view of society is quite common amongst conservatives. It should be noted, however, that Hayek does not believe that society is an entity in the ontological sense of the term. Hayek's theory in this respect shows many similarities with his view on the mind. According to Hayek, the mind and society are formed by their components (stimuli and individuals respectively), i.e. from an ontological point of view, there is no 'mind' or 'society' without 'stimuli' and 'individuals'. But that does not mean that the mind or society can be reduced to their components. There are emergent orders which have their own particular qualities and such qualities are not reducible to the quality of their components taken in isolation. Just as it is logically impossible to design and create a complex organism such as a mind from the scratch, it is also impossible for Hayek to create a whole society and its institutions according to some abstract design.

⁴¹ Barbara Rowland has rightly observed that 'whenever Hayek discusses Burke, the comments are invariably respectful'. Then she numerates three main counts in which Hayek discusses Burke's ideas (Rowland, 1988: 230).

5.5. Conclusion

In this chapter, I have identified three major doctrines for conservatism, which are scepticism/pessimism, traditionalism and organism. I have argued that scepticism towards the role of reason sits at the centre of conservatism. Conservatives are almost always sceptical about the capacity of abstract reason to fully understand the underlying mechanism in society. They make a distinction between theoretical reason and practical reason (although different thinkers have used various terms) and believe that in policy making, it is the practical reason that should be used by politicians. Moreover, due to their scepticism, conservatives do not seek a particular goal for politics. The role of politics in society is regulative and not directive. Since reason is not the best source of knowledge in society, conservatives tend to emphasise the importance of traditions. They see social traditions as a source of past experiences. These traditions are more reliable, according to conservatives, since they have survived throughout time. Any new change in society should be judged and implemented in society due to its particular social traditions. This view leads to the third doctrine of conservatism which considers society as an organism rather than a mechanism. Society as an organism is not reducible to its constituent parts, but rather it has its own particular characteristics. People who grow up and live in a particular society are also shaped by and connected to their society and are not able to fully feel relaxed in another society. I have tried to show that the main doctrines of conservatism, to a large extent, can be found in Hayek's writings. Similar to 'practical' and 'theoretical' reasons, Hayek also makes a distinction between 'knowing how' and 'knowing that'. The concept of tacit knowledge which plays such an important role in Hayek's epistemology (and his economics) is a re-articulation of the concept of 'practical reason'. Hayek, like many conservatives, believes in the epistemological features of

traditions. For Hayek, it is impossible to think outside of all traditions since they give our minds a framework and direction. That does not mean that we cannot judge or reform them, Hayek maintains, but we need to be aware that any reformation should be done in tune with other traditions. Unlike many scholars, I have argued that Hayek's particular view of methodological individualism and his theory of complex phenomena make him consider society as an organism. One of his main objections against 'constructive rationalists' is the fact that, according to Hayek, they see society as a machine that can be dismantled and reassembled based on an abstract blueprint. Hayek rejects this view and considers society as a diligent and sophisticated organism that should reflect any change within it meticulously.

Chapter VI: Conclusion

6.1. Introduction

In this thesis I have attempted to think through Hayek's social and political philosophy. I have tried to show that first, there is a strong tendency towards conservatism in Hayek's political thought and, that unlike what he said in his postscript to *The Constitution of Liberty* (1960/2011: 519-533), his conservative attitude became more and more intense in his post-1960s writings. Second, I have tried to illustrate that Hayek's conservatism has two major roots. One is his scepticism against what he called 'constructive rationalism', that is to say, building social and political philosophy on abstract reasoning and trying to shape a society based on a 'rationalist' blueprint. This is what I have named the 'negative aspect' of Hayek's political thought. What he proposed as an alternative to this 'constructive rationalism' constitutes Hayek's 'positive aspect'. In this respect, Hayek applies his own version of the theory of evolution to social institutions. According to his 'evolutionary rationalism', every change in social institutions should be based on a comprehensive understanding of the evolution of that particular institution and its inter-relation to other social institutions. Knowledge about any social institution cannot and should not be based on abstract reasoning but, rather, on its historical development and its social function throughout time. Even so, any changes should be exercised gradually since social institutions are delicate and complex entities. Moreover, they are interconnected to other social institutions and any change in one of them may result in unwarranted changes in the others.

6.2. Hayek's Scepticism and Evolutionary Theory

Hayek makes a tremendous effort in his writings to outline the scope and limits of human knowledge. As I mentioned in chapters three and four, Hayek believes that his major rivals, i.e. socialists, based their theories on false premises about the importance of human reason in society because

