INSTITUTIONS, MARKETS AND ECONOMIC EVOLUTION CONCEPTUAL BASIS FOR A NATURALIST INSTITUTIONALISM

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Institutions, Markets and Economic Evolution

Conceptual Basis for a Naturalist Institutionalism

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Abstract

The University of Manchester Jorge Manuel de Meneses Bateira Doctor of Philosophy (PhD), 2010

Institutions, Markets and Economic Evolution Conceptual Basis for a Naturalist Institutionalism

We might wonder, after two centuries of economic science and thousands of articles and books written by economists, if something new can still be said about 'markets'. Today, what new contribution could still be given to a so fundamental concept in economics? This thesis builds on the main legacy of Veblen, Polanyi and Hayek's Institutionalism: the distinction between the 'interactional' level of human sociality and the 'structural' level of society that Veblen named 'institutions'. The three authors tentatively formulated an original idea: the two levels of sociocultural reality are interdependent and mutually constitutive. This is a proto-emergentist ontology of institutions that makes the starting point of the thesis. Convergent results of different disciplines are explored in order to develop such ontology. It is argued that sociocultural systems have properties that make them specific, namely the human capacity to interact in multiple scales of time-space using human language. Sociocultural research cannot be guided by conceptual schemes abstracted from other levels of Nature. This is the bedrock of a Naturalist Institutionalism. To understand institutions we need to discuss meanings and culture: we need to enter the semiotic of Peirce, the founder of Pragmatism. The foregoing implies the distinction of three types of interdependent processes in sociocultural systems: the cultural ('norms'); the *social* (networks, organisations); the *material* reality. This analytical move enables a redefinition of 'institution': a sociocultural system emergent from inter-related organisations, networks, norms and material reality, which structure individuals and organisations and serves a societal function. In this sense, the 'economy' is a macro-institution and markets are sub-systems of the 'economy', meso-institutions. Thus, a market is a selforganizing, complex, and open system endowed with structural levels emergent from persons' interactions-communications participating in the transformation processes of production, distribution, appropriation and consumption, using matter-energy and symbolic tools. Finally, it is argued that the evolutionary process of markets has a specific sociocultural nature that goes by the name of 'history'. Their motion is discussed with recourse to a model that highlights the interactions of markets with science, state and culture to solve problems of uncertainty and coordination in the processes of competition, cooperation and valuation.

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Dedication

To Leonor V. Ferreira, in memoriam

The Author

Jorge Bateira is a mature student. He graduated in Economics (1975) at the University of Porto and has a 'Diplome d'Etudes Approfondis' in Regional Development at the University of Bordeaux. After sixteen years as lecturer of economics, he left the Faculty of Economics of the University of Porto to begin a career in the public sector in the nineties. He directed a regional agency of development in Vale do Ave, in the North of Portugal, providing services to Small and Medium Enterprises. Before coming to Manchester to begin his PhD studies he had the position of manager of SME Community Initiative for Portugal.

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At the end of this journey there is a song from my youth that comes to mind in the beautiful voice of Joan Baez, "Gracias a la vida" (Thanks to life). Despite the sudden illness of my wife, half way along this journey, and the enormous grief for her departure, I still say thanks to life. It has given me many opportunities to enjoy relationships that made me grow and feel fulfilled.

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As a mature student, my research benefitted from my professional experience, and a lot from sixteen years of lecturing at the Faculty of Economics in Porto. I want to thank Amílcar Pina for what I have learned through his mentoring and for the patience he had with this assistant. The friendship and affective encouragement of Aurora Teixeira will always be in

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Chapter 1 Introduction

1.1 Research questions

We might wonder, after two centuries of economic science and thousands of articles and books written by economists, if something new can still be said about 'markets'. Today, what new contribution could still be given to a so fundamental concept in economics?

However, in the recent Elgar Companion to Social Economics, Geoffrey Hodgson (2008: 251), a leading figure of contemporary Institutional economics, wrote in the entry "Markets": "No fewer than three Nobel Laureates have noted the paradoxical omission of discussion of market institutions in the literature in economics." Leaving aside institutions, perhaps a robust neoclassical theory of markets could be available; but even this hypothesis is discarded (Ibid, 251-252):

Even in the 1980s Ronald Coase (1988, p. 7) could still observe that 'in modern economic theory the market itself has an even more shadowy role than the firm'. Economists are interested only in 'the determination of market prices' whereas 'discussion of the market place itself has entirely disappeared'.

A quick look at the curricula of undergraduate courses in economics, and at the textbooks that support them, flagrantly confirms the diagnosis. Besides graphics about supply and demand, we do not find even a minimal elaboration about markets, much less a chapter dedicated to explain them to undergraduates. No wonder the financial crisis that began in 2007-2008, then the quasi-collapse of financial markets, took by surprise the mainstream of the profession, including the most accredited economists at the best ranked universities.

This thesis takes as point of departure economics current poor understanding of markets and intends to advance scientific knowledge in this fundamental field. It will argue that markets *are* institutions. Thus, a central place will be given to the understanding of institutions. In doing so, the

thesis aims to give a contribution to the updating and consolidation of Institutional economics that could be useful to policy makers, particularly in a time of great challenges to contemporary societies.

Years ago, Uskali Mäki (1993: 20) recalled the critique addressed to the so-called 'Old' Institutionalism about the lack of a theory and an obsession with collection of empirical material. In that same passage Mäki quotes a statement by Robert Langlois:

[Followers of Veblen] wanted an economics with institutions but without theory; the problem with many neoclassicists is that they want economic theory without institutions; what we should really want is both institutions and theory.

What happened since then has been the consolidation of this programme; a theoretical and applied "economics *with* institutions", precisely the title of Mäki's text. As a consequence, a large part of its promoters – those of so-called New Institutional Economics (NIE) – has been included in the mainstream of the discipline, which now spans from Neo and New Classics, New Keynesians, Game theoreticians and New Institutionalists. And for some time there are scholars also engaged in making bridges, if not promoting a convergence, between the Old and the 'well behaved' NIE stream (see Rutherford, 1995).

This thesis is unabashedly non-mainstream; it is unequivocally theoretical, and nevertheless affiliated to Thorstein Veblen's Institutional economics, which I prefer to label (instead of 'Old') Original Institutionalism. Rather than working to improve a stream of "economics with institutions", the thesis argues for an "economics of the economy", by which I mean that the object of economics is the 'institution-economy'. Although highlighting that there is more to the economy than markets, the focus of the thesis is on markets; it aims to give a contribution to the understanding of markets' nature and motion, qua institutions of society.

More precisely, I argue that the 'economy' is a macro-institution of society; *a self-organising, complex and open, sociocultural system.* Ioannides and Nielsen (2007: 10) would find in this stance a trade-off:

On the one hand, openness increases relevance but reduces possibilities for modelling. On the other hand, a closed system is more susceptible to modelling but is less relevant.

I totally disagree with such view, and in this thesis I intend to show (hopefully) that *open* systems can also be modelled, on the condition that we shake off the neoclassical frame of mind that equates theoretical modelling with mathematical formulas. Of course, any kind of modelling implies the acceptance of simplifications, but the crucial point resides in what we retain, what we let go, what assumptions we make. Unfortunately, in the vain hope of looking for recognition by the mainstream of the profession, some non-mainstream economists accept to be constrained by such narrow view about research methods, and indeed about what science is about.

This thesis embraces a systemic approach: markets are subsystems of the economy, which is itself a subsystem of society. I reserve for this kind of societal system – markets, economy, science, state and others – the term 'institution'. This is in strong contrast with the meaning of institutions that is usually adopted in Institutional economics literature, New and Old. As an illustration, consider the following statement (Samuels, 1995: 571):

Although Institutionalists disagree as to how much and what precisely is important in the neoclassicists' analysis of the operation of pure market mechanisms in allocating resources, they all agree that markets are organised by and give effect to the institutions which form them.

This is the typical formulation "markets *cum* institutions", which suggests that we have on one side "pure market mechanisms" and on another side "institutions"; to work, markets need these 'impurities'.

What actually are these "institutions" that organise markets? Some Institutionalists that have studied with the second generation of Institutionalist economists in the USA maintain that institutions are part of society's culture (for instance Mayhew, 1987). Note that the above presented statement tells us that "markets ... give effect to the institutions which form them." So we have here an issue of 'circular causation', a causal recursivity, involving "market mechanisms" and "institutions", the latter possibly of a cultural nature.

If we take account that Veblen adopted the Darwinian idea of "cumulative causation", perhaps it is pertinent to assume that "market mechanisms" and "institutions" mutually constitute themselves through processes of *cumulative and recursive* causation. This understanding is agnostic about what concerns the systemness of such overall process (a 'unit' that is not named) but at least it makes sense in light of the concept of 'emergence'

used in other sciences, though the term is seldom used in the Institutional economics literature.

However, what seems a problem of clarity and choice of terms quickly turns into a complicated issue when the scope of "institutions" is suddenly augmented. Two pages after, Samuels (1995: 573) states:

institutionalists insist that the ultimate determinant of allocation of resources is not some abstract market mechanism but the institutions, especially the power structures, which structure markets and to which markets give effect.

In this passage we are told that "institutions" also comprise "power structures", which certainly points to organisations, entities where we find layers of hierarchical relations through which power is exercised, especially firms that are leading actors of markets. Here we need to ask: if "institutions" (comprising both cultural entities and firms) structure "markets", what do they really structure? What are exactly these "markets"? The answer might be looked for in John Commons, a disciple of Veblen: they structure "individuals' transactions" (Kaufman, 2007). This augmented formulation could be acceptable if the above mentioned *system-unit*, as constituted by "individuals' transactions", the "institutions" that are given "effect" by them, *and* the relations between them (indeed, the higher-level encompassing system) were explicitly acknowledged.

Actually, the problem is deeper. The relations between "individuals' transactions" and the so-called "institutions" is seldom analysed. What is exactly involved in this articulation so that transactions "give effect to the institutions which form them", while some "institutions" are of an ideational kind and others are organisations? Is it enough to range everything under the concepts of 'habits' and 'rules', as contemporary Veblenians do, in order to account for processes relating "the market" and *two kinds* of "institutions"? And what is the analytical usefulness of the "institution" as a concept when "language, money, law, systems of weights and measures, table manners, firms (and other organizations) are thus all institutions" (Hodgson, 2006b: 2)?

This thesis attempts to answer these questions and shed light on this problematic riddle that plagues the very name of this stream of heterodox economics. Namely, the lack of research about the processes that make "the

market" a systemic unit – a unit made by individuals' interactions-communications of a particular kind *and* the structures that emerge upon them and at the same time structure them. After all, what is the future of Original Institutionalism if the ideas of those who are affiliated to it are all but clear about the 'corner stone' of their theoretical edifice? Facing head on these obscurities, the research of this thesis aims to answer the following questions:

- What is an institution? Is it a set of cultural and social structures coupled with individuals' interactions? If so, do these sets make a sociocultural system? Could we say that any sort of sociocultural system is an institution, or should we reserve the term 'institution' to the upper-level structures of these systems?
- Is the market an institution? How do we make an ontological distinction between the cultural components of markets and the organisational ones, namely firms? Do these two kinds of market structures relate in the same way to the lower-level interactions between individuals? What are precisely the processes that are at work in the emergence of these two kinds of structures?
- Do markets evolve? What connects the evolution of markets and societies to the evolution of the other levels of reality? Can we admit that, at a high level of abstraction, all evolutionary processes have a similar structure?
- Can we build a theory of capitalist markets that could be helpful in understanding their historical and geographical specificity as institutions of particular societies?

To answer these questions I had to deal with the limitations of my own training as economist, and the limitations of the discipline itself. I quickly understood that not only the full accomplishment of the project is beyond the capacity of a single researcher but it also required the risk of crossing disciplinary boundaries. Without a strong methodological 'glue' the very preliminary outcomes of such ambitious journey would fall apart shortly after the first steps. I had to make methodological choices that could guide my endeavour in the building of what ultimately became a *domain-specific*

ontological theory (Davidsen, 2005). In the next section I present the methodological assumptions of this thesis.

1.2 Methodological assumptions

By methodological assumptions I mean the philosophical points of departure and general guiding principles of my journey towards building an ontology of markets.

Mainstream economics rarely states at the outset the methodological assumptions of its research. I will behave precisely in the opposite way and accept the following statement (Jackson, 1995: 777):

Academics working as social scientists, by the nature of their activities, have little choice but to make ontological presuppositions. The realist argument is that it is better for these presuppositions to be declared from the outset and not left implicit in one's epistemology or theory.

Methodological choices that lay the ground for scientific research are researcher's answers to questions about: *Metaphysics* – what is reality?

Ontology – how is reality organised? Epistemology – how do we know reality?

My answers are different from those we usually find in non-mainstream economics literature. In this introductory chapter I limit myself to a brief synthesis of my options and will not contrast them with those of leading authors in Institutional economics. The unfolding of the thesis will open up the opportunity to contrast my choices with others' at the moment of discussing particular topics.

1.2.1 Metaphysics of process

As the Spanish philosopher Zubiri (2003 [1989]) has stated in the first lines of an interesting book, "things, in fact, "are" in a certain way but also "become", have a becoming." This gives us a clue of what is the meaning of a metaphysics of reality understood as a 'process' rather than 'substance'.

The advances in science in different domains of reality are confronting us with the need to let go the limited understanding of process as "mechanistic

¹ For the sake of brevity, I will use the terms 'Institutional economics'. Even heterodox economists more in tune with Schumpeter's thinking, rather than Veblen's, work with some version of the formula "markets *cum* institutions". As the organisations of the so-called Washington Consensus for some time also use the concept of 'institutions', one might even say that "now we are all Institutionalists".

causal interactions among fixed objects", simply because we no longer know what objects are. Physicists have decomposed physical reality into elementary parts the extreme but are still uncertain about what reality actually is.² Observed from the perspective of quantum physics, reality appears veiled (D'Espagnat, 2006). To leave behind a metaphysics of substance means to abandon the following ideas: (1) fixity-stasis is the default situation and change calls for an explanation; (2) each substance is decomposable in elementary elements; (3) reality has a bottom-level made of elementary particles and the causal relations among them.

As Bickhard puts it, metaphysics of substance introduces a "metaphysical split" between the realms of substance and intentionality (Ibid, 253):

This makes it rather difficult to account for phenomena such as intentionality and normativity, and, correspondingly, the normativities of function (functional, dysfunctional) and representation (true, false) have become at the center of the difficulties in studies of mental phenomena.

Choosing a metaphysics of process, leads us to embrace the following ideas: (1) "Change becomes default, and it is stability, should such occur, that requires explanation"; (2) "The world is constituted in organizations of processes, so there is no in-principle mystery that new organizations might yield emergently new properties"; (3) "If metaphysical emergence is no longer blocked, it makes sense to explore the possibility that normativity and intentionality might, after all, be emergent in the natural world. More generally, explorations of multiple realms of possible emergence are enabled" (Ibid, 254).³

With a metaphysics of process I gain a new perspective about the evolution of reality; its mode of being is the on going process that so far gave from itself new 'organisations of processes', new levels of reality – the physical, the living, the human and the social (Emmeche *et al.*, 1997). This understanding, I will argue, implies a reformulation of the concept of 'cause', the abandon of the idea of 'laws of nature', and the rejection of the modern synthesis between Darwinism and genetics (Ulanowicz, 2009). Therefore, in the study

³ Note that, contrary to a metaphysics of substance, in *organised processes* "it is not always clear where the boundaries are, or if there are any boundaries" (Bickhard, 2008b: 255).

² As Campbell (2009: 459) states, "since the only coherent way to conceptualize quantum fields is as processes extended in space-time, it follows that any process, no matter how micro, consists of yet smaller processes, ad infinitum."

of markets I will adopt a *process metaphysics* that sees reality, including sociocultural reality, as an evolutionary process that self-organises in *clusters* of emergent process systems (Campbell, 2009; Rescher, 2000), and I will name 'Nature' this evolutionary process launched by an event that macrophysicists usually term the Big Bang (Nicolescu, 1996).

1.2.2 Multi-level ontology

I share with Tony Lawson the idea that methodological issues, namely the ontological ones, are central to the separation between the heterodox stream of Original Institutional economics and the mainstream of the discipline (Lawson, 2006).

My ontology is explicitly grounded in the above presented metaphysics of process: basically, what exists in reality is 'organisations of processes', mostly bearing a systemic nature. I will adopt four basic ontological levels of reality (physical, living, human, sociocultural) constituted by entities that vary according to the degree of two fundamental properties, organisation and complexity (see Collier and Hooker, 1999).

Some of these entities, which I will label 'self-organising complex systems', have their cohesiveness built upon *non-linear bonds* between their components, which give them unique properties that are not present on the latter. As Campbell (2009: 463) explains,

What is ontologically significant is that, in these cases of non-linear unification, the properties of the whole are somehow 'more' than the arithmetical sum of its parts—such system properties, and the causal powers of such a system, are *emergent*. Emergence should no longer be viewed as a dubious metaphysical mystery, but as explicable in terms of non-linear functions. ... The result is the familiar picture of a multi-layered model of the world as stratified into different levels, in a micro-to-macro hierarchy.

A sub-type of self-organising complex systems is constituted by *self-maintenant* systems (e.g. flames). They are "stable far-from-equilibrium"

⁴ Contrary to the metaphysics of substance that attributes to each individual a *space and time location*, process metaphysics enables to "replace the particularist conception of individuals with a view of individuality that focuses not on location but on 'specificity-infunctioning' in the widest sense of 'functioning', i.e., focuses on the dynamic role of an entity (e.g., an activity) within a certain dynamic context" (Seibt, 2009: 484).

⁵ To my knowledge, this is the best formulation consistent with a *metaphysics of process*. Besides other reasons pertaining to the specificity of sociocultural reality, the lack of a metaphysics of process leads me to set aside the typology of complex systems proposed by Foster (2005a).

process-systems" which display *interactions with their environment* indispensable to their existence. Some of these (e.g. biological systems) are *recursively* self-maintenant and I will name them *autonomous* systems; they are (Ibid, 467)

necessarily open, organized action systems, in essential interactions with their environments. Unlike candle flames, through their internal control of such interactions they are able to maintain their own viability conditions and control their reproduction. The ontological consequence is that we cannot say what they *are* without taking those interactions into account.