they have not paid enough attention to the question of epistemology and particularly to the limits of human knowledge. Hayek's unfinished project 'the abuse of reason', which was partly published in *The Counter Revolution of Science* (1955), was an attempt to shed some light on such misconception about the limits of human knowledge that was common among many intellectuals at the time. That is the main reason that explains why the limits and justification of human knowledge – broadly speaking, epistemology – plays such an important role in Hayek's intellectual apparatus. As Chandran Kukathas has rightly argued, 'in his political theory, Hayek goes on to argue that it is the *epistemological* rather than the calculational problem which characterizes not simply the production process but the human condition generally' (Kukathas, 1989: 101). It has widely been argued that Hayek's epistemology is Kantian in its character. In chapter two, I have outlined the main arguments for such a reading of Hayek's epistemology. I have proposed that the Kantian reading of Hayek's epistemological writings is flawed since it overlooks some crucial points in his book on theoretical psychology, *The Sensory Order* (1952/1976). In the book, Hayek employs his evolutionary approach for explaining the formation of the mind and generating knowledge in the human brain. I have tried to characterise Hayek's particular understanding of evolutionary theory and the way in which he practised it. I have suggested that Hayek established his epistemology on grounds which are not Kantian as many scholars have mistakenly presumed. It has usually been argued that Hayek had a similar epistemology and methodological approach towards social and methodological issues with his mentor and friend Ludwig von Mises. I have argued that such an understanding of Hayek's thought is not acceptable. The assumption that many Hayek scholars have made, which in terms of epistemology, that there is a linkage between Hayek's ideas and Mises' *apriorism* and from that to Kant's philosophy, is not well founded. It is true

that in his early intellectual life, Hayek was influenced by Mises' ideas, especially his criticisms of socialism, but Hayek never accepted Mises' *apriorism* and 'rationalism' (Hayek, 1994: 123). Hayek agreed with Mises' conclusion regarding socialism but he was not satisfied with his reasoning. When Hayek was asked to clarify his position regarding his mentor, he replied, '[L]et me put it in a direct answer [...]. Mises remained to the end a strict rationalist and utilitarian. He would put his argument in the form that man had deliberately chosen intelligent institutions. I am convinced that man has never been intelligent enough for that but', he continued, 'that these institutions have evolved by a process of selection, rather similar to biological selection, and that it was not our reason which helped us to build up a very effective system, but merely trial and error' (Hayek, 1978e). And also, 'Mises [...] was still much more child of the rationalist age of enlightenment and of continental rather than of English liberalism, in the European sense of the word, than I am myself' (Hayek, 1983a: 18). It is obvious that, in terms of methodology, Hayek wanted to make it clear that he was not a dedicated follower of Mises and even more than that, he put Mises' name under the list of his opponents, i.e. rationalists and utilitarian thinkers. Hayek was even surprised when he learned that Mises had approved his article 'Economics and Knowledge' (1937), 'as if he had not been aware that it was a criticism of his own [Mises'] views' (French, 2013: 87). In his 'direct answer', Hayek also associated himself with a different method of studying society which seeks to explain social institutions by evolutionary process.

In chapter four I have endeavoured to demonstrate that Hayek extended the same evolutionary approach which he used in his epistemology and psychology to his social and political philosophy. Hayek repeatedly argued that the idea of evolution was taken up by Darwin from economics

and then applied to biology. He maintained that the idea of evolution was initially generated by some Scottish moral philosophers in the eighteenth century, people such as David Hume, Adam Smith and Adam Ferguson. What is common among all these philosophers, Hayek believes, is their distrust and scepticism about the role of abstract reasoning in social life. According to Hayek, they all admitted that it is a mistake to assume that all human actions in society should be based on axioms and rational grounds. On the contrary, they tried to point out some social institutions which could not be justified on rational grounds, but that had been proven to be useful for society over the centuries. Such traditions and customs were in fact the unintelligible products of cultural evolution. Hayek associated himself with these thinkers who believed that human interactions in society are not solely based on reason, but also on other factors which might not be justifiable by abstract reasoning. In his interview with Swedish economist Axel Leijonhufvud, Hayek made his position quite clear when he maintains 'you see, I am in a way taking up what David Hume did 200 years ago reaction against Cartesian rationalism. Hume was not very successful in this, although he gave us what alternative we have, but there's hardly been any continuation. Adam Smith was a continuation of Hume [...] but then things became stationary and our whole thinking in the past 150 years or 200 years has been dominated by a sort of rationalism' (Hayek, 1978b). Hayek's aim is to shake the foundations of this 'sort of rationalism' by raising sceptical arguments against its justification and showing its failure in dealing with social issues. In the same interview, Hayek shows that he is even reluctant to use the term 'rationalism' for what he sees as a deviation towards some genuine rationalisms (for example his friend Karl Popper). He says 'I avoid the word rationalism because it has so many meanings. I now prefer to call it constructivism, this idea that nothing is good except what has been deliberately designed, which is nonsense. Our whole civilization has not been

deliberately designed' (Hayek, 1978b) but rather, it can be added, it has been evolved over the course of history.