In social science research it is crucial to recognise that 'persons' are autonomous systems. Certainly they are open systems and they internally control their interactions with the environment in order to survive and reproduce. But they do much more and much better than that. Namely, the human mind not only thinks but also knows that it thinks. "Thinking that one is thinking, being aware of being aware, has to be a second-level operation. ... We have to do here with reflection. Such a meta-level of experiencing has in fact evolved, it is a characteristic feature of humans" (Campbell, 2009: 474).

In the same evolutionary process human beings have developed a sophisticated language, which enormously enhanced their capacity to cooperate, develop stable societies and control the bio-physical environment. Human beings are born and raised in a sociocultural environment pervaded by the symbolic code of language without which they are unable to think like persons; persons emerge as sociocultural human beings.

Finally we have the level of *sociocultural systems* to which markets belong. The interesting aspect here is that without human beings there are no sociocultural systems and, at the same time, without a sociocultural environment no human being becomes a person. As Campbell (2009: 474-475) puts it,

the emergence of reflective persons and the emergence of social institutions and certain social groups are mutually dependent and interactive. ... These institutions and groups manifest properties and powers which are novel and distinctive, and which the humans who constitute them do not individually manifest.

This emergent nature of sociocultural systems is determinant for the rejection of economic theories that are supported by 'methodological individualism'. However, I am not arguing for a methodological holism,

rather I am assuming the implications of the emergent nature of sociocultural systems. When persons act as members of sociocultural systems, that is, when they perform an institutional role, they do not act as individuals. What they do only makes sense as part of the structure and dynamics of the whole. The system, because of the *non-linear bonds* that bind its members, is much more than a population of individuals; it has causal powers of its own that are able not only to constrain but also to transform the persons that constitute it.

The above presented ontological distinctions (what exists in reality) are no more than basic guidelines for my research about institutions and markets; they have to be completed. For instance, 'organisations' are systems much different from the ideas that make a 'theory' of organisations. We clearly need to make an ontological distinction between social and cultural systems, but at the right moment in Chapter 3 I will discuss the topic.

1.2.3 Interactivist epistemology

In the previous subsections I made statements about what reality is and how it is organised. Nevertheless, they are what 'I think', and this is too an important methodological subject. Even if we are not aware, we always have some theory about what is our 'thinking', what is human knowledge; how persons organise and develop knowledge about a reality out there. I also need to make an epistemological choice.

To my knowledge, the best available epistemology, one that is consistent with a metaphysics of process and a multi-level ontology, is the 'Interactivist' epistemology developed by Bickhard (1999; 2009) and others (Campbell and Bickhard, 1986; Christensen and Hooker, 2000; Hooker, 2009). Here I limit myself to a brief note and reserve the details for Chapter 3 where I discuss how personal knowledge gives rise to 'public knowledge', that is, how cultural entities emerge and become part of institutions.

How should we deal with the problem of human knowledge? Hooker (2009: 515) answers:

if we set aside supernatural intervention, it can only be resolved through the consequences of interacting with the world; this is why interaction is essential. Rather than understanding our basic *representations about the world* as a mental 'codification' of sensorial data, the model starts with the rough idea that "representation emerges in the presuppositions of anticipatory interactive processes" (Bickhard, 2009: 86). Thus, the point of departure is a situated human body interacting with an environment (bio-physical and social) and, in the process, constructing anticipations about what particular aspects of this environment will appear. The learning process that the body goes through in *interactive trials and errors* gives rise to the human mind and a person, both understood as emergent 'organised processes'.

The novelty of such emergentist understanding of cognition and mind is well summarised by Hooker (2009: 522; emphasis mine):⁶

mind is concerned primarily with the extraction of *invariant* transcontextual environmental *patterns*, conceived as, and formulated in terms of, autonomy-sustaining action guides; it is only derivatively and context-specifically concerned with achieving action correlated to the environment.

Again, this understanding of *knowledge as invariant patterns* will be revisited and explored in my discussion about the ontology of cultural entities in Chapter 3.

One might be curious about the relation of this epistemology to the Variation-Selection-Retention (VSR) evolutionary scheme elaborated by Donald T. Campbell (1960) and widely cited in Institutional economics. Hooker (2009: 531) contrasts the Interactivist epistemology with Campbell's epistemology, and with his words I conclude this section:

By contrast, systems with more sophisticated regulatory capacities bring, to varying degrees, each of V, S and R under significant epigenetic regulation. In varying degrees, such organisms significantly regulate (i) their own development, both physiological and cognitive/behavioural, (ii) the structure of their environment, both natural and social, and through both, (iii) their behaviour, including their reproduction. This epigenetically regulated shaping of endogenous capacity and exogenous social and natural environment is a capacity to (partially) regulate the VSR process.

1.3 Overview of the thesis

The overview of the thesis aims to introduce the spirit of what will come next. I provide the main topics of the discussion that makes each chapter

⁶ "Bickhard also argues that the primary (and ultimately only coherent) conception of language is as a generative system of operations acting on the action states of recipients" (Hooker, 2009: 522; emphasis mine).

and highlight their rationale in relation to the research questions previously formulated.

Before that, I make three preliminary remarks. Firstly, in order to make its contribution to a theory of markets the thesis borrows freely from different sub-disciplines of the social science and makes consistent connections with psychology, biology and physic science. In the sense that it trespasses onto long established disciplinary borders, and despite its economics roots, it might be considered a post-disciplinary thesis in social science. In saying this I have no pretence of great originality. I simply tried to "look beyond fences and make synthetic use of what we have got; that is, sufficiently original and difficult" (Sorge, 2007: 193).

Secondly, the thesis provides a vision that goes beyond an ontology of markets. It questions established assumptions in economics, even within Institutional economics, and in doing so it aims to contribute to a renewal of Original Institutionalism; it provides the conceptual basis of what I name a Naturalist Institutionalism. I am aware that knowledge is fallible, and that this research is only a first step in a new direction that can only be fruitful as a collective endeavour. Even so, being aware that imperfections and errors are inevitable, I prefer "to be roughly right than precisely wrong", to recall a famous phrase attributed to John Maynard Keynes.

Finally, in order to make clear my argument I have frequently disagreed with prominent scholars that for a long time have worked and written about these topics. I am personally grateful to some of them for having opened up new horizons to my intellectual life some years ago. The fact that I have made my own intellectual journey, and thus made my own mind on the subjects under discussion, in nothing belittles their contribution. On this point I make mine the following statement: "To critique is to dignify, to acknowledge common ground from which to criticize, modify, and transcend" (Gregory, 2009: 142).

Chapter 2 refers to the work of three great names of economics and for this reason a preliminary explanation is due. Original Institutional economics enjoyed the status of mainstream economics in the USA in the first three decades of the last century and, notwithstanding a few brilliant but isolated scholars such as Polanyi, Myrdal, Hirschman, Kapp or Galbraith, it suffered half a century of almost complete exclusion until it started a come back in the eighties. In this chapter I state the Institutionalist affiliation of my

research and, for that, I discuss the legacy of three great names of this stream of economics. Obviously I had to start with the founder, Thorstein Veblen. However, to avoid the family quarrels of the first generations, the second Institutionalist author chosen is Karl Polanyi taking account of his specific contribution to the understanding of capitalist markets and their articulations to the wider society. The third author could be another of the above mentioned names, but I made a less evident choice. Over many decades of the twentieth century, Hayek has been the figure of the Austrian school that provided the strongest arguments for the political advocacy of "free markets". The interesting point is that his late work bears important connections with the Institutionalist thinking, even if this is largely unacknowledged. The choice of Hayek, with political options in radical opposition to Polanyi's, brought into the analysis a source of variety that eventually enriched my discussion of the nature of markets.

In the first half of Chapter 2 I summarise the legacies of these three authors mainly in terms of three questions: (1) the ontological nature of markets; (2) the epistemology underlying individuals' agency; (3) how they understood the articulation between agency and markets' structures. The second half connects these legacies to present day literatures in different disciplines; it provides up-dated answers to these questions and turns them into stepping stones for the work ahead. What begins to emerge in this chapter is a full fledged emergentist understanding of sociocultural reality.

In Chapter 3 I present an in-depth discussion of the emergentist nature of sociocultural systems with a focus on the much debated 'agency-structure problem'. The discussion acknowledges the crucial trait of human linguistic communication and from there proceeds with an ontology of cultural entities. In order to connect the material basis of culture to personal and 'public' knowledge, I recur to the semiotic of Charles Sanders Peirce, the founder of the Pragmatist philosophy that inspired Veblen and other scholars in the first decades of the last century. I conclude with an extended answer to the main research question, *What are institutions?* The chapter also places the specific emergence of institutions within the broader context of society and in connection with the evolutionary process of Nature, hence the title 'Naturalising institutions'.

Chapter 4 answers the research question *What are markets?* The point of departure is the Polanyian vision of the economy as a subsystem of society that serves the provisioning function. The latter is guaranteed by the market system and the non-market sector of the economy. I then present a critique of the received concept of economic rationality and propose a more realist and encompassing understanding of human rationality that also applies to persons acting in markets. Contemporary Polanyian views of markets are then discussed, which is followed by the detailed presentation of my institutional and emergentist view of *markets as meso-institutions* in light of the definition of institutions previously given. Consistently, Polanyi's fictitious commodities do not fulfil the conditions of my definition of a market. The chapter concludes with a critical discussion of other views of markets that have large currency in the heterodox literature.

In Chapter 5 the thesis shifts from the discussion of the structures of markets to the discussion of markets' motion. Of course, the reality studied is always the same, markets understood as organised processes of provision involving monetary exchanges. So, while in the previous chapter the 'structural' aspect of markets has been highlighted, in Chapter 5 it is the 'flow' aspect that is under analytical focus. It begins with a review of the meaning of 'economic evolution' in the debates that occurred in the last years within the non-mainstream Institutionalist camp. I will argue that it is not possible to abstract a general conceptual scheme of 'evolution' that could inform the study of all levels of Nature. Rather, I argue for a Naturalist pluralism that calls for an historical Institutionalist approach to sociocultural systems in order to respect their ontological specificity. This stance does not preclude the local use of a few multidisciplinary concepts that enable the analysis to account for properties common to all levels of reality. The chapter follows with a review of the theoretical legacies of Schumpeter and the Austrian school in order to take stock of their contribution to the understanding of markets' motion. In the last section I present a brief discussion about the concept of 'time' and a review of the literature of path dependence models. The limitations of these models leads me to propose a new understanding of the sources of market change, neither from 'within' nor from 'outside': an Interactionist model that shows how markets' change is fuelled by multiple interactions between internal and external processes and their forms of inter-organisation.

Chapter 2

Veblen, Hayek and Karl Polanyi: Their legacies and beyond

2.1 Introduction

In this chapter I want to consider the intellectual legacies of three great names of economic science of the twentieth century, Veblen, Hayek and Karl Polanyi. Bearing the specifics of their personality, research choices, and period of history they were given to live, each one left an intellectual legacy that should not be ignored at the moment of beginning an enquiry that addresses markets, firms and the economy. I am convinced that a warranted theoretical approach needs to take account of relevant past contributions in order to make a valid step forward. In each moment of our lives we always intertwine past, present and views about the future, and it seems that the same three dimensions are inevitably present in any scientific endeavour even if the researcher is not aware of that. Therefore, over the present chapter I intend to establish the affiliation of my current theoretical choices by establishing a connection to past enquiries in order to build a consistent conceptual framework that could be fruitful for the remainder of thesis.

Veblen, Hayek and Karl Polanyi are representatives of a tradition in economics that has been excluded from current undergraduate courses, and a great number of postgraduate training in the second half of twentieth century. They made important ruptures with the dominant economics ideas of their time, which made them in different ways forerunners of new research in the social sciences of the twenty first century. In what concerns my research interest, both Veblen and Polanyi distanced themselves from classical economics and its ideas of markets as a 'gift of nature', and economic behaviour as determined by self-interested calculatory rationality. Choosing different paths, Veblen and Polanyi converged on the understanding of markets as institutions, which they based on a complex and dynamic vision of human nature much different from the 'homo œconomicus'. Measured against this two-fold criteria they occupy unique

places in the history of Institutional economics: at the entry of twentieth century, Veblen is the founder of the frequently named 'Old Institutionalism' (although I prefer 'Original' instead of 'Old'), while Polanyi's Institutionalism at the middle of the century is credited with an innovative understanding of markets' nature, and a vision of capitalism motion that some see as alternative to Marx's fight of classes. In contrast with those two eminent figures of Institutionalism, Hayek never made a break with Adam Smith's vision of markets and left all over his work important elements of ambiguity. Nevertheless, Hayek is the twentieth century's strongest intellectual advocate of a society organised by "free markets", which is frequently (but wrongly) associated to an idea of "markets without institutional norms". Most importantly, despite Hayek's struggle for policy orientations at the opposite extreme of Veblen and Polanyi's, Hayek also upheld a stance about human knowledge that was not far from the Original Institutionalist action-based epistemology. Further, and at least after 1960, his dynamic non-Walrasian economics actually turns into a specific kind of evolutionary and quasi-Original Institutional economics when viewed in light of the above-mentioned criteria. Therefore, the inclusion of Hayek's late work in a discussion focused on 'markets as institutions' actually enriches the analysis by adding variety to the intellectual sources of the enquiry.

In order to organise the discussion that follows, I will try to find the answers of Veblen, Hayek and Polanyi to three questions that are crucial for the development of my theoretical framework: (1) What is the deep (ontological) nature of markets and firms? (2) What kind of epistemology underlies individuals' agency? (3) How individuals' agency links to markets and firms? In attempting to find the answers of each author, difficulties are expected due not only to the extent of the work under analysis but also to tensions, or even inconsistencies, that are natural in the development of an intellectual lifelong work. In principle, I will use two hermeneutic criteria: the late formulations are considered more mature, and thus more representative of the author's thinking; ambiguities should be discussed because this enables to better see the underlying assumptions of different formulations, most frequently of an ontological nature. It is expected that this overview will lead to an identification of common traits in Veblen, Hayek, and Karl Polanyi's legacies, which in a closing section will be related to recent interdisciplinary

research in order to provide key elements of the theoretical framework developed in the following chapters.

2.2 Veblen's evolutionary Institutionalism

The work of Veblen is voluminous, rich, and also uneven. It would be pointless to present here his ideas, even in a brief summary, as this has already been done in the last two decades by Hodgson (1988; 1993a; 1998; 2001; 2004b). Instead, I will follow a focused approach targeting the specific aspects of Veblen's work that are of direct relevance to the development of the present research.⁷

The first question to be approached asks about the ontological nature of markets and firms in Veblen's thinking. The answer is all but easy not only because Veblen did not address these issues directly but also because even the 'institution', the core concept of his work, presents different and more or less ambiguous formulations (Lawson, 2003a). Consider for instance the following passage (Veblen, 1899c: 190; emphasis mine):

The institutions are, in substance, prevalent *habits of thought* with respect to particular relations and particular functions of the individual and of the community.

In the above quote Veblen takes institutions as psychological phenomena ("habits of thought"), which are generalised at a point of being prevalent in the community. Now consider the following passage in a later text (Veblen, 1909: 243; emphasis mine):

The growth and mutations of the institutional fabric are an outcome of the conduct of the individual members of the group, since it is out of the experience of the individuals, through the habituation of individuals, that *institutions arise*; and it is in this same experience that these institutions act to *direct and define* the aims and end of the conduct.

Here we have a more elaborated formulation that suggests the autonomy of a new level of sociocultural reality ("institutions arise") endowed with causal properties over the individual.⁸ At the same time, the formulation avoids the reification of institutions as it clearly emphasises that they are an outcome of individual behaviour. According to Veblen, without a widely accepted habitual

⁷ For this, Hodgson (2004b) has been a rich and stimulating guide.

⁸ As acknowledged by Lawson (2003b: 204), and despite the ambiguities, Veblen "was in effect edging towards a special case of the realist transformational model of social activity".

behaviour of individuals there is no institution. This passage, and similar ones in Veblen's methodological works, provides convincing evidence that Veblen attained a *dynamic and recursive* understanding of institutions, and thus rejected both the idea that institutions are merely shared ideas and behaviours, and the idea that institutions are floating structures, independent of human beings, which determine habits and the overall human conduct. This is an important theoretical advancement, even if Veblen has always been vague about the ontological nature of institutions. In the examples he gives, most are of strictly cultural nature ('ideational') while a few others are hybrid, sociocultural systems (e.g. markets, firms). This is a subject to probe in the last section of the present chapter.

On this point additional elaboration is needed because Veblen's approach is complex. He draws heavily on the Pragmatist philosophy of Charles Sanders Peirce and the psychology of William James (1890) in order to place habits at the core of his analysis (Twomey, 1998). For Veblen, on the one hand individuals' "habits of life" reproduce cultural norms and social roles within which individuals are socialised, therefore creating social stability and (sometimes hard) resistance to change at the 'institutional' and the individual level; on the other hand, and besides the facilitation of daily routines, habits are also an indispensable support to knowledge development, thereby enabling innovative behaviour and social change. This tension between *stability* and (endogenously-driven) *change*, both in individuals and in Veblen's 'institutions', coupled with his formulations sometimes close to determinism, led to important misunderstandings by his disciples, and eventually gave rise to what became known as the Veblenian Dichotomy (Brette, 2003; Rutherford, 1984).¹⁰

Attempting to answer my first question, I will retain the more elaborate version of Veblen's concept of institution built on the pivotal role of habits. Within this conceptual framework markets and firms should be classified as two kinds of institutions. Not that Veblen gave any explicit definition of those entities, even

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⁹ In Veblen's (1899: 191) words: "These institutions which have so been handed down, these habits of thought, ... are therefore themselves a conservative factor. This is the factor of social inertia, psychological inertia, conservatism."

¹⁰ It is recognised that Ayres misunderstood the recursive dynamics of Veblen's concept of institution (Lawson, 2003a). Moreover, Ayres and other Institutionalists diffused the problematic idea of a 'Veblenian dichotomy': institutions were responsible for social stability whereas technologies were the main source of social change (Rutherford, 1984).

in *The Theory of Business Enterprise* (1904). But we can confidently deduce that, for Veblen, markets and firms are elements of modern society's institutional fabric and are not reducible to the economic agency of individuals. At least in implicit terms, the institutional nature of markets and firms is approached in the following passage (Veblen, 1899b: 193; emphasis mine):

Any community may be viewed as an industrial or economic mechanism, the structure of which is *made up of what is called its economic institutions*. These institutions are habitual methods of carrying on the life process of the community in contact with the material environment in which it lives.

Markets and firms are not mentioned here, but it is reasonable to infer that Veblen has them in mind. Note that in this passage institutions are "habitual methods of carrying on the life process", instead of "habits of thought" referred to three pages earlier. However, this is not a much different formulation, and it should be understood in the light of the Pragmatist philosophy that influenced Veblen, and for which *knowledge is always rooted in human action*.

However, in a later work Veblen (1904: 26, 68-69) stated:

The channel by which disturbances are transmitted from member to member of the comprehensive industrial system is the business relations between the several members of the system; and, under the modern conditions of ownership, disturbances, favourable or unfavourable, in the field of industry are transmitted by nothing but these business relations.

It is among these transmitted institutional habits of thought that the ownership of property belongs. It rests on the like general basis of use and wont. The binding relation of property to its owner is of a conventional, putative character.

The first quote addresses the crucial role of the "business man" seeking profit and producing disturbances in the ("industrial") system of interlocked markets; it emphasises the social nature of markets. The second one clearly states that a crucial character of the industrial firm, its ownership, bears an institutional nature. On the whole, it is evident that Veblen integrates both markets and firms in the above-mentioned concept of "economic institutions", although it is also true that Veblen almost reduced them to the stripped concept of "institutions as habits of thought" and almost ignored their teleological components (e.g. laws, contracts).

In brief, I find in Veblen two core ideas, albeit not always clearly developed: (1) markets and firms are economic institutions integrated in the institutional

fabric of society; (2) the specific nature of institutions involves interdependencies between a structural level of "habits of thought" and individuals' actions.¹¹ These two propositions are assumed to be Veblen's answer to my *first question*, even if I totally agree with Lawson's (2003a: 199) argument that Veblen was not directly concerned with an ontological elaboration of his concept of institution. Indeed, what really interested Veblen was an evolutionary explanation of societies and, specifically, of "economic institutions".

Veblen strongly criticised classical economics because its interpretation of causal relations in the economic realm always presupposed the existence of a "natural law" (Veblen, 1898: 378):

This natural law is felt to exercise some sort of a coercive surveillance over the sequence of events, and to give a spiritual stability and consistence to the causal relation at any given juncture.

In brief, classical economics was more concerned with deductive methods and their empirical confirmation, than with real "processes of cumulative causation", open-ended causal sequences in line with the scientific method used by Darwin.

Therefore, Veblen argued for an evolutionary economics that theorises "the economic life process ... the sequence of change in the methods of doing things,— the methods of dealing with the material means of life" (Veblen, 1898: 387). The crucial point is that Veblen assumes *social reality as a process*, which means a continuous and simultaneous interplay between individuals and 'institutions' – "the scheme of life" – both of economic and non-economic kind. Rutherford (1984: 343-344) acknowledges the following stages in Veblen's *institutional dynamics*, which corresponds to a kind of 'transformational model':

(i) habits of livelihood giving rise to institutions and conventions which are then refined, crossed, and grafted onto all areas of life, embodied in law, and extended over time [forming the institutional base]; (ii) the logic of the prevailing scheme affecting the rate and direction of technical change; (iii) adjustments within the existing institutional logic to any new technological means introduced; and (iv) the possibility of changes of institutional base as a result of the new habits of life which emerge as technological change overcomes the resistance of established institutions and interests.

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¹¹ Hodgson (2004b: 180) remarks that the distinction between these two levels appears in passages where Veblen insists on the precedence of 'institutions' over the individual and refers that 'habits of thought' are received from the past.

This sequence corresponds to a "developmental process", as Veblen (1898: 387) called it, which is fuelled by human action: "Changes in the material facts breed further change only through the human factor" (Ibid, 388). At this point we are led to ask: how does this developmental process relates to Veblen's evolutionary thinking? The answer is usually referred by Institutionalist authors to the following passages of Veblen (1899b: 188, 189):

The evolution of social structure has been a process of natural selection of institutions. The progress which has been and is being made in human institutions and in human character may be set down, broadly, to a natural selection of the fittest habits of thought and to a process of enforced adaptation of individuals to an environment ... there is no doubt simultaneously going on a process of selective adaptation of habits of thought within the general range of aptitudes which is characteristic of the dominant ethnic type or types.

Here we are presented with a scheme of variation and selection of 'institutions' that presupposes a long-run process. In these passages Veblen does not explain the nexus between the previously mentioned "developmental process" and this "evolutionary process" inspired by Darwin. However, we could easily see that the former is the ongoing short-run process that maintains existing institutions, and also generates new ones, which are differentially adapted to "the exigencies of life" that make up the "changing environment" (lbid, 188). About the *selection* mechanism, Veblen (1899b: 190; emphasis mine) also states:

whether it is chiefly a selection between stable types of temperament and character [genetically transmitted between individuals], or chiefly an adaptation of men's habits of thought to changing circumstances [handed down by learning] — is of less importance than the fact that, by one method or another, *institutions change and develop*.

In fact, Veblen repeats the argument some paragraphs later (Ibid, 192). From the structure of the argument we see that Veblen was not able to make a choice between a Darwinian and a Lamarckian explanation of how institutions become adapted in the long run, and we are left with an important lacuna in his evolutionary argument. But, despite his agnosticism about the issue, Veblen concludes the passage stating that what counts is that "institutions" "change and develop", which is an ambiguous expression reinforced by the fact that further references to any kind of phylogenetic process are absent in the pages that follow the quotation. Moreover, in a passage of the same work (1899b: 207), Veblen uses the word "evolutionary" in a discussion about how

the leisure class addresses maladjustments of her "conspicuous consumption", which is a 'developmental' context.¹²

Hodgson (2004b: 188-192) forcefully argues that Veblen was trying to apply Darwinian principles of variation-selection-retention to the analysis of social evolution by taking institutions as the unit of selection and assuming differences in the details of mechanisms. However, combining my above-given interpretation of the 'classical quotes' with the relevant passages in Veblen's (1919) methodological works, I tend to agree with Rutherford's (1998: 467) interpretation that "in Veblen's later work ... institutional change comes increasingly to be represented exclusively in terms of the adaptation of habits of thought to new circumstances", which points to a developmentaltransformational model. This view is also argued by Lawson (2003b: 210-212) for whom "Veblen's limited use of the phrase 'natural selection'" and "no mention at all of Darwinian mechanisms of 'natural selection'" is due to the fact that Veblen did not see it necessary; "it was enough that Veblen identified non-teleological processes of cumulative causation. The precise mechanisms in play in any given context are a matter of detailed concrete, empirical analysis" (Ibid, 212). Thus, confronting this interpretation of Veblen's Darwinism with an updated understanding of evolutionary processes in natural sciences (Weber and Depew, 2001), I am led to suggest that Veblen's hesitations actually reflected a forerunning intuition of the need to take distance (at least) from an adaptationist idea of natural selection.13

For Veblen, institutions can only exist through individuals' habitual interaction, which begs fundamental questions about human nature. Veblen shared Darwin's explanations of the evolutionary origin of man and, like the American pragmatists, saw human knowledge rooted in the individual's action. Twomey (1998: 437; emphasis mine) summarised this influence:

For Peirce, knowledge is bound up with action in the world—and this action can be, and often is, of a habitual nature. This theory of knowledge was

explanations in terms of "processes of cumulative causation".

13 Veblen (1899b: 192; emphasis mine) also understood 'selection' in terms of *coevolution*: "[Social advance] consists in a continued progressive approach to an

approximately exact "adjustment of inner relations to outer relations"; but this adjustment is never definitively established, since the "outer relations" are subject to constant change as a consequence of the progressive change going on in the "inner relations."

¹² Referring to the Darwinian passages above quoted, Jennings and Waller (1998: 212) state that "there are no similar passages elsewhere in Veblen's work". They argue that, despite multiple references to Darwin, Veblen's Darwinism was above all a commitment to explanations in terms of "processes of cumulative causation".

clearly influenced by Darwin's theory of evolution, with Peirce's understanding that *knowledge is an adaptation to the environment*.

Thus, Veblen's philosophical inspiration pointed to a naturalist understanding of knowledge inspired by the most recent scientific perspectives of his time. Accordingly, he argued vehemently against 'rational choice' assumptions of classical economics and claimed that human behaviour should also be understood in evolutionary terms. Behind Veblen's critique it is easy to see the ideas of Dewey who strongly opposed the classical separation between 'ends' and 'means' in human action, as recalled by Joas (1996: 154):

Dewey speaks of a reciprocal relationship between an action's end and the means involved. ... he does not presuppose that the actor generally has a clear goal , and that it only remains to make the appropriate choice of means. On the contrary, the goals of actions are usually relatively unspecified, and only become more specific as a consequence of the decision to use particular means. ... The dimension of means in relation to the dimension of goals is in no way neutral.

Therefore, human knowledge emerges in the embodied mind through *forward-looking* adaptive interactions with the world, which includes the natural and the social environment. Referring to the latter, Veblen also stated that any community has acquired "a body of technological knowledge" (Veblen, 1908b: 325-326):¹⁴

Such a stock of knowledge and practice is perhaps held loosely and informally; but it is held as a common stock, pervasively, by the group as a body, in its corporate capacity, as one might say; and it is transmitted by the group, ... not by individuals and in single lines of inheritance.

In this passage there is a striking similarity between Veblen's systemic view of knowledge production and current management literature about 'collective knowledge'. Yet, Veblen never lost the view that "every further detail of workmanlike innovation, is of course made by individuals and comes out of individual experience and initiative, since the generations of mankind live only in individuals" (Veblen, 1914: 103). In fact, Veblen has a process view of knowledge development that occurs in the interplay between individual's inner life and the relevant sociocultural structures. Against classical economics' view of man ("a bundle of desires"), Veblen (1898: 390) argued that human nature is

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¹⁴ In this "body of technological knowledge" Veblen includes the language (Ibid, 325), which is symptomatic of his cultural understanding of institutions.

a coherent structure of propensities [instincts] and [personal] habits which seeks realization and expression in an unfolding activity. ... The activity is itself the substantial fact of the process, and the desires under whose guidance the action takes place are circumstances of temperament which determine the specific direction in which the activity will unfold itself in the given case. ... [they are] the outcome of his antecedents and his life up to the point at which he stands.

This passage presents a naturalist view of human nature and suggests that each individual is different and path-dependent; human beings are the outcome of their present actions but strongly influenced by inherited traits. However, despite this idea of a joint outcome of 'nature and nurture', Veblen did not go so far as to explicitly discuss how human knowledge-action is in itself a source of change, which would require more attention to individuals' self-reflectivity.

Taking account of this background, I assume that Veblen's answer to my second question is an action-based epistemology, which interactively arises in the socialised process of human development.¹⁵

Coming back to those "circumstances of temperament", Veblen (1898: 390) wrote:

They are the products of his hereditary traits and his past experience, cumulatively wrought out under a given body of traditions, conventionalities, and material circumstances; and they afford the point of departure for the next step in the process.

Linking this passage to a later work, we can see that, besides habits, "instincts" also played an important role in Veblen's (1914: 2-3) analysis. Veblen elaborated a particular understanding of instincts that draw partially on the work of William James, and on discussions with the biologist Jacques Loeb, his colleague at Chicago. Opposed to neurological explanations (Veblen, 1914: 28), Veblen argued that the instinct should be viewed as a innate propensity of *psychological* nature "that sets up a characteristic purpose, aim, or object to be attained" (Ibid, 3). Accordingly, Veblen identified three major instincts: "parental bent", "idle curiosity", and "workmanship". Most relevant to our discussion, the latter was supposed to be responsible for human's continuous

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¹⁵ Veblen's pragmatist epistemology escapes both positivism and idealism. *Against positivism*, Veblen (1908a: 33) argued that scientific knowledge always needs a point of view ("The concept of causation is recognized to be a metaphysical postulate, a matter of imputation, not of observation"). Yet, *against idealism*, Veblen strongly argued for experimental science guided by "imputed" causal sequences, which he illustrated with the advances in physics of his time (lbid, 35).

search for productive efficiency and technological improvement, while the second explains human drive for knowledge acquisition and the endeavour of science. This means that Veblen used a particular understanding of instincts "to place human beings within the ambit of material causation" (Jennings and Waller, 1998: 206). Recurring to the psychology of McDougall, Veblen acknowledges the largely *common physiological grounding* of the different instincts, and states that "each engage the individual as a whole", so that

the habituation that touches the functioning of any given instinct must, in a less degree but pervasively, affect the habitual conduct of the same agent when driven by any other instinct (Veblen, 1914: 12-13; emphasis mine).

By now it is clear that for Veblen human intelligent action is sustained by habits, which bear on instincts, and instincts are the evolutionary link to nature (Hodgson, 2004b: 162-175). His theory of instincts also gave him a basis to formulate a negative view about the "pecuniary motives" of businessman and industrial competition, which he depicted as a destabilising rivalry that produces waste. On the other hand, he praised the "machine process" and the "industrial system", both driven by the "instinct of workmanship" and seen as a source of institutional change. In fact, Veblen envisaged a society where technological change could be liberated from the negative command of pecuniary gain (Knoedler and Mayhew, 1999).

In brief, I take Veblen's answer to the *third question* as follows: "economic institutions" are maintained and changed by individuals' interactions, which in the relevant cases are determined by human habits, both directly and indirectly through the support of habits to explicit deliberation. In any case, for Veblen, instincts play an important role as expression of our primitive origins.

My reading of Veblen's work takes account of an impressive legacy that centres around *two crucial contributions*. Firstly, the defence of an evolutionary Institutionalist economics: economic 'institutions' (Veblen's meaning), in necessary interplay with the economic activities of individuals, should be the object of economic science. Secondly, according to Veblen's Darwinian perspective, the adequate methodological approach should respect the deep nature of reality, both natural and sociocultural, which is best captured by an understanding in terms of 'process'. Albeit marked by inconsistencies, and a lack of elaboration about the specific processes that originate markets and firms, Veblen is credited with a new understanding of human societies as structured by evolving, and inter-connected, 'institutions'

of different nature that *depend upon, and partially constitute*, the individuals. In this sense, Veblen's work is a radical rupture with classical economy and other schools of thought of his time. A century after, a strand of non-mainstream economists is attempting to revitalise his unfinished research programme strongly arguing that in multiple aspects it remains of actuality (Brown, 1999; Hodgson, 2004b; O'Hara, 2002).

2.3 Hayek's evolutionary orders

The work of Hayek is immense in quantity and variety, spreading over six decades. It is widely recognised that his work before 1936 was conducted under the philosophical framework of the emerging neoclassical school, even if Hayek already had some doubts about it. While immersed in a neoclassical environment at the London School of Economics, Hayek wrote *Economics and Knowledge* (Hayek, 1936), a work that marks the beginning of his rupture with mainstream economics. This second stage in Hayek's work (Hayek II) led him to explore both the limitations of neoclassical assumptions (e.g. knowledge, equilibrium, human agency) and the potential of a subjectivist view of knowledge.

However, the rupture with the concept of equilibrium begs the question of what to put in its place. For years this problem remained unsolved and in the background of other research subjects, mostly because of Hayek's idealistic philosophy, as discussed below. According to Fleetwood (1995: 5), *The Constitution of Liberty* (1960) is Hayek's first presentation of his mature understanding of "social structures":

After 1960, however, Hayek successfully integrates the notion of social structures into his analysis, thereby allowing the development of a notion whereby human agents navigate their way in the socio-economic world by following social rules of conduct. This development appears to be a turning point in his work.

This third period leads Hayek to a shift in his ontology of social reality, which is complemented by the adoption of an evolutionary explanation for what he terms "social orders" (Hayek, 1960: 58-59):

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¹⁶ As Caldwell (2001: 542) recalls, "Hayek's interest in psychology dates to the early 1920s, when as a student he wrote a paper that would later form the basis for his book *The Sensory Order* [1952]."

in the relations among men, complex and orderly and, in a very definite sense, purposive institutions might grow up which owed little to design, which were not invented but arose from the separate actions of many men who did not know what they were doing. ... For the first time it was shown that an evident order which was not the product of a designing human intelligence need not therefore be ascribed to the design of a higher supernatural intelligence, but that there was a third possibility—the emergence of order as the result of adaptive evolution.

In this passage Hayek applies to the social realm the concept of 'emergence' taken from the complexity approach in natural sciences, which accounts for an autonomous, emergent level of reality arising from the complex interactions of its constituent elements. Moreover, in alternative to the mechanics of equilibrium in neo-classical economics, Hayek III combined a realist view of social orders with a naturalist understanding of knowledge, thereby arriving to an evolutionary dynamics that I will discuss later.¹⁷

This understanding of social orders is much different from the approach adopted by Hayek II, for whom *social phenomena does not exist beyond individuals' shared conceptions*. In that period Hayek (1943: 43; emphasis mine) stated:

the specific subjectivist approach of the social sciences starts ... from our knowledge of the inside of these social complexes, the knowledge of the individual attitudes which form the elements of their structure.