Hayek explicitly discussed the idea of evolution in his late 1960s and post-1970s writings, yet I have argued that the idea of evolution is not alien to Hayek before that period. It seems to me that over time, Hayek came to realise that many of his latent ideas needed to be expressed clearly if he wanted to be understood correctly. The idea of evolution came to the fore in Hayek's writing partly because of said reason. But it was also due to some criticisms that Hayek had received regarding the lack of coherent systematic explanation about the rise and evolution of social institutions. Hayek tried to rearticulate what he saw as the lost tradition of liberalism which was more into the evolution of social institutions than deliberately constructing them in his *The Constitution of Liberty* (1960/2011). The book received cold criticism from many scholars. For example, Anthony Quinton, a British philosopher, dismissed it as a 'magnificent dinosaur' (Tebble, 2010: 130). Hayek's emphasis on the importance and also the inevitability of social traditions and practices in shaping our understanding of such concepts as liberty, equality, justice, etc. had made many critics consider his message as a conservative one. Hayek replied to this in his postscript 'Why I Am Not a Conservative' and argued that conservatism by its very nature 'cannot offer an alternative to the direction in which we are moving' (Hayek, 1960/2011: 520). Later on Hayek developed his notion of social and cultural evolution in his trilogy *Law, Legislation and Liberty*. This trilogy, I believe, should be considered Hayek's major final work on cultural evolution since there are serious concerns regarding the authenticity of his other book, *The Fatal Conceit* (1988/1992), which was published after the *Law, Legislation and Liberty*. When Hayek's health was deteriorating in the 1980s, he asked W. W. Bartley III to assist him as the editor of the book. As Caldwell says,

'despite Bartley's considerable efforts, the book is not one of Hayek's finest. [...] it is not clear just how much of the book should be attributed to Hayek and how much to Bartley' (Caldwell, 2004a: 317). Jeffrey Friedman who was Bartley's research assistant in 1986 also claimed that the book 'was being written—apparently by Bartley, with little noticeable input from Hayek, who was mortally ill' (Friedman, 1997: 463). It is true that there are still some features of Hayek's prior thoughts in the book, but there are also many sketchy new ideas and name of figures such as Marcuse (Hayek, 1988/1992: 138), Habermas and Foucault (Hayek, 1988/1992: 64) which were absent in Hayek's earlier writings. All these evidences make it difficult to ascribe the book only to Hayek.

6.3. Hayek's Conservatism

In chapter five, I have tried to show what I mean by conservatism and why I consider Hayek as a conservative thinker. This claim is in opposition to Hayek's famous postscript to *The Constitution of Liberty* (Hayek, 1960/2011: 519-533) where he argued that he is not a conservative. To some extent he is right. Despite many conservatives, Hayek always has a vision of the 'Great Society'. In his article 'Intellectuals and Socialism', he even proposed a 'liberal utopia' as an alternative to the socialist utopia (Hayek, 1949/1997: 237). Hayek's liberal utopian thinking can also be seen in his best-seller *The Road to Serfdom* (1944/2007). Although Hayek attacked social planning in that book, his proposed alternative way was not far from what he had attacked. I believe Oakeshott was right when he commented on Hayek's *The Road to Serfdom* that 'a plan to resist all planning may be better than its opposite, but it belongs to the same style of politics' (Oakeshott, 1962/1991: 26). Hayek believes that the problem with conservatism is that it is unable to provide any alternative direction. It may be successful in slowing down undesirable tendencies, but it cannot prevent their occurrence. Because of

that, it has 'invariably been the fate of conservatism to be dragged along a path not of its own choosing' (Hayek, 1960/2011: 520). So, in contrast to conservatives such as Oakeshott, Hayek does not believe that the aim of political activity is to keep the ship of state 'afloat'. He, on the other hand, argues that there is a destination and society should be arranged in a way that that goal can be achieved.

Hayek gradually moved from this position, however, at the end of his life. As he got older, he became more and more sceptical about any positive role that the state can play in society. Such a pessimistic view about the role of the state in society, I have suggested, is to a large extent the result of Hayek's evolutionary theory. The primary concern for Hayek in all his works is the formation of complex orders (Hayek, 1994: 154). It is not just an accident that the development of Hayek's theory of cultural evolution went parallel together with his pessimism about central planning. For Hayek, the underlying force for development of societies is the mechanism of cultural evolution and that can work properly when there is no external coercion. Hayek came to realise that even small changes with specific purposes may create undesirable results in the long term, so it is better to limit any interference to a bare minimum. As far as there is a general legislative framework that can protect basic rights, people can and should follow their individual goals by their preferred means. All that state can do is exercise the abstract rules of conduct over society without interfering in the results of such rules (Hayek, 1976/1998: 1-5).

The idea of cultural evolution and the fact that 'all evolution is largely the product of accidents' (Hayek, 1978d), made Hayek pay more attention to the formation of traditions and social institutions. For Hayek, social traditions are important in several respects. Alongside our genetic coding, social institutions, he argues, such as language shape our brain and the way

in which we experience the world. I have argued that, in this regard, Hayek expressed what later came to be known as 'dual inheritance' theory or gene-culture coevolution. Moreover, traditions are important for Hayek because they are valuable assets of past experiences; that is to say, they should be considered as sources of knowledge. According to Hayek, social traditions help us to cope with our ignorance and make us able to successfully follow our ends in society. Hayek does not reject the importance of making change in social traditions, but the change should be exercised gradually and with respect to the social and historical context of a given society. Hayek's abhorrence against 'constructive rationalists' and especially socialists is rooted in his belief that they do not fully understand the epistemological importance of traditions. For Hayek, there is no Archimedean point to stand on and experience the world. Those who believe that such a thing is possible are deluded and suffering from a 'fatal conceit' (Hayek, 1988/1992: 66).