This methodological stance reveals that Hayek aims to explain social phenomena by the study of individual's conceptions, which would be subsequently aggregated and classified in order to build models able to predict at least loose patterns of behaviour (Hayek, 1952). In fact, Hayek II combined a subjectivist understanding of knowledge with a positivist philosophy that takes prediction as explanation, although he recognised the epistemic limits of the endeavour because of the higher complexity of social phenomena. Such methodological individualism is a direct consequence of Hayek's ontological assumption that social structures have no real existence outside individual's ideas (at best, they are viewed as *epiphenomenal*), which contrasts with his mature understanding of "orders" and "social rules of conduct". The ontological shift detected circa 1960 reveals that Hayek combines a subjectivist epistemology with an ontology that still sees social

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¹⁷ The fact that some authors fail to recognise Hayek III, and combine quotations from works of distinct periods (see Boettke and Subrick, 2002), originates serious misunderstandings about Hayek's thinking. Nevertheless, there are important ambiguities in the texts of the mature Hayek.

reality as concept-dependent in its understanding, but is *no longer reduced* to conceptual constructs in the minds of the agents. In this sense, Hayek III can only be understood within a theoretical framework whereby the 'structural' level is constituted, maintained, and transformed by (but also acting on) human interactions.

Hayek was aware of the *emergentist model* developed in natural sciences. Fifteen years after having written about 'complex phenomena' (Hayek, 1967: Chap. 2), Hayek not only was enthusiastic about the physics research of Prigogine, and the evolutionary psychology of D. T. Campbell, but also explicitly accepted the idea of 'downward causation' of the social level over the individuals (Hayek, 1979: 158). In fact, Hayek III rejected the view that social reality is merely epiphenomenal to persons' activities.

Acknowledging this intellectual background, it is time to address Hayek's answer to my *first question*. Recurring to his mature work, a short answer could be: markets and firms are social structures that bear the nature of 'orders'. By order Hayek means the "matching of the intentions and expectations that determine the actions of different individuals" (Hayek, 1973: 36) as living members of a society. Rather than an atomistic account of economic processes, Hayek III takes from the sciences of nature a 'complex systems' theoretical framework, which provides the analogy for his analysis of markets and organisations. 19

At this stage, Hayek makes a central distinction between *spontaneous* ('kosmos') and *purposeful* ('taxis') orders. Referring to the former, Hayek (1973: 37) states:

It would be no exaggeration to say 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.

Here Hayek refers to actions guided by ('tacit') rules learned by experience, "rules which we know how to follow but are unable to state" (Ibid, 19) and that are part of our *cultural heritage*. Therefore, a spontaneous order results (emerges) from the multiplicity of interacting individuals, which adapt to their

¹⁸ Referring to the market order, Hayek used the Greek-derived word 'catallaxy'.

¹⁹ "Only recently has there arisen within the physical sciences under the name of cybernetics a special discipline which is also concerned with what are called self-organizing or self-generating systems" (Hayek, 1973: 37).

environment by following what Hayek terms "abstract rules", and in many cases we could identify with customary rules. However, Hayek makes it clear that spontaneous orders also build on *other types of rules*. Besides natural and customary rules, there are enforceable rules of law that "we can deliberately alter" (Hayek, 1973: 45):

They may have to be made to obey, since, although it would be in the interest of each to disregard them, the overall order on which the success of their actions depend will arise only if these rules are generally followed.

This idea is also stated in a later discussion of "stratification of rules of conduct" where he distinguishes between "the remains of traditions" of past social structures and "the thin layer of rules, deliberately adopted or modified to serve known purposes" (Hayek, 1979: 160).²¹

Hayek defines "purposeful" orders (e.g. organisations), which are understood as powerful instruments of co-ordination of individuals' behaviour. Purposeful orders need specific *commands* and *rules* addressing the performance of tasks, the latter aiming at "filling the gaps left by the commands" (Hayek, 1973: 49). What critically distinguishes organisations from spontaneous orders is both their teleological origin (they are "created by an outside agency") and their smaller degree of complexity (Hayek, 1973: 38):

Such orders are relatively *simple* or at least necessarily confined to such moderate degrees of complexity as the maker can still survey; they are usually *concrete* in the sense just mentioned that their existence can be intuitively perceived by inspection; and, finally, having been made deliberately, they invariably do (or at one time did) *serve a purpose* of the maker.

In the last line of this passage Hayek admits that a concrete order may no longer serve the purpose of his maker. A possible meaning could be that a concrete order may change into an abstract order after an important growth in complexity. However, acknowledging Hayek's *strict separation* between spontaneous orders and organisations, loannides (2003: 538) suggests that "as a man-made order develops in complexity, the purpose that it serves, or

capture, "the concrete circumstances known only to the individuals who obey the rules

possible."

21 In fact, the "spontaneous" nature of the order does not depend on its *origin* but on the *high level of complexity of the overall interdependencies*, which each individual cannot

and apply them to facts known only to them" (Hayek, 1973: 46).

²⁰ Hayek (1973: 44) stated: "Society can thus exist only if by a process of selection rules have evolved which lead individuals to behave in a manner which makes social life possible."

the original agency behind the original purpose, may change." Thus, loannides turns to Hayek's 'complexity criteria' and argues that (over time) organisational growth in complexity eventually leads to the emergence of some sort of *abstract rules*, typical of spontaneous orders, in which commands and concrete rules become embedded. In this sense, and still within the Hayekian spirit, it is reasonable to suggest that firms may also integrate abstract rules of functioning, which we may identify with the *culture* of the organisation.

Hayek referred to the "catallaxy" as a particular case of spontaneous order created "by the mutual adjustment of many individual economies in a market ... through people acting within the rules of the law of property, tort and contract" (Hayek, 1976: 109). In order to preserve the mechanisms that give rise to the emergence of the order, those market rules should be "independent of purpose" and address all the agents, or at least "whole classes of members not individually designated by name" (Hayek, 1973: 50). In brief, Hayek states that the emergent market order makes "peaceful reconciliation of the divergent purposes possible—and possible by a process which redounds to the benefit of all " (Hayek, 1976: 110).22 This extreme optimism did not impede Hayek from recognising that spontaneous orders need to be preserved, and sometimes improved, but the process should be only indirect by acting on the rules; any direct intervention would only disturb the "part of a system of interdependent actions determined by information and guided by purposes known only to the several acting persons but not to the directing authority" (Hayek, 1973: 51).

Therefore, Hayek's rejection of purposive rules to 'organise markets' is justified on the grounds that they may disrupt or even destroy the 'spontaneous' order. On this point Murphy (1994) highlights that Hayek certainly knew Aristotle's trichotomy of 'nature-habit-reason', which we recognise as core order-concepts behind his three types of 'natural-spontaneous-purposive' orders, as he named them. Unfortunately, and contrary to Aristotle, Hayek treated those three types of orders as *mutually exclusive*. While "Aristotle treats his concepts as complementary and mutually inclusive ... Hayek tends to see a given institution as the exemplar of only

²² Hayek (1976: 113; emphasis mine) went further to assume that "the economist is therefore entitled to insist that conduciveness to that order be accepted as *a standard by which all particular institutions are judged.*"

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one kind of order" (Murphy, 1994: 538-539). However, in different passages of his work Hayek was not consistent with a strict distinction between social and natural orders (Hayek, 1973: 39-40, 1979: 158-159). For instance, following Adam Smith, Hayek assumes that the division of labour is based on a natural psychological propensity to truck, barter, and exchange, and that the internal causal mechanisms of the complex system (the 'invisible hand') inevitably gives rise (if not disturbed) to an order that is analogous to the biophysical order of nature.²³

Because Hayek lacked a clear understanding of a hierarchical emergence in natural systems he could not see the *mutual interdependency* of the three nuclear orders; that purposeful rules always build on nature and custom, even when they attempt to modify both (Murphy, 1994). Moreover, conflict between customs is inevitable in the functioning of 'spontaneous orders', which frequently lead to new (and concrete) legislation. Note that Hayek acknowledged the need to review previous legislation. However, he did not make the next step; he failed to integrate downward causation from purposeful rules over individuals through habituation, which might lead to the emergence of a new custom. But to go down this road would represent the acceptance of a Veblenian scheme, which was far beyond his ideological stance.

At this point I have enough material to frame Hayek's answer to my *first question*. Markets are spontaneous orders that emerge by individuals' economic behaviour according to informal and formal rules of conduct, which by accumulation of traditions currently form multiple 'institutional' layers. *They are evolving complex systems*, and hence emerge out of individuals' interactions but do not reduce to these interactions.²⁴ For Hayek firms are organisations, that is, concrete social orders infused by purpose and structured by commands and concrete rules.

Approaching now the second question, it is clear that Hayek III maintains the Kantian inspired epistemology of Hayek II, but now combined with the

analogous counterparts in bio-physical self-organising systems (Prasch, 2000).

²³ In fact, Hayek's concept of 'spontaneous orders' seems unable to accommodate important features of social systems such as disruptive tensions between groups, institutional crises and periods of accelerated changes, which may be seen to have

²⁴ Hayek (1973: 39) specifies his understanding of 'emergence': "The significance of the abstract character of such orders rests on the fact that they may persist while all the particular elements they comprise, and even the number of such elements, change."

adoption of a realist ontology that encompasses social phenomena. For Hayek, sensory stimulation always needs to be organised under previously acquired categories in order to provide understanding of the situation. In his major work about psychology Hayek (1952) assumes that those previous meanings are themselves learned, possibly since the first post-birth experiences. In fact, Hayek's theory of the mind builds on a particular understanding of neural networking and its relationship with human experience, which has been sketched in his youth. He stated (Hayek, 1960: 23): "Man did not simply impose upon the world a pattern created by his mind. His mind is itself a system that constantly changes as a result of his endeavour to adapt himself to his surroundings". In other passages of the same work Hayek's psychology takes a pragmatist flavour (Hayek, 1960: 24, 35; emphasis mine):

an erroneous intellectualism that regards human reason as something standing outside nature and possessed of knowledge and reasoning capacity independent of *experience*.

[abstract thought] would no long continue and develop without the constant challenges that arise from the ability of people to act in a new manner, to try new ways of doing things ... And the flow of new ideas, to a great extent, springs from the sphere of action, often non-rational action, and material events impinge upon each other.

In these formulations there is a clear emphasis on the idea that knowledge, which is also an 'order', emerges from action, instead of being made of passive impressions of outside reality into the mind. This is an understanding similar to the American pragmatists' view, even if the inspiration is not recognised. Such a view of knowledge emerging from the particular experience of the individual led Hayek to stress that knowledge is a subjective reality. Each economic actor has a specific and partial knowledge about the catallaxy and of society in general. However, because each individual "moves within a coherent structure most of whose determinants are unknown to him" he can access to much more knowledge than he possesses (Hayek, 1973: 14). In this sense, scientific advances come from "the utilization of knowledge which is and remains widely dispersed among individuals" (Ibid, 15). Thus, Hayek sees catallaxy as a field of opportunities for individuals, not only to find information about (and through) prices but also to find and use relevant knowledge about their business (Butos and McQuade, 2002). In brief, Hayek's answer to my second question is an action-based understanding of knowledge supported by

a connectionist perspective about mind-brain relations of which he was a forerunner (Steele, 2002).

Hayek linked individual agency to social rules of conduct within an evolutionary framework whose more elaborated formulation he attributes to "the eighteenth-century moral philosophers and the historical schools of law and language" long before Darwin. Like Veblen, Hayek takes 'institutions' as units of selection and accepts a "basic conception" of evolution common to the biological field. However, Hayek does not spend much time to discuss the differences between biological and cultural evolution (a "similar but much faster process"; Hayek, 1979: 154). Rather, he systematically emphasises what he sees as a crucial similarity, *the complex nature* of spontaneous orders (lbid, 158):

all enduring structures above the level of the simplest atoms, and up to the brain and society, are the results of, and can be explained only in terms of processes of selective evolution, and that the more complex ones maintain themselves by constant adaptation of the internal states to changes in the environment.

Therefore, Hayek combines in his evolutionary scheme two processes: the dynamics of spontaneous order (self-organising complex systems) and the basic evolutionary scheme ("variation with selective retention" in D. T. Campbell's formula). About the latter, and *pace* Hodgson's (1993a) critique, Hayek provides meaningful statements in line with Lamarckism: albeit implicitly, he recognises the "law breakers, who were to be path breakers" as a source of *variation* of institutions (Hayek, 1979: 161); he accepts the (group) *selection* mechanism by which "some practices enhanced prosperity of certain groups and led to their expansion" (Ibid, 159), thereby conducting to the "prevalence of the more effective institutions in a process of competition" (Ibid, 155); he also referred to the *retention* mechanism that maintains successful institutions ("learnt habits are transmitted by imitation"; Ibid, 155). This line of evolutionary explanation based on group selection certainly raises difficult questions, which Witt (1994: 184-185) sees as a weakness in Hayek's work.

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²⁵ Whether the evolutionary explanation corresponds to a late discovery in Hayek's work, and in what sense it is a Darwinian one, is a controversial issue discussed by Caldwell (2001; 2004) and Hodgson (2004c).

Drawing on this cursory review of Hayek's approach to the motion and evolution of orders, I am able to answer my *third question*: for Hayek, human knowledge and behaviour is a source of endogenous variation, which becomes enmeshed in the complexity of sociocultural interdependencies and leads to differential outcomes among firms, markets, or societies. In the long run differential fitness selects for the prevailing rules, while human experience is the built-in source of new rules in the on going motion of spontaneous orders.

Despite having forcefully argued for the crucial role of human (action-based) knowledge in social processes, Hayek mostly focused on the virtues of tradition and customary laws as guides of human behaviour in slowly evolving spontaneous orders. This bias also led Witt (1994: 186) to acknowledge the inconsistency:

The members can invent new rules or modify old ones. Of course this may be the result of reasoning about current rules and their efficiency, deliberate action, and even consciously planned modifications. ... what matters is only whether or not the modifications lead to superior adaptation to the current state of the environment. Hence, deliberate change founded on reason and reflection cannot be rejected *per se*.

Inconsistencies in the work of Hayek should not surprise. Hayek had a peculiar understanding of what science should be: "Fruitful social science must be very largely a study of what is *not*: a construction of hypothetical models of possible worlds which might exist if some of the alterable conditions were made different" (Hayek, 1973: 17). Indeed, rather than explaining the social orders we actually have, Hayek's work is about *providing policy-makers with an Utopia*, a "guiding conception of the overall order to be aimed at" with the ultimate aim of "radically redesigning society" (Hayek, 1973: 65). This politico-ideological agenda underlies his condemnation of 'targeted policies'. Hayek gives two main reasons for this: policy-makers have limited knowledge about the internal mechanisms of a complex social order; policy-makers lack 'field knowledge' that is only available to those involved in the issues object of the policy. But, at the same time, Hayek seems to have no doubts about the overall beneficial effects of "rational policies" aiming at the realisation of the Utopia, if necessary by

"radically redesigning society". The complexity of the system, and policy-makers' limitations seem no longer hold in the latter case.²⁶

The normative motivation that ultimately conducted Hayek's work helps to explain why he put aside important aspects of complex systems, namely their organisation on the basis of (equally complex) interdependent subsystems. This structured complexity (otherwise consistent with Hayek's 'stratified' view of 'institutions') strongly contradicts Hayek's passages about an *unstructured catallaxy*, which only comprises individuals, either humans or organisations ("it is necessarily vain to try to discover by observation regularities in any of its parts"; Hayek (1973: 64). This unrealistic assumption about the ontology of social orders also contributes to damage Hayek's argument for non-targeted policies aiming "to increase equally the chances for any unknown member of society of pursuing with success his equally unknown purposes"; Hayek (1976: 114). A vision of an unstructured society actually means that no social classes are acknowledged, which is largely contradicted by other social sciences, namely sociology and anthropology.²⁷

There are other problematic points in the work of Hayek such as a formalist conception of economics or a sociobiological explanation of resistance to a Great Society submitted to (and organised by), the standards of the market order. Yet, Hayek's legacy also includes important contributions to the advancement of our understanding of the social realm: rupture with equilibrium assumptions and the exploration of commonalities between sociocultural and bio-physical systems; concept of market rules emerging from individuals' interactions; connection between self-organising systems and the evolutionary process, which prefigure modern advances in evolutionary biology beyond Darwinian Modern Synthesis (Depew, 1998).

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²⁶ Witt (1994: 186) recognises the problem in a sympathetic style: "Thus there is a problem in determining the boundary between constructivist presumptiousness on the one hand and reflection on existing rules and suggestions for improving them that can usefully inform policy action on the other."

²⁷ Indeed, social classes exist and are reproduced. There is now abundant evidence that meritocracy-designed policies aiming to enhance the chances of children belonging to lower classes fail to compensate for the physical, psychological, and socialising effects of poverty in the early stages of childhood (Esping-Andersen, 2004).

2.4 Karl Polanyi's instituted economy

Karl Polanyi was born in 1886 in Vienna. Until his death in 1964 he has been contemporary of dramatic events and radical changes both in Western societies and in the world economy. His most important work, *The Great Transformation* (Polanyi, 1944; hereafter GT), addresses the rise of the liberal order of the 19th century and attempts to explain how the consequences of such "utopian project" eventually gave origin to the social and political turmoil that ended in two Great Wars.

As Mayhew (2000: 1) stated,

The Great Transformation is a history of the SRM [Self-regulating market]: of its emergence from the fact that the Industrial Revolution of the late eighteenth and early nineteenth centuries took place within a thoroughly commercial though not yet thoroughly market-organized economy; its nurture through the efforts of the liberal economists and statesmen of England in the first decades of the nineteenth century; and finally its demise as a consequence of the "protective reaction" to counteract the consequences that the SRM spawned.

Central to Polanyi's argument is the distinction between the 'economic system' and the different forms of its integration. Building on the anthropological research of Malinowski and Thurnwald, Karl Polanyi argues that classical economics was founded upon the "paradigm of the bartering savage", which plainly connected the division of labour to the exchange of goods, and identified the latter with markets (GT: 44). Against the atomistic view of human nature pictured by classical economists, Polanyi stressed the social nature of the primitive man and stated that possession of material goods in primitive societies was always a means to obtain a social status (GT: 46):

Neither the process of production nor that of distribution is linked to specific economic interests attached to the possession of goods; but every single step in that process is geared to a number of social interests which eventually ensure that the required step be taken.

Having discredited the motive of gain in primitive societies, Polanyi also recurred to anthropological studies to put forward three principles of economic behaviour that have been present in, and contributed to the integration of, economic activities in all societies across time: *reciprocity, redistribution* and *exchange*. But, adopting an Institutionalist stance, Polanyi immediately emphasised that those principles of behaviour (more or less present in all societies) would not be possible "unless existing institutional

patterns lend themselves to their application" (GT: 48). Hence, he mentioned the institutional pattern of "symmetry", which supports trade activities without profit, and the institutional pattern of "centricity", which supports redistribution processes in different types of societies. Exchanges may be bartered or mediated by money; they also may involve vital provisioning for a society, or simply non-essential goods. On the institutional level, they depend on the 'market pattern', which is an organised way to operate economic exchanges. However, while the other two principles do not create separate institutions – or "institutions for one function only" (GT: 56) – exchanges give rise to a specific 'institution', the market, which brings a new and destabilising element into the societal organisation: the motivation to produce for gain.

Polanyi (GT: 54-5) summarises his argument as follows:

all economic systems known to us up to the end of feudalism in Western Europe were organized either on the principles of reciprocity or redistribution, or householding, or some combination of the three. ... The Greco-Roman period, in spite of its highly developed trade, represented no break in this respect. ... it formed no exception to the rule that up to the end of the Middle Ages, markets played no important part in the economic system; other institutional patterns prevailed.

Polanyi's idea that, previously to industrial capitalism, markets were "submerged in general social relations" is also expressed in the following statement: "the motives and circumstances of productive activities were embedded in the general organization of society" (GT: 70). Unfortunately, this idea has been reinterpreted by Granovetter (1985) and other authors in economic sociology.²⁹

This leads us to the core of Polanyi's thesis: the nineteenth century produced in England a radically new type of organisation of economic processes never seen before in History, the "market economy" and its "self-regulating mechanisms". This means an "economic system controlled, regulated, and directed by markets alone" (GT: 68), while "self-regulation implies that all production is for sale on the market and that all incomes derive from such sales" (GT: 69).

²⁹ For Granovetter, 'embeddedness' means that economic behaviour always *occurs within* (*individuals*') *networks of social relations*. About this concept see Barber (1995) and Krippner (2001).

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²⁸ In GT Polanyi also refers to the principle of householding, "which consists in production for one's own using" (p. 53). However, in a later work Polanyi (1957: 250) no longer refers to it, presumably because he reclassified it as a form of redistribution (Schaniel and Neale, 2000).

At this point Polanyi introduces a critical element in his argument: the development of a fully integrated and self-regulating market economy implied that *labour*, *land* and *money* should be submitted to the pricing mechanisms prevailing in the trade of other commodities. However, these are "fictitious commodities". Polanyi (GT: 71) argues:

labor, and land are no other than the human beings themselves of which every society consists and the natural surroundings in which it exists. To include them in the market mechanism means to subordinate the substance of society itself to the laws of market.

This (at least partial) subordination has been established in England in the first decades of the nineteenth century. Polanyi dedicated some chapters of GT to a detailed description of the great economic, social and political transformations occurred in England at that time leading to a social organisation in which "human society had become an accessory of the economic system" (GT: 75). Or, as stated later in a clear formulation (Polanyi, 1947: 63; emphasis mine):

an "economic sphere" came into existence that was sharply delimited from other institutions in society. Since no human aggregation can survive without a functioning productive apparatus, its embodiment in a distinct and separate sphere had the effect of making the "rest" of society dependent upon that sphere.

This "market society" had devastating consequences on human beings and the environment in the England of mid-nineteenth century. In a short period, a social and political counter-movement was underway calling for laws to enforce less unfavourable conditions to labour.³⁰ According to Polanyi, society was trying to "safeguard the human character of the alleged commodity, labor" (GT: 177) by reducing the power of the self-regulating market. New legislation to improve sanitary conditions in factories and cities, and to protect natural resources, was approved. Even business interests had to be protected from market laws (GT: 132): "central banking and the management of the monetary system were needed to keep manufactures and other productive enterprises safe from the harm involved in the commodity fiction as applied to money."

Thus, Polanyi understands the dynamics of modern post-Industrial Revolution societies as a "double movement" conducted by two organising principles: the principle of *economic liberalism*, supported by trading classes calling for

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³⁰ In GT it is not clear if Polanyi accepted that the 'self-regulating market' existed for some decades in the nineteenth century England, or it was a liberal utopia that actually never fully existed because the social reaction against the initial damaging effects of the first transformations impeded its institutionalisation.

laissez-faire policies and free trade; the principle of social protection, supported by those immediately affected by the self-regulating market who call for protective legislation and restrictions to the market mechanisms. The outcome of this double movement is open, which means that it is contingent to the historical conditions of each society in a particular time, as Polanyi attempted to show with a detailed analysis of the differences between the British and the Continental industrialisation.³¹ In particular periods, the sociopolitical conflict may lead to stalemate and create conditions for the rise of "unsuspected forces of charismatic leadership and autarchist isolationism" (GT: 200) such as the fascist movements that spread in the aftermath of the Great Depression.

Having surveyed the core of Karl Polanyi's thought I turn now to the three questions put forward in the beginning of this section. Firstly, how did Polanyi see the deep nature of markets and firms? In the following I only refer to markets because Polanyi did not discuss the nature of firms, which is an important shortcoming of his approach to the market economy.

The critique addressed to the classical economists by Polanyi centred on their atomistic and naturalistic understanding of human nature, which was less evident in Adam Smith but eventually became the basis of Malthus and Ricardo economics. According to Polanyi, the fathers of political economy ignored 'society' as an autonomous reality. Because they did not recognise the autonomy of social phenomena, they recurred to naturalistic explanations such as "the iron law of wages". Opposing classical economics, Polanyi adopts an Institutionalist view and develops in GT (Chapter 4) a crucial distinction between "principles of behavior" and "institutional patterns". He also accepts the existence of causal mechanisms affecting those two levels in a bidirectional way: "institutional patterns and principles of behavior are mutually adjusted" (GT: 49).

In a later work, Polanyi (1957: 248; emphasis mine) states his Institutionalist lineage in these terms:

Because he wanted to publish the book before the end of WW II he had no time to revise the text, which thus bears the traces of two organising frameworks.

³¹ According to Block (2003), over the writing of GT Polanyi made a shift from an initial view of social dynamics in line with the Marxist conception of dialectical interplay between 'material productive forces' and 'social relations of production' into his own concepts of 'self-regulating market', 'fictitious commodities', and the dynamics of 'double movement'.

The fount of the substantive concept [of economics] is the empirical economy. It can be briefly (if not engagingly) defined as an instituted process of interaction between man and his environment. ... The economy, then, is an instituted process.

And, Polanyi specifies (Ibid, 250):

A study of how empirical economies are instituted should start from the way in which the economy acquires unity and stability, that is the interdependence and recurrence of its parts. This is achieved through a combination of a very few patterns which may be called forms of integration.

Here Polanyi refers to the already mentioned patterns of reciprocity, redistribution, and exchange, which are observed in personal interrelations. And the argument goes (Ibid, 251; emphasis mine):

Superficially then it might seem as if the forms of integration merely reflected aggregates of the respective forms of individual behaviour ... The significant fact is that mere aggregates of the personal behaviors in question do not by themselves produce such structures. ... Acts of exchange on the personal level produce prices only if they occur under a system of pricemaking markets, an institutional setup which is nowhere created by mere random acts of exchange.

Adopting a formulation close to contemporary critical realism, he insists that "societal effects of individual behavior depend on the presence of definite institutional conditions, these conditions do not for that reason result from the personal behavior in question" (Ibid, 251). This means that institutions are necessary for individuals' socialisation and precede their behaviours. Therefore, Polanyi makes an ontological distinction between individuals' patterns of exchange and market institutions, both levels being at the same time autonomous ("relative independence") and interdependent. Ultimately, Polanyi's answer to my first question is not far from Veblen's view of 'institutions', but excludes the evolutionary dimension. In fact, despite having studied human societies at different stages of their development, Polanyi was mostly interested in the 'embeddedness' of the economic process and not in the causal mechanisms of the evolution of institutions. His aim was the motion of capitalism propelled by the action of individuals and their struggles around political projects, a dynamics far from the Darwinian meaning of evolution but perhaps not so far from a 'developmental' one.

Individual behaviour and epistemological issues are not directly addressed in Polanyi's work. However, some passages reveal Polanyi's views of human nature, which carry an implicit formulation of his ideas about those topics. The

following passage is an example of his rather subliminal way of addressing the issue (Polanyi, 1957: 249):

In the absence of any indication of societal conditions from which the motives of the individuals spring, there would be little, if anything, to sustain the interdependence of the movements and their recurrence on which the unity and the stability of the process depends.

Here Polanyi stresses that individual's interactions always need institutional support to be effective. Or, in other words, "only in the presence of a system of price-making markets will exchange acts of individuals result in fluctuating prices that integrate the economy" (Ibid, 252). Thus, individual's behaviour is only meaningful if sustained by an institutional framework. In brief, human beings acquire their knowledge through socialisation ('instituted') processes, a view that strongly contrasts with the view of classical economics to which prices carry information to be processed by solipsistic individuals.

Moreover, Polanyi sees human activity commanded by a complex of motivations. Hence, he strongly criticises all dichotomies (material *versus* ideal, rational *versus* non-rational, economic *versus* non-economic) that misread the ontological nature of both human action and society's institutions ("Yet it would be truer to say that the basic human institutions abhor unmixed motives"; Polanyi (1947: 71). Indeed, Polanyi's work and life has been a "plead for the restoration of that unity of motives which should inform man in his everyday activity" (Ibid, 72). Therefore, his intellectual work builds on a Personalist understanding of man, which bears a unitary view of *human beings as persons* to be respected in the way societies institute economic processes (Özel, 2001). Acknowledging this Personalist anthropology, I conclude that Polanyi's answer to my *second question* is certainly very close to the integrative philosophy of Merleau-Ponty, which he (implicitly) combined with the abovementioned recursive understanding of individual-social structures relations.

This leads to my *third question* about how Polanyi related human action to (maintenance and change of) markets' institutions. Again, Polanyi did not work out his views on this 'micro-macro' linkage but it is not difficult to see that he subscribed (albeit not always in clear statements) Veblen's habits-based explanation of how institutions mould individuals' behaviour. An example is his critique of mainstream economics 'habits of thought' concerning the selfish nature of man (Polanyi, 1947: 69):

For once society expects a definite behavior on the part of its members, and prevailing institutions become roughly capable of enforcing that behavior, opinions on human nature will tend to mirror the ideal whether it resembles actuality or not.

Here the importance of habits is implicit in the statement that opinions on human nature *tend* to conform to instituted roles and ideas, a mechanism that helps to explain the inertia of institutions. At the same time, Polanyi perceived that, in parallel to the 'reification' of man's labour activity, market society provided some "freedoms" to individuals and the awareness of the "reality of (a complex) society". In fact, despite the acknowledgement of an institutional moulding of individuals' through habits, and of the need of state power to organise society, Polanyi strongly rejected the idea of an over-socialised man: "In truth, we will have just as much freedom as we will desire to create and to safeguard" (Polanyi, 1947: 76).

Therefore, Polanyi's understanding of the 'agency-structure problem' is different from both the liberal occultation-negation of society by market relations, and the orthodox Marxism's deterministic view of the economic sphere. Because, as persons, we preserve the ultimate freedom to not fully adapt to (and even fight against) 'institutions', Polanyi upheld that "the transformation of society was not only shaped by the functional logic of the market system but also by social counter movements" (Thomasberger, 2001: 7). This means that in the passages about the political and moral implications of his analysis Polanyi is still consistent with an ontological view of "interdependence with relative independence" of agency and social structures.³²

Polanyi's thinking remains an illuminating contribution, not only to a deeper understanding of the role of the state in relation to markets and market societies (Hodgson, 2002a), but also to a better consideration of the role of economic ideas in the dynamical interplay of state, economy, polity and social movements (Blyth, 2002).

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³² For an overview of the moral implications of Polanyi's thinking see Baum (1996).

2.5 Building on the legacies

The above-presented theoretical legacies are idiosyncratic understandings of society, economic processes, and what economics is about. We can find in the three authors important and still valuable contributions, as well as weaknesses and unfinished legacies. But what strikes most in the overview of their work is that all of them had the courage to create and build upon a theoretical perspective of society that in crucial points was in strong dissonance with prevailing ideas of their time. Their contributions stand as landmark legacies of the twentieth century that cannot but inspire the different strands of economics that currently labour for a new paradigm able to meet the challenges of the new century.

In the following I recall foundational legacies of Veblen, Hayek and Polanyi and attempt to explore its connections with recent research about issues that are relevant for the work ahead: conceptual frameworks about social reality; visions of human nature; the linkage between agency and social structures.

2.5.1 Social reality: emergence or practices?

One of the core legacies reviewed above is the institutional nature of markets. Both Veblen and Polanyi explicitly use the word "institution" to qualify markets, while Hayek most frequently refers to "catallaxy" to stress the self-organising complexity of the market 'order'. Beyond the differences, what is relevant is the (more or less elaborated) acceptance by the three authors of *an emergent level of sociocultural organisation* that comes up from economic and non-economic interactions between individuals, which in turn enables and constrains these same interactions. In their own specific way of dealing with the problem of sociocultural emergence, each author assumed that between the level of "human interactions" and the level of (what they named) "institutions" there are causal processes operating both ways. However, none of them assumed that *both levels form a unity*, an outcome of the whole process of emergence. This is a crucial step that I make in this thesis when, in the next chapter, *the concept of institution will be redefined*.

institutional rule, the exact specification of the design that emerges at the end of the day may not correspond with the original intentions of all (or any) of the parts involved."

³³ Rutherford (1996: 93) gives a good insight on how Polanyi's perspective could be reinterpreted in emergentist terms: "although the process [the political bargain] as a whole aims (to some extent) to produce some deliberately implemented and enforced institutional rule, the exact specification of the design that emerges at the end of the end of the design that emerges at the end of the end of

While Hayek stressed the negative effects of purposeful action aiming the change of social norms and gave more importance to self-organising, customary orders/institutions, Veblen and Polanyi also admitted purposeful action as a source of institutional change, thus building a framework that provides a better understanding of state and public policy-making, which strongly contrasts with mainstream economics. As Mayhew (2001) argued, an Institutionalist view of the interplay between agency and structure enables to see how mainstream rational choice theories "reduced people involved in governments to rent seekers or to pawns of history" (Ibid, 244), and why ,little recognition has been given to "learning by state agents, no room for inheritance of ideas of good government, and, as a consequence, no way to incorporate the idea of "public purpose" into the motives of our agents" (Ibid, 245). Instead of a vision of the state taken by bureaucracy and opportunism, an Institutionalist approach based on a pluralist view of human motivations and a recursive interdependence between agency and structure suggests a richer, nuanced understanding of state intervention, which is able to explain both state capture by vested interests and developmental policies. To this we should add Hayek's insistence on the complex nature of sociocultural systems and the always-present unintended effects of public policies, which suggests precaution and, whenever possible, experimental stages in policy-making.

Another point of convergence is given by the fact that the three authors linked markets to the broader society. In Veblen this societal integration is best illustrated by his analysis of the developmental path linking changes in technologies to changes in the institutional fabric of society, a dynamics that is understood as a "cumulative causation" process. Either discussing the adaptive selection of rules, or arguing against what he labelled 'rationalist' policies, Hayek also acknowledged the interdependence between catallaxy and other social orders within his Great Society. Without explicit elaboration, Polanyi formulated the concept of 'embeddedness' referring to the uneven interdependence between markets and society. The concept has been central to the literature of New Economic Sociology (Guillén et al., 2002), and influential in the analysis of markets (Callon, 1998) since Granovetter's (1985) particular appropriation of the concept. Granovetter wanted to emphasise that market relations are not cut from other kinds of relations. His argument developed along two lines of reasoning: "the first is that economic activity is embedded in networks of social relations; the second is that economic

institutions are socially constructed" (Lewis, 2004: 169). Granovetter developed a critique of mainstream economics (including Transaction Cost Economics), and for that he placed his analysis at the level of *personal relations and networks* thereby ignoring higher level, cultural and social structures.

However, in line with the legacy of the three authors, another stream of research labelled 'critical realism' (Archer *et al.*, 1998; Lawson, 1997) insists that social structures are ontologically distinct from person's activities in that they "are composed of a nexus of (in many cases internally related) positions, the relations between which are relatively *im*personal in the sense that they typically exist independently of the particular individuals who occupy them at a particular moment in time" (Lewis, 2004: 175). Usually, critical realists argue that social structures correspond to a particular distribution of vested interests, and have an historical dimension based on material and discursive resources, which in the overall are not reducible to *current* agency and interpersonal relations.³⁴ This entails an emergentist perspective of social reality that differs from Individualism, Holism and what Archer (1995) labels "Elisionism" or "Central conflationism" implicit in Giddens' sociology.

Critical realists highlight the *temporal priority, relative autonomy* and *causal efficacy* of sociocultural structures. Such realist perspective should be seen as consistent with a multi-level ontology, which calls for analytical distinctions between individuals' interactions and emergent sociocultural systems.

According to Archer (2000b: 465), "analytical dualism" is different from "ontological dualism" because "(1) structures are only held to emerge from the activities of people, and because (2) structures only exert any effect when mediated through the activities of people."³⁵ Therefore, critical realists have rejected not only the network approach to the 'agency-structure problem' but also other theoretical variants mostly inspired by the works of Bourdieu and Giddens. They argue that these approaches are based on a narrow, flattened vision of social reality when proposing a mid-level, a 'central conflation' of levels, between individuals and social reality. Referring to such theoretical

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³⁴ Most critical realist literature does not make a distinction between social and cultural structures. An outstanding exception is (Archer, 1988, 1995).

³⁵ Given the ontological load of the term 'dualism' in the discussions of the so called 'mind-brain problem', I prefer the expression 'analytical distinction' in order to keep apart from the 'dualism vs. monism' debate, which I think is overcome by a multi-level ontology. Further discussion of sociocultural emergence is postponed to the next chapter.

option, Layder (1998: 99) recognises that "although some examples of this kind of approach are more likely to formally acknowledge the existence of different social domains their practical effect is to compact, dissolve or conflate them and thus to fail to account for their distinct and partially autonomous effects."