I have argued that based on the above evidence, Hayek can be considered a conservative. He, like many other conservatives especially in the British tradition of conservatism, is not against change *per se*. What he is against, as Madsen Pirie has rightly said is '*imposed* change' (Pirie, 1987: 151). Throughout all of his writings, Hayek tried to illustrate the limitation of human reason in shaping societies and the importance of unintended consequences. As I mentioned before, he is a theorist of 'complex phenomena' but his theories cannot do more than provide 'pattern prediction', because there is always an element of chance or accident that can play a crucial role in changing the final result. The best we can do is to provide as much freedom as possible for a society and to insure there is sufficient condition of progress. As Hayek himself maintains, 'when it becomes clear that it was the evolution of a tradition which made civilization possible, we may at least say that spontaneous evolution is a necessary if

not a sufficient condition of progress' (Hayek, 1979/1998: 168). These observations, I have suggested, make Hayek much closer to the conservative tradition than the liberal one.

6.4. Some Reflections on Hayek's Edifice of Thought

6.4.1. Two Irreconcilable Trends

As I mentioned before, Hayek accused conservatives of lacking any direction in their political philosophy. However, Hayek's writings do not fall far from such criticism. First, it is not quite clear whom Hayek had in mind when he discussed conservatism. It seems to me that Hayek's way of categorising past thinkers is sometimes problematic. He usually associates Edmund Burke with the evolutionary tradition of political thought and considers him as a liberal. But he also puts Immanuel Kant in the same category. He warmly admires Burke because 'after his brilliant restatement of the Whig doctrine in defence of the American colonists, violently turned against the ideas of the French Revolution' (Hayek, 1973/1978: 125), but he never explains that how is it possible to have both Burke and Kant who had very different views towards the French Revolution in the same category. In general, Hayek's view of Kant is ambivalent. Based on Hayek's definition of constructive rationalism, I believe, Kant should have been considered as a constructive rationalist (or probably the arch constructive rationalist). It has been suggested by Kukathas that there are two major different trends in Hayek's political thought; the Humean tradition and the Kantian one (Kukathas, 1989). Kukathas argues that Hayek did not managed to reconcile these two different traditions in a coherent political philosophy. It appears to me that Hayek falters between these two different poles in his writings and especially in his trilogy *Law, Legislation and Liberty*. Although the first volume of the book discusses the formation of rules and order in an evolutionary manner, the second volume tries to formulate the general and

abstract rules of conduct. In the second volume, he comes to a conclusion about justice which sounds quite Rawlsian when Hayek says 'the conclusion to which our considerations lead is thus that we should regard as the most desirable order of society one which we would choose if we knew that our initial position in it would be decided purely by chance (such as the fact of our being born into a particular family). [... That is] to say that the best society would be that in which we would prefer to place our children if we knew that their position in it would be determined by lot' (Hayek, 1976/1998: 132). In the preface of this volume, Hayek even claims that the difference between him and Rawls is 'more verbal than substantial' (Hayek, 1976/1998: xiii). Although I have not discussed Hayek's notion of justice in this thesis, it seems to me that his theory of justice is based on grounds which are not quite in line with his theory about the evolution of rules and orders.

6.4.2. Moral Superiority of Liberalism?

This brings me to another important point in Hayek's writing, i.e. the moral superiority of liberalism. Although Hayek is cautious not to commit the naturalistic fallacy by saying that things that have long survived in the course of evolution have moral value (Hayek, 1988/1992: 27), based on his theory, it can nevertheless be said that things that have long survived have functional value. Hayek maintains that 'whether we like it or not, without the particular traditions [...] the extended order of civilisation could not continue to exist' (Hayek, 1988/1992: 27). According to Hayek, many of our moral instincts are rooted in hunter-gatherer communities which are not useful anymore in modern societies. He named two moral instincts which are great obstacles to the development of modern economy; one is solidarity and the other one is altruism. The problem with both of these instincts, Hayek claims, is that they imply there can and should be a common purpose. These moral

instincts were very useful for thousands of years since they helped humans survive and flourish. But they are major obstacles in modern society, or what Hayek calls the 'Great Society'. In the Great Society, Hayek maintains, varieties of groups and organisations follow different and sometimes contradictory purposes and the pursuit of common purpose for the whole society is just an illusion (Hayek, 1983a: 29-31). For Hayek, if humans want to become civilised and enjoy the fruits of civilisation, they need to suppress their archaic instincts in favour of civilised order. Such suppression, of course, causes anxiety and discomfort in us, and that is why civilisation has so often been considered 'unhealthy, unnatural, and artificial, and human beings have sought so hard to escape from its disciplines and its requirements' (Gamble, 1996: 28). Hayek also noted that 'man was civilized much against his wishes' (Hayek, 1983a: 47). Hayek was aware that his ideas in this respect were very similar to Freud's *Civilization and Its Discontents* (1930/2002) and when it was pointed out in an interview he exclaimed that 'you can only become civilised by these repressions which Freud so much dislikes' (Hayek, 1978b). Although Hayek acknowledges that 'emotionally, ninety-nine percent of the population of the world are socialists' (Hayek, 1983a: 43), he maintains that socialism and social justice are in nature reactionary and belong to tribal sentiments (Hayek, 1976/1978).

Now it can be asked whether the Great Society is morally superior to primitive societies? As far as I am concerned, Hayek does not give a clear answer to the question. It seems to me that he sometimes implies that the Great Society has no moral superiority over other forms of society. In *The Constitution of Liberty*, Hayek claims that 'the rules of morals are instrumental in the sense that they assist mainly in the achievement of other human values' (Hayek, 1960/2011: 128). And according to Hayek's

evolutionary theory, the most important one among the 'other human values' is life itself. Hayek makes it very clear that life has no other purpose than survival and reproduction (Hayek, 1988/1992: 133). 'The economic calculus is a calculus of life' Hayek says 'it guides us to do the sort of things that secure the most rapid increase in mankind. In a sense, I am prepared to defend this contention by saying that life has no other purpose than itself, by which I mean that we have been so adjusted that our actions contribute to produce more human beings than there existed before' (Hayek, 1983a: 50-51). It seems that even concepts such as freedom and democracy have instrumental value for Hayek. 'Democracy is essentially a means' Hayek argues 'a utilitarian device for safeguarding internal peace and individual freedom' (Hayek, 1944/2007: 110). And freedom is important for Hayek because it can let the market work properly and by that he means in the end everyone gets financially better off. But what if people can get financially better off by restricting their freedom? Hayek believes that is an impossibility. It is not simply feasible for Hayek to get financially better off by restricting freedom. This is one of the reasons that Edward Feser considers Hayek 'almost certainly the most consequentialist thinker of the mainstream political right in the twentieth century. It is just possible that he was the most consequentialist twentieth-century political thinker, right or left, period' (Feser, 2006b: 1).

However, it is not easy to ignore the whole of Hayek's rhetoric in favour of liberalism when he says 'we must show that liberty is not merely one particular value but that it is the source and condition of most moral values' (Hayek, 1960/2011: 52-53) and also 'freedom has never worked without deeply ingrained moral beliefs' (Hayek, 1960/2011: 80). It should be noted that Hayek uses the words 'freedom' and 'liberty' interchangeably (Hayek, 1960/2011: 57). Hayek maintains that in a free society, not only the

advancement of knowledge and technology can be achieved more successfully, but 'freedom would also bring progress in the moral sphere' (Hayek, 1973/1978: 148). These passages and many others in Hayek's writings imply that there is intrinsic value to freedom, yet Hayek is unwilling to provide a non-consequentialist argument for his conception of freedom. According to Hayek, freedom is important because it makes evolution possible and evolution is needed because it will give us a better chance of survival. 'Evolution creates a possibility of choice only under freedom' Hayek says 'if you do not have freedom, the thing is directed by a superior authority. You have no longer a selective evolution, where the better and the more effective succeeds, but what succeeds is determined by those who are in power' (Hayek, 1978f).

6.4.3. Hayek's Concept of Social Evolution

The concept of evolution is somewhat problematic in Hayek's writings. Sometimes he associates the concept of evolution with the notion of progress. Such association, I believe, creates two major problems for Hayek's theory. One is that, in order to make sense of progress, a goal or an end should be postulated. If there is no goal, it does not make sense to speak of either progress or regress.⁴² It seems that for Hayek, the main goal

⁴² In his 'postscript' to *The Structure of Scientific Revolutions* (1962/1973), Thomas Kuhn argues that it is possible to make sense of the idea of progress in scientific theories without postulating an ultimate end or a goal to the process that is associated with the concept. Kuhn maintains that later scientific theories do not get closer to the 'truth' or representing the 'reality' in a better way because there is 'no theory-independent way to reconstruct phrases like 'really there'; the notion of a match between the ontology of a theory and its 'real' counterpart in nature now seems to me illusive in principle' (Kuhn, 1962/1973: 206). Scientific theories can get better (or worse presumably) at solving the problems that are presented in a particular paradigm, but outside of that paradigm, the theories are neither better nor worse. In this regard, scientific theories are like organisms that are adapted to their specific environment in a way that they would have a better chance of survival. It is quite feasible to say that an organism is 'well-adapted' or 'poorly-adapted' to a particular environment, however, it does not make much sense to say that an organism is 'truer' or 'more real' than the other ones. Moreover, such an adaptability is only useful in that specific environment and an organism may easily perish if it is put in a different environment. Kuhn says, scientific development is 'like biology, a unidirectional and irreversible process. Later scientific theories are better than earlier ones for solving puzzles in the often quite different environments to which they are