Therefore, markets cannot exist without: (1) interpersonal relations (interactional level); (2) settled 'ways of doing business' governing the different stages of the market process (intermediate level); (3) general laws, rules, standards and a variety of higher-order systems of social and cultural nature (high structural level). Therefore, whatever the level of analysis considered, I will treat a *market as the systemic totality of these three levels of processes*, a particular kind of emergent sociocultural system.

At this point it should be clear that an Institutionalist, emergentist understanding of markets makes a contribution to the methodology of economic theory. This emergentist perspective—neither independence nor conflation of levels and causal relations—pictures the interplay between human agency and the structural levels of society as a complex process, which calls for a deeper elaboration that goes largely beyond the bare scheme used by the three Institutionalist authors reviewed. In fact, none of them was able to use the concept of 'emergence' in their multi-level understanding of institutions, even if the concept was already discussed in biology since Veblen's time (Hodgson, 2004b). Therefore, references in their formulations to mutual interdependence between agency and sociocultural structures mostly rest on a rather vague discourse involving habits, imitation and some (unspecified) collective action.

Fortunately, in the last two decades a more elaborate ontology of social reality has been developed by social scientists of different backgrounds inspired by the critical realist philosophy of Roy Bhaskar (1989 [1979]) and his proposal of a Transformational Model of Social Activity (TMSA) (see Fig. 1). The latter has been improved by Archer's (1995) morphogenesis-morphostasis model making explicit both the *temporal dimension* of social phenomena and the importance of *the interface* between agency and structures (see Fig. 2).

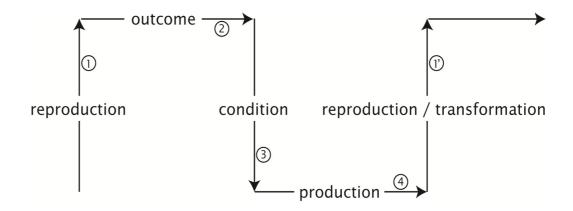


Fig. 1 - Bhaskar's TMSA (source: Archer, 1995: 156)

Pre-Existing Structures

(prior outcomes)

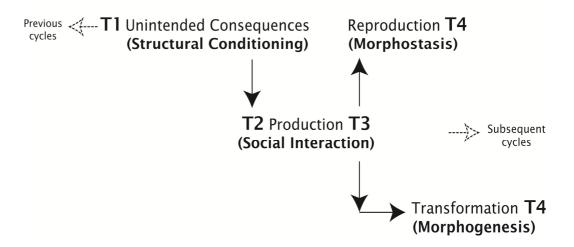


Fig. 2 - TMSA - Morphogenetic/static cycle (source: Archer, 1995: 158)

The critical realist approach of social reality is still an ongoing research programme engaged in important debates; it still needs to settle some epistemological and ontological issues (Cruickshank, 2004; Nellhaus, 1998),³⁶ and clarify in what sense the invoked causal efficacy of sociocultural structures is compatible with individuals' autonomy (Lewis, 2000; Wight, 2004). Nevertheless, taken in a broad scope, it provides what I find the more adequate conceptual framework available at this moment for those who want to theorize economic phenomena and build on the Institutionalist legacy. Therefore, in order to proceed, I need to come to terms with underdeveloped aspects of the critical realist ontology, and with the problems of applying it to specific sociocultural entities such as markets. The task is even more demanding because the widespread adoption of biological metaphors in heterodox economics has diverted some non-mainstream economics researchers from the most important task of exploring the specific sociocultural nature of markets and firms (Niman, 1994), notwithstanding the acknowledgement at a high level of abstraction of some commonalities.

2.5.2 Homo œconomicus or persons?

As noticed, Veblen and Hayek emphasised the enduring nature of 'institutions' on grounds of human propensity for habitual behaviour. On the contrary, Polanyi stressed the transformative power of human agency to explain why and how the institution of a "market society" has been a rupture in human history. The question that arises is how these two facets of human behaviour (routine versus innovation) have been integrated by subsequent nonmainstream literature, and if so under what kind of coherent and plausible understanding of human agency?

But first it is convenient to explain why this discussion does not concern mainstream economics, either in its neoclassical school or in the revised versions of game theories (Davis, 2003). In fact, neoclassical economics appeared as a result of a long theoretical struggle of classical economists with the difficulties to integrate human subjectivity in their analysis. In its

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³⁶ Critical realism has been criticised by Hodgson (2002b) because it neglects the "reconstitutive downward causation" of institutions over individuals' motivations namely through change in habits. However, a careful reading of Archer (1995: Chap. 8) shows that her concept of "double morphogenesis" of structure and agency accommodates this type of effect, but certainly without any preponderance of habits as I will discuss below in this section.

beginnings, economics adopted Locke's version of the individual as an isolated, conscious and self-reflexive being that privately builds knowledge out of simple ideas that he gets through sense experience. Either in cardinal utility theory, or later with preferences in the ordinal utility theory, the Lockean view of individual consciousness, private and unchanged along time, remains the fundamental inspiration. But, assuming the existence of two worlds, the inner (subjective) and the external (objective) world, the classics had to face the difficult question about their relations. While Adam Smith recurred to the rather vague concept of 'order' (the metaphor of the "invisible hand") to link the subjective world of individuals and the economic outcomes of the market. this stance has been considered far from satisfactory. By the end of the nineteenth century the disputed problem of how to scientifically integrate in economics the subjectivity of the individual received a *neo*-classical solution, that is, the belief that psychological states are the direct causes of individual behaviour, which expresses rational choices of the mind based on the marginalist principles.

However, the debates around utility and individual's psychology led to the belief that rational maximisation of utility was only one instance of the *general principle of rational choice procedure*, which is instrumental about means and agnostic about ends.³⁷ Therefore, after the contribution of Samuelson, Arrow and others, "the theory of choice was progressively emptied of any and all reference to individuals' subjective ends, to the point that current mainstream choice theory refers to individuals' ends entirely formally in terms of objective functions" (Davis, 2003: 27). At the end of this process what has become mainstream economics treats preferences as "given" or as "exogenous" to economic relations. The self-reflective individual and his subjectivity finally disappeared from the economic realm as it has been reconverted into abstract choices determined by algorithmic computations in the brain.³⁸ In fact, the failure of the microfoundations project of New Classical Economics, and the deep ambiguities of the "hybrid atomist-holist" game theory explanations

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³⁷ For a critique of rational choice theory see, among others, (Archer, 2000a), (Dupré, 2001b) and (Joas, 1996).

³⁸ According to Davis (2003), the adoption of game theory in the analysis of strategic decisions of individuals is what mostly distinguishes modern mainstream economics from neoclassical economics. However, this new application of 'rational choice theory' does not reintroduce the subjectivity of the individual in the analysis.

(Davis, 2003: 35-44), are only symptoms of a more fundamental reality: indeed mainstream's *homo œconomicus* is not about real human beings in the world.

In contrast to the atomist view of the economic agent, most heterodox views recur to what is usually called the 'embeddedness' of individuals. This term no longer corresponds to Polanyi's meaning, and rather points to the idea that in their decisions individuals are influenced by their social environment, which is usually understood (wrongly, but see below) as a limitation to human rationality within a view of man as a 'rule follower' (Rutherford, 1996). Nevertheless, in the Original Institutionalist perspective launched by Veblen 'embeddedness' still preserves individuals' autonomy to learn and change, both themselves and the social structures around them.

Other authors (Hodgson, 2004b; Vromen, 2001), replying to sceptical critiques about how to account for human purposeful action within a Darwinian evolutionary understanding of institutions, recur to Evolutionary Psychology.³⁹ However, Davis (2003) argues that evolutionary economics, as well as other non-mainstream approaches that attempt to deal with this 'embedded man' without making it disappear in a holist view of social reality, have been unable to fill-in the details of the framework of agency-structure interaction. To provide an alternative, Davis builds on the idea of an 'embedded man' that is self-reflective and endowed with causal powers, and makes a step forward by adopting a particular theory of the individual that he thinks is able to provide the quested articulation between self-reflectivity and social behaviour. The individual is the starting point: "the specific account of socially embedded individuals I employ—shared or collective intentionality analysis—is not an account of individuals outside social relationships, but one that instead sees social relationships as embedded in individuals" (Davis, 2003: 130). Actually, the author adopts the theory of social relations proposed by Tuomela (2002), which also influenced John Searle's philosophy of institutions. A crucial idea in this theoretical framework is that individuals behave in accordance with two interconnected kinds of intentionality: first-person singular, which is the domain of instrumental rationality; first-person plural, which is the domain of voluntarily accepted social obligations. The approach amounts to an 'individualisation' of social phenomena, and thus proposes a solution to the 'agency-structure problem' that has received strong and convincing critiques

³⁹ I disagree with this stream of research but reserve the discussion for Chapter 5.

(Meijers, 2003; Viskovatoff, 2003). Had Davis made a careful enquiry into contemporary research within psychology and sociology he certainly would find other contributions that fully assume the individual, and yet picture a more convincing nexus between agency and structure. The pointers to an alternative to *homo œconomicus* may be found both in the Pragmatist legacies of Veblen and Hayek-III, and in the Personalist vision of human nature underlying Polanyi's work. Both streams connect with a plurality of recent contributions of which I will present a cursory synthesis in the following paragraphs.

I begin with a comment on the growing literature that reviews and updates our knowledge of American Pragmatists' understanding of both human nature and social structures (Barbalet, 2004; Joas, 1996, 1998; Manicas, 2002). Firstly, the philosophy and psychology of William James are usually associated with Veblen's emphasis on the role of habits and instincts as linkages between agency and institutions (Hodgson, 2004b: 162-175). However, James's study of instincts should be put in the scientific and cultural context of his epoch. Actually, it was a refined understanding that broadly corresponds to what is now referred under the formula of "embodied knowledge" in opposition to the classical cognitivist, computational theory of the mind. When we take account of James's ambiguous formulations, namely about the autonomy of the mind, then instinct and emotion appear to be very close in kind if not the same; the former is understood as a evolved, "pre-organised mechanism" of bodily changes triggered by some external (or memory) event, which is experienced at the mental level by the human being as 'emotion'. 40 However, Bird (1986: 139-140) notes that "James is not claiming that emotions are instinctive rather than acquired, and he could allow that we may acquire or develop certain emotions. (...) The idea is rather that whatever the provenance of the emotion it will have to be associated with those established physiological mechanisms". This relative autonomy of 'emotions', linked to what James perceived as complex, obscure causation of neurophysiological processes, should be framed within James's dualist metaphysics, which leaks into his psychology the struggle of the philosopher trying to reconcile scientific explanations with the idea of a survival of the 'soul' and a religious meaning for life (Flanagan,

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⁴⁰ Actually, William James's concept of emotion seems to be what Damasio (1999) names 'feelings', the conscious awareness of emotions: "bodily changes follow directly from the perception of an exciting fact, and that our feelings of [these] changes as they occur is the emotion" (Quoted by Barbalet, 2004: 341-342).

1997). In my view, because James has not a concept for emergent phenomena, his formulations ultimately reveal the relentless pursuit of a science-based non-eliminativist, and yet non-dualist understanding of human nature, which only recently is receiving wider acceptance in psychology (Martin, 2003).⁴¹

Taking this background, "reference to the future is crucial for an understanding of James's thought, because the apprehension of the future and the basis of action that achieves or creates one possible future against others are necessarily emotional' (Barbalet, 2004: 338; emphasis mine). This forwardlooking attitude is also basic to James's understanding of human rationality. The future carries with it uncertainty or ambiguities that can only be dissipated by a decision prompted by emotionally driven expectations about the consequences. "In this affective or emotional displacement of uncertainty concerning the future James locates rationality, or at least the 'sentiment of rationality', ... the particular emotional configuration that enables actors to engage unknowable futures" (Barbalet, 2004: 343). In brief, William James sees emotions ('feelings' in Damasio's terms) as mental, general-purpose guides of adapting human behaviour.42 In a more up-dated formulation, but still preserving the essential of James's intuitions, Clark (2002: 157) states: "In place of rigid patterns found in most species, the inherited "drives" of primates and humans might better be described as broad propensities that guide an overall behavior pattern that is learned mainly from experience and from social culture." In this sense, it would be a reductionist mistake to use James's problematic discussion of instincts both to establish a gene-based direct link to human propensities and, further, to privilege a particular propensity (e.g., habits, creativity) in order to account for actual behaviour.

A naturalist view of mind is also present in the particular Pragmatism of John Dewey, mostly in his late work where he clearly anticipated the connectionist understanding of the brain and thus rejected the idea of a problem-solving

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⁴¹ For a deep discussion of emergent processes in natural systems, see Emmeche *et al.* (1997). For process metaphysics supporting an emergentist and evolutionary view of reality, yet opened to the religious concerns of William James, see Entralgo (1999).

⁴² According to Clark (2002: 58), "there are but three basic drives or needs that specifically constitute human nature ... I label these needs "propensities" rather than "instincts" or "drives" (the more common terms for genetically programmed emotions) because while propensity still implies a powerful innate tendency, it suggests far more flexibility in the behavioral responses by which it can be satisfied. The three propensities are for bonding, for autonomy, and for meaning." Clark specifies that the latter subordinates the other two, and that the particular meaning system we need for bonding and preserving autonomy is a "human construct" (lbid, 59).

mind governed by symbols and rules (Manicas, 2002). Further, he had an ecological understanding of the mind as he saw knowledge arising at the crossroads of brain and body acting within a specific situation. "That is, there is no way to disconnect sensing and acting nor to disconnect these from the situation which is changing as the consequence of acting" (Manicas, 2002: 286). With this ecological understanding Dewey rejects the Cartesian dualism of mind and matter in two fundamental aspects. First, rather than accepting that we make a movement as a consequence of a perception, Dewey argues that perception and movement are only analytical stages of an ongoing, coordinated act and each of them gains a meaning as part of that action. "From the standpoint of the actor, the action, the goal, the actor and the object usually remain undifferentiated or fused within the act" (Gillespie, 2005: 23). Second, Dewey sees the mind as arising within a process of managing conflicting responses within the act. Consciousness arises out of unexpected difficulties in the course of action that forces the subject to a mental "reconstruction" of the situation. Gillespie (2005: 23-24) states: "the basic movement can be schematised as a movement from a rupture of ongoing action, to reconstructive effort (experienced as consciousness), which resolves in the continuation of action."

From the above presented cursory notes we can see that an important legacy of American Pragmatism consists in a complex understanding of human nature, at the same time biological, psychological, and constitutively opened to the world (see Fig. 3). This has been an inspiration for a number of contemporary researchers in developmental psychology whose current work builds on the concept of 'person' (Bickhard, 2004b; Martin, 2003; Overton, 2004).

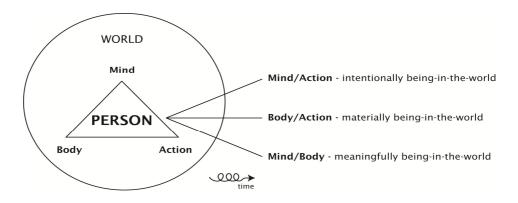


Fig. 3 - The human being as emergent 'person'

Looking for an alternative both to "modernity man", which has been impoverished until only left with an algorithmic-abstract rationality, and to "society's being", the post-modern human individual turned into "gift of society" (Archer, 2000a), the above-mentioned authors argue for a third stance that builds on the concept of emergence. The framework adopted endorses important critiques formulated by post-modernism against modernity understanding of human nature, but also assumes different ontological and epistemological assumptions that prevent both idealism and relativism. Rather than a 'self' 'socially constructed', it argues for the *emergence of self as person* "through relational discursive construction [and material interactions] deployed in the context of systemic processes of social constitution, both societal-level and local, in a temporally extended unfolding" (Falmagne, 2004: 838). In a convergent account that accepts the post-modern critique of a entirely unified view of the self, Martin (2005: 212) argues:

A very considerable degree of multiplicity and diversity in any individual person is readily accommodated in most of our sociocultural practices of personhood, without necessitating a denial that the embodied individual in question is a single self.

The importance of this 'emergent person' perspective for the theoretical framework I aim to build merits a sketch of its main ideas. 43 Firstly, because persons "emerge and develop contingently within real sociocultural, physical, and biological contexts" (Martin et al., 2003: 110), they are not reducible either to biological kinds or to sociocultural contexts and practices. "A person is an identifiable, embodied individual human with being, self-understanding (self), agentic capability, and personal identity" (Ibid, 111). Besides the biological body (not only the brain), this definition highlights the *contingent* existence of the individual in the life-world (being) and his relational development, which "is dependent on, but very different from the developmentally more primitive, prelinguistic sense of self that equates with one's recognition of one's physical body as distinct from other objects and people" (Ibid, 111). Further, the definition points to a personal 'identity', the "particular concerns, cares, and commitments to which self-reflective agents direct their actions and efforts" (Ibid, 112). Finally, the authors make it clear that persons have a deliberative, reflective activity for "selecting, framing,

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⁴³ See also the meaning of 'emergent person' in Bickhard (2004b: 126; emphasis mine): "It is emergent in the biological and psychological development of an individual who, however massively social, is not entirely social in his or her being."

choosing, and executing" their actions in a way that is not fully determined by other factors than their own understanding and reasoning (lbid, 112).44 One important aspect of the developmental view is the pre-reflective, body sensations experienced by the infant unfolding in progressive maturation. This occurs at the biophysical level and at the psychological level, the latter mostly in the capability to make sense of the socio-cultural practices, of which the relational-conversational are crucial for learning to use symbolic tools (Martin and Sugarman, 2000: 400). 45 Such developmental, on going acquisition of conscious self-reflection does not imply the disappearance of pre-reflective activity; on the contrary, the latter is always present and plays a crucial role in everyday life routines. 46 The development of the infant is nested in biological, social and psychological interdependencies and involves learning processes of different kind: 'acquisitional' learning (elaborating meanings from relations with the environment), and 'revisionist' learning coming from the conscious interpretation of a new situation when previous understanding is insufficient (Martin and Sugarman, 2000: 402).