in human life is the survival of individuals which is only possible by economic development.⁴³ As I mentioned earlier, other values such as freedom, morality and democracy are as important as they can serve that goal. For Hayek, there is no economic development without freedom and freedom cannot be preserved without private property.⁴⁴ These concepts are all linked together in Hayek's mind when he says 'there can be no free sphere for the individual unless he knows which things in the material world he can control and how he can control them, unless he knows at any moment what means he can use for the ends which he pursues' (Hayek, 1955/2014b: 175). Any restriction on private property which is the motor of economic development, Hayek believes, will lead to catastrophic consequences for the other parts of society. So economy is not just a section in society like other institutions but it plays a far more important role. In *The Road to Serfdom*, Hayek says 'economic control is not merely control of a sector of human life which can be separated from the rest; it is the control of the means for all our ends. And whoever has sole control of the means must also determine which ends are to be served, which values are to be rated higher and which lower—in

applied' (Kuhn, 1962/1973: 206). Although Kuhn argues that scientific theories are getting better as instruments for puzzle-solving, he also says, 'I can see in their succession no coherent direction of ontological development. On the contrary, in some important respects, though by no means in all, Einstein's general theory of relativity is closer to Aristotle's than either of them is to Newton's' (Kuhn, 1962/1973: 206-207). Number missing here However, as I discuss in following pages, it seems that Hayek has a particular view about the main goal in human life.

⁴³ Hayek does not discuss the importance (and sometimes the crucial role) of other values for individuals and society. He thinks that as far as we have economic freedom, other values will follow and individuals and societies can develop and flourish. Unlike some liberal and conservative thinkers such as Berlin and Oakeshott, Hayek does not show any sensitivity towards the tragic nature of human life and incompatibility of all human values.

⁴⁴ In a letter to Hayek dated 5th Jan 1965, Oakeshott raised several questions about the way in which Hayek used the terms Nomocracy and Telocracy. Oakeshott believed what Hayek had argued as Nomocracy (a different name for Cosmos order), is in fact a different form of Telocracy. Oakeshott wrote 'Telocracy may exist in various idioms (religious, moral, economic, etc:) and there is nothing to prevent a, so to speak, developing or changing Telocracy – though every change of any significance would represent a transformation of the whole society. I take it that the current form of Telocracy is Productivism'. The original letter is stored at Hoover Institution Archives, Stanford, California. Dr. Luke O'Sullivan was kind enough to provide me a copy of the letter.

short, what men should believe and strive for' (1944/2007: 127). If it is not the individuals who control the economy but rather a community of people as their 'representatives' or even a dictator, Hayek argues, 'whoever exercises this control has complete power over us' (Hayek, 1944/2007: 136).

So according to Hayek, the economic sphere should remain as free as possible because it makes evolution and progress possible in other areas of society. Now the question is whether economic development is a goal in itself or not? If yes, it would contradict what Hayek has always argued - that it is a mistake to talk about 'social goals'. Society cannot and should not have a goal and people should remain free to pursue their own aims in life. But if the answer is no, then the question is why did Hayek insist so much on economic freedom? It can be answered that economic freedom is not an end in itself, but it is a framework which makes the development in other spheres possible. But this answer is not satisfactory because it can be asked what if the development in other areas required some restrictions on the economic sphere? It seems that Hayek's major aim is to maximize freedom in terms of economics since he thinks that economic freedom is the foundation of progress and survival. It is also important to remember that for Hayek, other social values such as freedom, justice (in his own interpretation) and democracy can only have a chance to fully grow and manifest themselves in society when the right of private property is protected by the law and government. Although Hayek accepts that some legislative regulations should be exercised on the economic sphere, such regulations are quite minimal in their nature. However, Hayek is not ready to accept any restriction more than the minimal ones which he has proposed on the economic sphere. Any constraint on economics, in Hayek's mind, is a constraint for the values of the Great Society. It is not conceivable for Hayek

that the welfare of a society can be achieved by controlling economies. For Hayek, there are only two opposites, either economic freedom and all the good things on one side, or some sort of limitation of economies and all the evils on the other side. Christina Petsoulas is absolutely right to say that Hayek had a 'Manichean' view of the world. 'Everything he considers superior –spontaneous order, 'evolutionary rationalism', individualism, capitalism, liberalism–' she says 'is juxtaposed against its opposite –made/design order, 'constructivist rationalism', collectivism, socialism, totalitarianism' (Petsoulas, 2001: 12-13).