Therefore, above and beyond the traditional separation between routinised and purposeful action, we should accept that (in more or less degree) *a creative dimension is present in human action*, even when we perform an institutional role or act routinely.⁴⁷ This is an important contribution of the Personalist understanding of human nature that merits detailed discussion of its implications in the following subsection.

2.5.3 Agency: tangled up in personality and society

I begin with a reference to Hans Joas's (1996; 1998) sociology of action, the most discussed work of the last decade addressing the present topic, which is also inspired by the American Pragmatist thinking of the beginning of the twentieth century. Joas's (1996) work is consistent with the above-mentioned

⁴⁴ In a similar vein, see Ingold (2002: 744): "in truth, no more than other animals do human beings come biologically ready-made, to be 'topped-up' by culture."

⁴⁵ Donald (2001) extensively discusses the emergence and use of symbolic technologies.

⁴⁶ This does not mean that human routines are not conscious as some evolutionary economists assume. About this see (Donald, 2001: 57).

⁴⁷ See this illuminating passage by Archer (2000c: 53; emphasis mine): "norms cannot be scripted for every contingency. Therefore the successful role-player cannot sink into the passive follower of normative instructions whose only reasons for action are located in the role itself, or because satisfactory performance gives access to further roles. ... Yet, if we truly personify roles, then we bring to them something other than the normative stuff out of which roles are made. What we bring is judgement ..."

developmental view of human nature and presents an elaborated critique of action theory's assumptions as assumed either in neoclassical economics or in normative theories of classical sociology. In brief terms: rather than the rigid and sequential scheme of given ends/goals commanding optimal choice of means, ends/goals and means/actions are constituted (defined, revised) within an interactive situation; rather than taking for granted (and almost ignoring) the body, we need to recognise that the body has an influence on action that is not completely anticipated, and be opened to other forms of action that imply passivity, receptivity and the release of the body; rather than the conventional individualistic, fully autonomous view of action, we need to emphasise the natural, social and historical shaping of both individuals and their interactions.

Building on the above-mentioned critique, Joas (1996) goes further to elaborate a theory of action, which brings human creativity to the foreground within a multi-stage model:

According to this model, all perception of the world and all action in the world is anchored in an unreflected belief in self-evident given facts and successful habits. However, this belief, and the routines of action based upon it, are repeatedly shattered. (...) Our perception must come to terms with new or different aspects of reality; action must be applied to different points of the world, or must restructure itself. This reconstruction is a creative achievement on the part of the actor. If he succeeds in reorienting the action on the basis of this changed perception and thus continuing with it, then something new enters the world: a new mode of action, which can gradually take root and thus itself become an unreflected routine (Joas, 1996: 128-129).

Some reviewers of Joas (1996) have noticed that this model presents a dual, sequential view of habitual and creative action that is not consistent with its foundations. As Kilpinen (1998) recalls, Pragmatists had a *reflective* understanding of habit, which they did *not* equate with routine. In Peirce's words, "consciousness of habit is a consciousness at once of the substance of the habit, the special case of application, and the union of the two" (quoted in Kilpinen, 1998: 178). Acknowledging Peirce's *intertwining of habit and reflexivity*, Camic (1998: 289) also asks "why single out one half of this pair and propose a theory of creativity, rather than of the habit-creativity nexus?" These observations point to a weakness in Joas's (1996) model and reveal the need of its re-elaboration in order not only to do justice to Peirce's thinking but also to move beyond and fully acknowledge a creative dimension in human action, which is different from a formulation in terms of 'habits-cum-creativity'.

Actually, this is the line of argument proposed by Dalton (2004) who firstly recalls Bourdieu and his concept of 'habitus', which is based on individual's habitual behaviour acquired within a particular social class setting. The conceptual framework of 'habitus' is important for the present discussion because, despite being central to the explanation of social reproduction, *it also assumes that creativity is always present in human action* although in a largely constrained manner. As Dalton (2004: 614) states, "the primary lesson Bourdieu's perspective holds lies in the possibility of *uniting habitual and creative elements* in a theory of action that neither depends on ascribing a separate origin and operation to a creative "tendency" nor on toggling between habitual and creative moments in the unfolding course of practical challenges."

A creative dimension in habitual behaviour is better seen with three examples that cannot be framed within Joas's model: (1) creativity arises in the *impulsive behaviour* that emerges within a routine, not because there is a problem to solve but as a result of boredom and the need to vary, or even is motivated by a desire to subvert normal activities; (2) in artistic activities sometimes the work becomes routinised in specific styles or genres, "and when routinised, the concrete realization of specific forms of artistry may be creative achievements because of small deviations from artistic ideals or paradigmatic works" (Dalton, 2004: 609); (3) rather than a reaction to the failure of a routine, creativity may also be at work in the efforts to improve a routine even if it is already successful. In this case, creativity does not suspend routine but rather operates within the routine. In brief, these examples show that we need to look for a more sophisticated understanding of human action than the sequential stages proposed by loas (1996).

In order to overcome the above-mentioned limitations I turn now to the less discussed work of Emirbayer and Mische (1998), which is also inspired by the Pragmatist thinking. The crucial insight of their contribution lays in the consideration of the *temporal dimension* of agency (Emirbayer and Mische, 1998; 963):

while routine, purpose, and judgement all constitute important [temporal] dimensions of agency, none by itself captures its full complexity. Moreover, when one or another is conflated with agency itself, we lose a sense of the dynamic *interplay* among these dimensions and of how this interplay varies within different structural contexts of action.

Emirbayer and Mische (1998: 971) distinguish in human agency three analytical dimensions related to time-positioning: iterational ("selective reactivation of past patterns of thought and action"), projective ("imaginative generation of possible future trajectories of action") and practical-evaluative ("capacity to make now practical and normative judgements among alternative possible trajectories of action"). The authors argue that the three dimensions are present in any kind of action in varying degrees, but they also recognise that iteration is crucial because the other two dimensions "are deeply grounded in habitual, unreflected, and mostly unproblematic patterns of action by means of which we orient our efforts in the greater part of our daily lives" (Ibid, 975). Even so, Emirbayer and Mische (1998: 979) underline that iteration always involves the (secondary) presence of some form of projective and evaluative dimensions. To explain this, they refer to the presence of an expectation that past patterns will repeat and succeed in the situation at hand, and that we still need in the moment some 'manoeuvring' to adequate agency to the details of the situation. In brief, Emirbayer and Mische (1998) provide an insightful analysis that not only preserves the iterational aspect of human behaviour but also goes beyond Veblen's habit-based psychology by fully integrating creativity as a uniquely human capacity (Donald, 2001).

At this point a question is in order: is it possible to build on the multidimensional analysis of agency proposed by Emirbayer and Mische (1998) and establish a theoretically adequate (and methodologically useful) linkage to the ontology of sociocultural reality? To achieve an answer to this question I need to provide the analytical detail that renders this articulation possible, and the qualifications that should preserve both a developmental stance about human nature and the critical realist approach previously endorsed.

My point of departure takes *person as an emergent source of causal powers* in line with developmental arguments already presented. Despite basic theoretical convergence with Archer (1995) on what concerns her emergentist stance about sociocultural structures, and her defence of "analytical dualism" to preserve ontological distinctions between human and social realms, I do not fully subscribe to her recent work (Archer, 2000a; 2003), which sees the self as *primarily* constituted in the infant's practice—his relationships with nature or with objects—only then being able to socially interact. Archer's ideas that from birth infants create a proto-self by drawing on their emotions in order to filter

sensorial experiences and organise meanings is certainly consensual, although it seems to be only a part of the story mainly because it neglects *affective*, *language-based interactions with caregivers*. To consider the emergence of the self as *previous to* social interaction is only a first step in Archer's theoretical struggle against oversocialised views of the individual, which she links to the seminal influence of Mead's psycho-sociological thinking.⁴⁹

In a second step, Archer defends that the process of identity formation is solitary and takes the form of an internal conversation. Arguing for a nuanced position, Meyers (2003) convincingly shows that this process of identity building begins early with the acquisition of language and strongly depends on the learning of a range of skills with helpful adults. Developing an extensive argument against Archer's (2000a) views, Meyers (2003: 280) states: "I believe that there is no need to espouse such unrealistic conception of human life. (...) it is possible to make good on the claim that people's distinctive desires, interests, values, and goals are not simply products of their environment without denying the indispensability of interpersonal relationships or the profundity of society's influence."

Another critique of Archer's stance is given by Mutch (2004: 432) who agrees with her broad critical realist formulation of agency-structure relations "provided that they include an adequate response to the broader literature on the situated nature of cognition." As a complement, the author proposes the work of the sociologist of education Basil Bernstein and argues that his conceptual framework enables us to account for the influence of structural factors, specifically linguistic codes typical of certain social classes, on children's identity construction, which occurs through the limitations those codes introduce in conversations, ways of thinking and life projects. And Mutch (2004: 440; emphasis mine) concludes:

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⁴⁸ Benton (2001b: 37) addresses a pertinent question: "what of the non-linguistic dimensions of embodied human interaction – including those between infants and carers, but continuing through life?". In fact, the question contains a pertinent critique of Archer's narrow views of how a sense of self emerges, and of her predominantly linguistic understanding of social interaction.

⁴⁹ According to Vandenberghe (2005: 233), in Archer's recent work "Mead is assailed as an 'uncompromising externalist' and a 'downwards conflationist' who got it all wrong."

⁵⁰ About this point Benton (2001b: 38) also asks: "Why does it matter whether we arrive at a modus vivendi between our different emotional dispositions and commitments by way of an inner conversation with ourselves, or by way of an outer conversation with friends, members of the family or other acquaintances?"

there seems to be at least some evidence to suggest that such modes of thought are powerfully shaped by structural factors in a way which perhaps needs to be taken into consideration when we consider conversations and reflexivity.

Even so, we must bear in mind that structural factors at work in social interactions are always *actively received*; they are filtered and reconstructed, for "the achievements of the creative imagination are constitutive for the person's ability to communicate with reality, other people, and him or herself" (Joas, 1998: 13).⁵¹

With the above-presented critical reviews of Archer's recent work my aim is to give a hint of the complex background that should be acknowledged when we discuss the *tangled connections between socio-cultural structures and human action*. As McGowan put it, "both [are] deeply embedded in cultural codings that carry experiences of the past and motivational-normative orientations toward a desired future." Certainly, as Archer (1995) discussed at length, today's human beings have grown up under the influence of social realities that pre-existed them, and each of us plays social roles that give access to specific resources used to maintain and/or change present social structures, or to create new ones for the future. However, notwithstanding Archer's (2003) most recent contribution, critical realism still needs to develop in depth analysis about the agency-structure linkage, both from the side of human action (but see Layder, 2004b) and from the side of sociocultural structures to the extent that semiotic processes are usually absent from the analysis (Fairclough *et al.*, 2002).

Critical realists emphatically reject social reification and argue that social entities *exist as relations* between roles/positions and *only have an influence through people's actions*. This means that causal powers of more or less distant social layers-systems are always *mediated by persons*,⁵² which also exert their own causal powers. Hence the importance of Goffman's focus on the bottom level of person's inter-actions. Layder (1994: 218-219) comments on this basic level in the following terms:

⁵¹ In this sense we should not refer to "internalisation" when talking about learning processes because it is not "an automatic copying or transmission operation, but one involving *coordination of the new with the old and restructuring of both*" (Carpendale and Müller, 2004: 11; emphasis mine).

⁵² In Archer's (1995: 184) words, "any form of socio-cultural conditioning only exerts its effects on people and is only efficacious through people."

Without doubt Goffman was aware of the intimate tie between interaction and [higher-level] institutional orders (...) he never lost sight of the complicated and delicate mediations that the interaction order interposes between human agency and the wider social fabric. It is only by making such distinctions between social orders that we can depict the 'layering' of social reality.

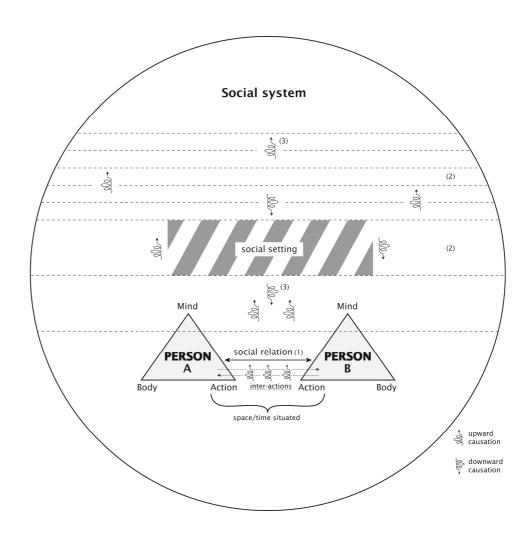
In line with such a view of a social reality composed of different but closely interdependent layers, Layder (1997; 2004a) proposed a typology of 'social domains': psychobiography ("lifelong personal development and individuation"), situated activity ("relationships between at least two individuals enclosed by the situational focus of their mutual involvement"), social settings ("the socially organized conditions (reproduced relations) under which different kinds of situated activity take place"), contextual resources ("person's most general social [and cultural] influences", namely his/her position in networks giving access and control in different kind and degree to cultural, material and authoritative resources within society).

Layder's contribution opens a new perspective about the social realm but I cannot accept 'psychobiography' as a *social* level; rather, what Layder describes is a 'hybrid' domain that impedes a clear ontological distinction between individual and society. Even so, the framework is useful for my discussion in that it assumes "the individual as intrinsically involved with others in both face-to-face situations and in terms of more remote networks of social relationships" (Layder, 1994: 3). In a convergent stance, Falmagne (2004: 823) argues:

a 'person''s subjectivity and 'mind' are constituted over time through her/his social location in a gendered, 'raced' and class-stratified world, the attendant formative societal discourses, the local discursive processes in which s/he has participated and that have been configured by those larger discourses-structures, and her/his agency in appropriating, rejecting or modulating various societal discourses and in constructing the subject positions s/he inhabits in local discursive exchanges. At the same time, social subjects affect local and macro-level social processes by their actions and their positionings.

From the above-presented stances I take that at a local level, within more or less organised 'social settings', persons establish interactions between one another and with nature, thereby creating, maintaining and transforming social relations, the units that make up social structures, some of which give rise to systems endowed with strong emergent properties. Emphasising that 'social domains' are not only analytic distinctions but also emergent realities, Layder (1998: 89) further states that "while distinct in their own right, the

domains overlap, interpenetrate and diffusely influence each other." According to this view, the bottom-level⁵³ of the social realm is constituted by myriad of *social relations that emerge* in virtue of patterned human interactions and practices that persons entertain in given contexts (see Fig. 4).⁵⁴



- (1) Emergent social relations
- (2) Social structures: emergent, organised roles-positions
- (3) Causal interactions between social layers-systems

Fig. 4 - Interpenetration between agency and social structures

⁵³ Here, and in other passages or diagrams, I adopt a spatial metaphor to benefit from its semiotic potential, although this is not fully appropriate in the case of social reality as I will discuss in the next chapter.

⁵⁴ Analogously to the emergence of concepts, which are seen as 'invariants' from patterned, meaningful experiences across different contexts (Hooker, 1995; Pankow, 1976), here I see social relations as 'social invariants' emerging across time and space from patterned human interactions.

Consider, for example, parent-offspring relationships (Layder, 1997: 83; emphasis mine)

that are socially defined in terms of formal expectations and obligations, patterns of deference and so on. However, actual contact and the quality of relations [inter-actions] between parent and offspring will depend on the "state" of the relationship. Typically though, the two will come together in specific episodes of face-to-face interaction, and each instance will have a small life and history of its own in which the social relationship is reproduced in various ways.

This means that, although mutually constituting, human 'interactions' and 'social relations' should be analytically distinguished. *Interactions belong to situated activity*, the lived-experience of human beings involving cognitive processes enmeshed with emotional engagements, which generate normative bonds for those who interact (Baerveldt and Voestermans, 2005); *social relations are emergent invariants of those bonds*, some of which are *internally* and *necessarily* related and thus constitute social roles-positions independently of the persons that enact them. In Layder's (1997: 83; emphasis mine) words, "social relations are about the *trans-situational ties that join together particular episodes of situated activity."*

Although within a very different research programme, Niklas Luhmann (1995: Chap. 6) followed a similar path. Setting aside the discussion bout the nature of the elementary unit of social systems—should we consider human action or human communication? (Stichweh, 2000)—Luhmann was right when he argued that the severing of human beings from social systems does not occur when one sees that the human realm interpenetrates the social realm at the interactional level: "interpenetration exists (...) when both systems enable each other by introducing their own already-constituted complexity into each other. (...) This is strikingly true in the relationship of human beings to social systems" (Luhmann, 1995: 213).

With the foregoing discussion I am ultimately arguing for an understanding of the sociocultural realm that rejects the 'intersubjectivity' approach to social reality adopted by some non-mainstream authors (see Fullbrook, 2002). To clarify this point I can also recur to the idea that *human action is*

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⁵⁵ Despite wide use of the concept of 'intersubjectivity' to address the interactional level of social reality—including critical realists such as (Lewis and Runde, 2002) and (Layder, 1998: 92)—I reject it because it presupposes that the subjectivity of individuals is *externalised*, which is an idea based on the problematic codificationist understanding of language. I have discussed at length this topic in (Bateira, 2006).

a "bipolar" concept: it has both a subjective experience aspect, which relates to the motion of human beings' personality, and a transformative aspect that is public and source of experiences for other human beings (Overton, 2004: 39). 56 Therefore, in my view, human inter-actions are the locus of 'interpenetration' of two ontologically distinct levels of reality, the personal and the sociocultural. Such understanding presupposes that the person maintains its autonomy, that is, a relative control of self development within which "the actions, attitudes and perspectives of others gradually are appropriated and transformed into psychological processes" (Martin, 2005: 221). 57

This ontological separation carries with it an important implication that I have suggested before: the units that constitute systems' structures are *not* the individuals themselves, not even their agency, but the *social relations* that are created between them (see Fig. 4). With time, interactions become patterned and give rise to *bonds* between persons and to their *invariants*, 'social relations'. This emergentist understanding of social relations builds on the previously argued emergentist understanding of persons, and also bears a connection to the philosophy of Martin Buber to whom Chiari and Nuzzo (2006: 258; emphasis mine) refer *emphasising a structural perspective*:

We are more accustomed to thinking that social processes take place whenever an individual meets another individual. In this case, we see two separate individuals interacting with each other. However, we can assume a different perspective and *take the relation as primary*: it is from the relation that persons and their realities emerge. In this case, the two terms of the relation are no longer separately interacting; they *complement* each other.