The second problem with Hayek's evolutionary theory is that, it seems that either way we need to suppress some of our 'instincts'.⁴⁵ If we want to live in the Great Society, we are expected to suppress our archaic sense of 'social justice' and stay civilised against our inner compulsions. But if we want to live in a 'planned society', we also need to suppress our desire for 'freedom'. Hayek's defence of 'freedom' over 'social justice' is purely consequentialist. For Hayek, freedom is important because it makes evolution possible and that, in the end, guarantees our survival. Hayek contends that the sense of 'social justice' belongs to hunter-gatherer communities and it helped those communities to survive and reproduce. Since for the most part of human history, Hayek argues, they lived in such communities, the sense of 'social justice' is deeply seated in human psyche. However, in modern industrial societies, the sense of 'social justice' does not have survival value anymore, but it has turned to an obstacle to the evolution of modern societies. According to Hayek, since cultural evolution

⁴⁵ Although by associating a particular meaning to justice, Hayek tries to make it compatible with the resetting of his political theory and avoid any clashes between different values. He still does not see any obstacle (except perhaps from human folly) in repressing our deep-seated instincts. As I said in the previous footnote, Hayek seems completely uninterested or even blind to the tragic nature of human life and that 'out of the crooked timber of humanity, no straight thing was ever made' (Berlin, 1947/2013: 50).

proceeds faster than biological and psychological evolution, if we want to survive, we need to adapt our biological and psychological impulses to our cultural environment. As Hayek said and I mentioned earlier, we have to be civilised against our will. In this respect, there are some parallels between Hayek's argument and Elias' in *The Civilising Process* (1939/2000). For both Hayek and Elias, as for Freud, civilisation is only possible by restricting some of our instincts. Repressing the sense of 'social justice' may make us uncomfortable, but that psychological repression is the price we need to pay to stay civilised and keep flourishing. As Hayek says, 'we can be few and savage, or many and civilised' (Hayek, 1988/1992: 133).

6.4.4. The Limit(s) of Control

By claiming that we should adjust our psychological impulses to our cultural atmosphere, Hayek adds an element in his theory which is not easily compatible with the rest of it. One of the major aspects of Hayek's thought is that we are not fully able to control all aspects of our life; in his writings he fervently attacks those who believed that human beings are in charge of their lives and are able to make their lives as they wish. Now it seems that Hayek himself makes the same mistake. He believes that deep psychological impulses can be changed or altered by the power of the human will. Such an optimism about the ability of the human will to change the sense of 'social justice' has no ground in Hayek's psychology and social philosophy. The other aspect of such optimism is that Hayek does not explain based on his evolutionary theory how it is possible to ignore such a deeply seated instinct like 'social justice', which has been existed for millions of years, and replace it with a very recent conception of 'justice', which is the by-product of the market economy? In this respect, Hayek goes against his evolutionary theory and does not completely follow the consequences of his theory. Hayek not only wants to explain the things as they are, but also how they should

be. He 'wanted to move toward a more specific, visionary representation of his worldview' (Burgin, 2012: 107), as he wrote in late 1940s 'a liberal utopia' that can be achieved by 'truly liberal radicalism' (Hayek, 1949/1997: 237). Such ideological closures is not in accord with his evolutionary theory and, as Andrew Gamble has argued, makes it impossible for Hayek to 'develop many of his insights (Gamble, 1996: x).

Moreover, in his discussion on legislation, Hayek provides an argument which is in contrast to his epistemology. Although Hayek is aware that evolution may lead to an unfree state, he maintains that freedom ought to be safeguarded by principled legislation. In order to develop a system of law which can safeguard freedom, Hayek argues in the second volume of *Law, Legislation and Liberty* (1976/1998), the legislator needs to understand all the rules that a society already has. With such knowledge in mind, Hayek's argues, the legislator is able to frame a law which is consistent and compatible with the other laws of society. Now, Hayek does not explain how a person or groups of people could possibly acquire such knowledge. If knowledge is fragmented in society, if humans follow rules which they do not completely understand, if ignorance is 'irremediable' (Hayek, 1973/1998: 12) for both social actors and social theorists, then how is it possible for anyone to frame a law which is compatible with all the other rules of society, not only in terms of logical compatibility, but also compatibility in the aims? And moreover, how could someone know all the relations and inter-relations between the new law and the established one and foresee their compatibility in the future? Again Hayek does not give a clear answer to the above questions.

Although Hayek's theory of cultural evolution is extremely fruitful and impressive, in the end it fails to deliver a coherent philosophy of liberal market society. This failure, I believe, is due to some elements of

'rationalism' and 'utopian' thinking in Hayek's mind. Hayek, like Marx whom he criticised so severely, has a vision of the 'Great Society' and when he condemns conservatives for not having a plan for society and being 'dragged along a path' not of their own choosing, he expresses a genuine concern. Nevertheless, Hayek did not try to reconcile such a notion of the 'Great Society' with his theory of cultural evolution. For example, Hayek established the Mont Pèlerin Society in 1947 as an ideological body in order to attract sympathetic intellectuals who shared a political goal, i.e. their hostility towards socialism. The main objective of the Mont Pèlerin Society was to counter-balance the ideological rhetoric of socialism by providing a 'liberal utopia'. Hayek was initially disappointed since the members of the society 'were largely united in what they opposed but shared little agreement in their attempts to construct an alternative vision' (Burgin, 2012: 121). Ben Jackson has suggested that Hayek had even entertained the idea of inviting some 'liberal socialists' to the first meeting of the Mont Pèlerin Society, although in the end he narrowed the invitation list to centre and right liberals (Jackson, 2010: 136-137). This utopian aspect of Hayek's project made some right-wing liberals such as Michael Polanyi withdraw from the society or in case of Michael Oakeshott, not join the society altogether (Burgin, 2012: 115-116).⁴⁶

Although Hayek moved from his earlier utopian thinking in his later life, he never managed to free himself completely from his initial utopianism. One example of his faith in liberalism can clearly be seen in his visits to Chile. In his first visit to Chile in 1977, he had a short meeting with Augusto Pinochet, the military Dictator of Chile from 1973 to 1990. On his return,

⁴⁶ In case of Oakeshott, he told Hayek that he would be willing to accept the membership of the society, but he never attended. Polanyi on the other hand 'participated in several of the society's early meetings but eventually decided that there was an irreconcilable gulf between his and Hayek's worldviews' (Burgin, 2012: 115).

Hayek asked his secretary Charlotte Cubitt to send Pinochet a copy of his chapter on 'A Model Constitution' from *Law, Legislation and Liberty* (Caldwell and Montes, 2015: 279). According to a Chilean newspaper report, Hayek also mentioned some ideas about a 'model constitution in his talk before a group of businessmen' (Caldwell and Montes, 2015: 279).⁴⁷ Karin Fischer has argued that Hayek had a significant role in shaping the Chilean constitution since the constitution 'was not only named after Hayek's book *The Constitution of Liberty*, but also incorporated significant elements of Hayek's thinking' (Fischer, 2009: 327). Fischer also maintains that Hayek's influence over Pinochet 'extended beyond the merely personal' relationship (Fischer, 2009: 328). Such claims are not very well-founded and since Caldwell and Montes have extensively, and I believe successfully, disproved them (Caldwell and Montes, 2015: 284-288), I shall not discuss them further. The important point, however, is the fact that Hayek believed that his theory is not only applicable to Western countries. In his interview with *El Mercurio*, a Chilean newspaper, on April 12, 1981, Hayek states that when a society is broken down, dictatorship is justified in order to bring back the order and by 'order' he means liberalism. 'I personally prefer a liberal dictator to a democratic government lacking liberalism' He says (quoted in: Caldwell and Montes, 2015: 298). Although Caldwell and Montes interpret Hayek's response in a way that 'for him, dictatorship can only be justified as a temporary response to a breakdown in society, and that the goal should be return to a stable democracy' (Caldwell and Montes, 2015: 299), I believe that the question for Hayek is not democracy, but rather, 'liberalism'. Three years earlier to this interview, Hayek also expressed the importance of

⁴⁷ Hayek visited Chile twice in his life, once in 1977 and the other in 1981. One important question that can be asked is why Hayek even tried to help Pinochet's government? Caldwell and Montes (2015) has tried to clarify the issue. Whether one finds their account convincing or not, my concern here is not Hayek's relation with Pinochet's government, but rather, the fact that he proposed a model constitution that could be applied in Chile.

market liberalism over democracy in his letter to *The Times* when he says 'if Mrs. Thatcher said that free choice is to be exercised more in the market place than in the ballot box, she has merely uttered the truism that the first is indispensable for individual freedom, while the second is not: free choice can at least exist under a dictatorship that can limit itself but not under the government of an unlimited democracy which cannot' (Hayek, 1978c: 15). As I explained before, for Hayek, the market economy and freedom are (and ought to be) the core values of any prosperous society. Social evolution can only happen under freedom, if the society or market are restricted by an authoritarian system, there is no evolution since new systems cannot emerge because of the domination of the old system which has been preserved by force. So, 'it's rather that evolution is made possible by freedom' Hayek maintains, 'and what you get in unfree systems is due to the fact that the emergence of the better has been prevented' (Hayek, 1978f). Hayek sees freedom as an instrumental value which paves the way for the evolution of social institutions. At the same time though, he believes the evolution of social institutions creates a more free and prosperous society. Any rational planning to restrict this condition of evolution should be expelled since it results in catastrophe.

To summarise, Hayek's scepticism towards the role of human reason in society and his theory of cultural evolution are two sides of the same coin. One of the main concerns of this thesis was to show that the Kantian reading of Hayek's epistemology, which has been the dominant interpretation in the last 30 years, is not well grounded. I have also tried to illustrate Hayek's particular view about evolution both in cultural and psychological terms. I believe that Hayek's book *The Sensory Order* (1952/1976), which has been widely overlooked by many scholars, plays a crucial role in understanding Hayek's epistemology and social philosophy. Hayek's views on cultural

evolution and his lifetime of mistrust of social planning made him get much closer to the conservative attitude. Both for Hayek himself and his conservative contemporaries, however, there is an element of 'utopian' thinking present in his thoughts which prevented him from fully acknowledging his own conservatism. Yet, I have argued that such a utopian trend became more and more invisible in his late writings. As Hayek got older, he developed his theory of cultural evolution which has many similarities with conservative thinking. I believe, in the end, Hayek got much closer to conservatism, but he always remained a reluctant one.

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