Therefore, instead of the individual, I take "the relation as primary" for my ontology of the 'social' domain in sociocultural systems. I assume *social relations as units* that emerge from person's interactions.⁵⁸ In their multiple interconnections, *social relations form roles and positions* in order to specialise and pattern individuals' interactions; *roles and positions in turn*

⁵⁶ See also (Baerveldt and Voestermans, 2005: 467).

⁵⁷ In a similar vein see (Harvey, 2002a: 193).

⁵⁸ While I take *social relations* as emergent *invariants* of bonds between persons, most evolutionary literature takes *social rules* as the elementary unit of social realty, which places connections between individuals and society under the perspective of analytic philosophy about mind-world relationship. For a critique of analytic philosophy see (Lakoff and Johnson, 1999).

are organised into networks (themselves elementary 'systems') that form layers of social structures. Some of those networks have highly dense non-linear relations with multiple feedback and feedforward links. These connections originate a complex self-organising structure that emerges as a unity, a social system displaying properties of its own. 59 In the next chapter I intend to show how the foregoing perspective, and the resulting reformulation of the 'agency-structure problem', will be helpful for the discussion of a renewed understanding of institutions, and thus of markets.

Although in a rather implicit manner, this linkage between human action and social reality also underlies Dalton's (2004) analysis of creativity, which he thinks should be framed by "an interaction between the individual's attempts to operate successfully in the world and the social judgements that permeate any such attempts" (Dalton, 2004: 617). This means that the outcomes of creative agency ("creative products" in Dalton's words) fall immediately into the social realm when they enter into the domain of human inter-actions. Being subject to "social judgements", they may be adopted as such, modified, rejected, or even object of "a variety of contradictory responses that reveal ambivalence linked to conflicting social pressures or positions" (Dalton, 2004: 618). That is, creative products enter an open-ended process that eventually turns some of them into socially validated *innovations*. Further, this social selection of creative products occurs under the up and downward causal influence of different types of structural layers, which are more or less close to the interactional level. Therefore, innovation is not simply dependent on the interactional level where individuals appear to be creative; it also depends on higher-level "patterns of creative authority [socio-cultural systems] that influence social response" (Dalton, 2004: 619). Indeed, socio-

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⁵⁹ In a second stage of his thinking Bhaskar uses the concept of "rhythmic" to account for interactions' dimensions of space, time and causality, which give social relations *the dynamics typical of self-organising systems*. According to Harvey (2002a: 175-176)"the concept of "rhythmic" points to a complexly layered totality whose elements interact to form a reality greater than their sum. ... With the incorporation of spatio-temporal rhytmics into TMSA, the reciprocal reproduction of structure and agency takes on an irreversible temporal character. This irreversibility, in turn, allows us to expand its analytic so that the possibility of path-dependent social development can take center stage."

⁶⁰ In this context I think useful to make a distinction between three interlinked concepts: *imagination*, which is a precognitive phenomenological dimension of individuals that intertwines with perception to sustain our sense of reality; *creativity*, which corresponds to particular outcomes of agency most visible when its projective dimension takes a leading role; *innovation*, which emerges as a socially validated outcome of multiple interactions involving material and social reconfigurations in different domains.

cultural systems interpenetrate and mutually influence each other thereby making the societal realm dynamic and structured.

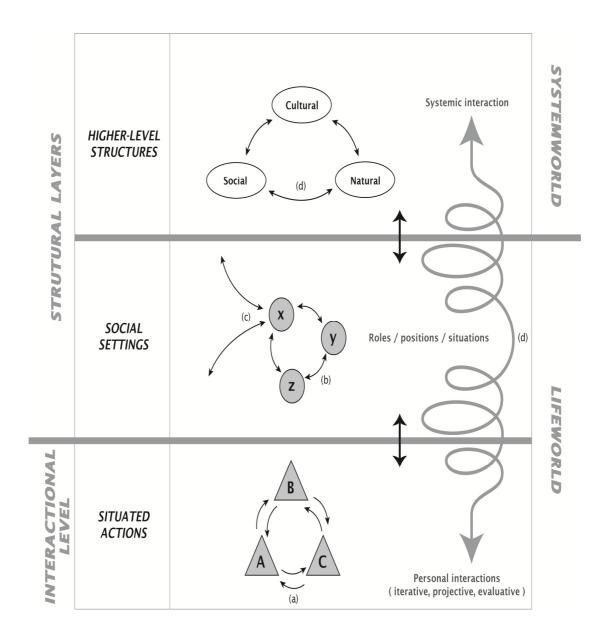
Returning to Emirbayer and Mische's (1998) contribution it is important to acknowledge that in the concluding section they explicitly reject both dualist and flattened understandings of the 'agency-structure' problem, and assume that individual agency and social structures are continuously engaged in a contingent interplay (Ibid, 1003). However, their analysis of agency is still one sided, individual-based. The internal structure of agency (the "chordal triad") is viewed from the side of an individual who plays with the undifferentiated "temporal-relational context".⁶¹ For this reason, the lines of empirical research that the authors propose mainly focus on changes at the individual level, and either take contexts as 'made of a piece' or reduce contexts to the social setting. Clearly Emirbayer and Mische's (1998) analysis of agency's internal structure is a very useful contribution, but on the condition to be placed into an analytical framework that could integrate a process understanding of sociocultural reality.

Summing up my emergentist approach (see Fig. 5), human action is the way a person lives in the world and thereby manifests his/her more or less conscious arbitration of the different social influences to which it is subject (Archer's *modus vivendi*). At the same time, human inter-actions continuously give rise to/maintain/transform social relations thereby organising myriad of dynamic networks of roles/positions, which make up social structures and the systems they form.⁶²

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⁶¹ Contrastingly, a psychologist as Falmagne (2004) clearly acknowledges the need to adopt a systemic level to account for the interdependencies between local settings, societal levels and persons' interactions.

⁶² Such a *relational* perspective calls attention to different access to the resources available, and therefore "allows one to situate the possibility of different (and antagonistic) interests, of conflicts within society, and hence of interest-motivated transformations in social structure" (Bhaskar 1979/1989, reprinted in Archer *et al.*, 1998: 221).



- (a) Interactions: at the same time iterative, projective and evaluative
- (b) Social relations between roles-positions: internal and necessary
- (c) Other social relations: external and contingent
- (d) Causal processes: upwards, downwards, horizontal

Fig. 5 - Emergentist understanding of sociocultural reality

Using the spatial metaphor, while the latter feed-downwards to the persons that occupy such positions-roles, the dynamics of their relations also feed-upwards to the social settings where human interactions occur, and also to higher-level structures to which both 'interactional' and 'social setting' levels are (internally and necessarily) related.⁶³

In the past, social relations have given rise to social systems ("the activities of the long dead" to use Archer's (1995: 143) words), and thus to the properties they currently exhibit. This means two things: firstly, social relations that are relevant to the system are not reducible to the people involved now;64 secondly, persons acting in different social settings (family, workplace, professional, leisure, political, religious, etc.) currently maintain-transform 'inherited' roles-positions constituting different kinds of networks and organisations, which have more or less defined borders, multiple connectionsoverlaps, and variable complexity. Such perspective enables us to see that social systems not only exert downward causation over social settings, and the relations that individuals therein mutually entertain, but also causally interact among themselves as sub-systems of the societal system, thereby generating diverse forms of macro-social relations going from hierarchical dependence. equal footing inter-dependence or only loose connections. On the overall, this process enables the emergence of society's autonomy (Luhmann, 1995).⁶⁵ In turn, such autonomy raises the question of the conditions of possibility for a meta-regulatory role for the state (Jessop, 2004).

About a *layered* understanding of social reality, Habermas (1987) introduced a much invoked distinction between the 'lifeworld' and 'systemworld' in order to account for what he saw as a basic duality of modern societies (see right side of Fig. 5). "The lifeworld refers primarily (although not exclusively) to aspects of social life that have to do with lived experience of human beings. ... System elements have to do with the reproduced, institutionalised features of society"

⁶³ This stance relates Layder's 'social domains' approach to Georg Simmel's sociology, which was also based on the guiding concept of 'human interaction'. For an appraisal of Simmel's thinking, see Nedelmann (2001).

⁶⁴ This foundational idea is at the core of the philosophy of Martin Buber in his "ontology of the between" (See Friedman, 1999: 411).

⁶⁵ I agree with this view of Luhmann (1995: Chap. 6), although I do not follow his understanding of social systems, both on the exclusive choice of *communications* as bottom-level units and on the autopoiesis of the cell as the analogy for modelling social systems. For critiques of Luhmann's perspective that I (to a point) subscribe see (Collier, 2000; Goldstein, 2003; Mingers, 2002; Viskovatoff, 1999).

(Layder, 1997: 78). Therefore, Habermas splits the level of 'social settings' between the systemworld (e.g. organisations, state and other formal 'institutions') and the lifeworld (e.g. informal situations). Although disagreeing with the purity of these two levels, and their low interconnectedness much emphasised by Habermas, it is worth to acknowledge the distinction because it refers to a real and much neglected issue in social analysis. In fact, interactions in a particular setting may not have the same degree of institutionalisation (in the sense of normative patterning and duration) as in other kinds of settings. For example, friendship relations are not so structured as workplace relations, and behaviour in streets is not so constrained as behaviour in courtrooms. All this means that there are some higher-level social structures that have gained macro-properties of a systemic kind. They have much greater stability and exert strong downward causation, while other social structures are constituted by less complex systems and networks, and still others may simply have a dyadic nature. A modern reading of the sociology of Georg Simmel helps to illuminate this point (Nedelmann, 2001: 71):

Applying Simmel's dynamic perspective, the three types of institutions ["patterned everyday mundane interactions", "interactions within institutionalised structures", "generic forms of society itself"] can be understood as a continuum of increasing institutionalization (or deinstitutionalization), in which the costs of individual freedom (in the sense of deviations from institutionalised criteria of social action) are gradually increasing (or decreasing).

Such variability is caused by two types of factors: first, human inter-actions bear a dual nature (private and public) and thus "play a significant role in "carrying" the respective influences of the lifeworld and systems elements into social practices and activities and into the personal lives of particular people"; second, there are differences between "types of power and control relations and their consequences for practice as they relate to the social domains" (Layder, 1997: 80).

With the foregoing I began to unveil crucial mechanisms at the interface between personal and sociocultural systems, and hope to have shown the variable complexity of the structures of these systems, which sheds more light on the nature and motion of agency-structure linkages, thereby enriching the "transformational model" proposed by critical realists (Fig. 1 and 2). On the overall, this section points to a research path that could combine a multi-level approach to institutions, already implicit in Veblen and Polanyi's legacies, with

a self-organising complex systems approach inspired by Hayek's idea of emergent social orders. Such is the challenge I will address in the next chapter.

Chapter 3

Naturalising institutions

3.1 Introduction

The third chapter of this thesis aims to develop the emergentist intuition explored in the work of Veblen, Polanyi and Hayek, which constitutes an important legacy of Original Institutionalism. Previously I provided evidence of its implicit use by those authors in what amounts to a 'proto-emergentism'. I recognise that the concept of emergence has never been widely used in this literature, although it has been the subject of a vigorous debate for over thirty years between two Institutionalist scholars; Clarence Ayres, a disciple of Veblen and David Miller, a disciple of Mead (see Hill, 1989).

The stance that I argue in this chapter, and constitutes a corner stone for the whole thesis, takes the side of David Miller and has been well summarised by Hill (1989: 469):

Emergence is present in all levels of evolutionary change from the physical universe of inanimate objects, through the biological universe of living beings, to the cultural universe of human kind. The human species is differentiated from other species by the emergence of the ability to use symbols in thought and in communication.

In the philosophy of science, the concept of emergence has been used with a variety of meanings that I will not discuss. I only make clear that my concept of emergence is a 'strong version', labelled "nomological emergence" by Silberstein (2002: 91) in the following terms:

there are no bridge laws whatsoever linking fundamental physical phenomena with higher-level phenomena. In such cases, fundamental physical facts and laws would only provide a necessary condition for higher-level facts and laws. ... in all cases of *nomological emergence*, it is *in principle* impossible to derive or predict the higher-level phenomena on the basis of the lower-level phenomena.

With this specification it becomes clear that my understanding of Nature is supported by a version of 'emergence' that goes beyond the concept of 'supervenience' referred by Hands (2001). Therefore, in the present chapter I make an attempt to 'Naturalise' institutions in the sense that I assume their specific emergence upon the evolutionary previous levels of Nature, and attribute to institutions 'genuine' causal powers beyond those of persons, still much beyond the causal powers of their bodies. My stance is *not* physicalist naturalisation (see Hands, 2001: Chapter 4).

The second section of this chapter discusses my understanding of emergentism in the context of social reality, and points to *linguistic communication* as a most distinctive trait of human and sociocultural reality in relation to previous levels of Nature. Section three is a large one as it faces head on the specification of an ontology of culture. I cannot see how economists could understand their domain of reality – the institution 'economy' – without clear ideas about what is specific about human nature and sociocultural systems. I argue that the use of explanatory schemes borrowed from other sciences will not account for the specific of sociocultural emergence, and this is why I engage in the unravelling of what happens in the emergence of institutional norms, whose ontology is cultural.

However, human culture is strongly related to material objects because, besides the body (voice, gestures), we also use tools for symbolic communication. I think that the semiotic of Peirce provides the best way to articulate what is the specific of sociocultural systems—and institutions are systems of this kind—to the mind of humans, to their biology and to the inanimate world. Following this path I prepare the ground for a true sociocultural study of 'markets as institutions' and, at the same time, I keep persons and sociocultural systems in deep connection with the rest of Nature. Section three concludes with a detailed answer to the question: What are institutions? Ultimately, this chapter is a bold exercise of "transdisciplinarity" (Nicolescu, 1996).

3.2 Specifics of social emergence

To clear the ground for the discussion that follows, I answer in the present section the following questions: (1) What is the precise meaning of emergence? (2) What is specific to 'social' emergence as an autonomous domain of sociocultural reality? In order to address these complex issues, I discuss and

present a personal synthesis of relevant contributions in different disciplines that converge, or are consistent, with my methodological choices—metaphysics of process, multi-level ontology and interactivist epistemology.

3.2.1 In defence of strong emergence

Firstly, I assume social reality as a new, emergent level 'above' persons and their social life, in the sense that it has *causal powers of its own* that affect the latter; otherwise social reality would be only 'epiphenomenal' to persons' interactions, which is a 'soft' version of reductionism that I reject with my choice of a multi-level ontology. Soft reductionism corresponds to the idea that social reality exists as *an aspect* of individuals' interactions whose properties *fully determine* those of that 'supervening' reality. As Humphreys (1997: S337; emphasis mine) put it,

reduction is still not an option, but supervenience is no good either. It is a notion that is *empty of any scientific content*, and what antireductionists need in its place is emergence. The latter idea can properly capture the picture of distinctively different layers of the world in which antireductionists believe.

Therefore, rejecting supervenience, I side with those who acknowledge the possibility of different levels of emergence within Nature's evolutionary process, which include animals minds, the human mind, persons and human societies. 66 This means that human social phenomena have emerged upon human interactions according to *evolutionary developmental processes*, 67 which gave rise to an ontological level endowed with *specific causal properties* (Emmeche *et al.*, 1997). 68 In line with my discussion of the dynamical interpenetration between the personal and the social realm (Fig. 4), social entities may be defined as "systems of human *relationships* among social positions" (Porpora, 1998: 343; emphasis mine), a critical realist formulation

⁶⁶ The evolutionary process is Naturalist in the sense that the ontological diversity of reality is the actuality of *an originary and unitary process*, which I name Nature (Bateira, 2006: 233). See also the "unified" ontology of Smith (1999: 96; emphasis mine) for whom "physical objects and events, mental activities, persons, societies, and cultural institutions all occur in this *one world of nature*."

⁶⁷ The discussion of 'evolution' in its biological and sociocultural meanings will be held in Chapter 5.

⁶⁸ Analogously to other levels of nature, the social level is an *organisation of processes*. Thus my reference to *entities* (including 'social entities') should be understood in the context of *metaphysics of process*, instead of metaphysics of substance (Bickhard, 2000a).

that suggests the emergence of a social system.⁶⁹ In fact, as Hooker and Christensen (1998: 103-104; emphasis mine) have stated

in metaphysics of complex non-linear systems, being an entity isn't the only legitimate kind of natural status. In these kinds of systems we need (at minimum) to distinguish between entities, immediate (or narrow) properties of entities, and wide—complex interactive—properties which arise through the interactions of entities.

In social reality, these system-wide properties are emergent upon structured and patterned interactions between persons; indeed, because persons can only exist in society, 'between' them there are *social relations*. In general terms, Wight states (2004: 294; emphasis mine), "binding them all together and *providing the structure* within which the different ontological forms exist are the "relations". Social relations are not a fiction imagined in our heads; *they are real*. Social relations organise in particular ways the different roles or positions occupied by individuals in the social structure, which is causally relevant because "much of their "capacity to do" (their causal power) is derived from their social positioning" (Ibid, 292).

'Causal powers' of social entities are a controversial issue among sociologists and Institutional economists. In my understanding, research in different sciences has settled that sociocultural phenomena display features that are formally analogous to those of self-organising complex systems in all other domains of reality (Urry, 2005); they emerge upon *non-linear* relations established between individuals (Abbott, 1988). These relations organise into *spatio-temporal, meaningful structures* thereby giving rise to social systems, which (among other effects) exert *downward causation* over individuals and their interactions.⁷¹

occupied by individuals.

⁶⁹ See an encompassing definition by Lawson (1997: 165): "the building blocks of society are *positions*, involving, depending upon, or constituted according to, social rules and associated tasks, obligations, and prerogatives, along with the practices they govern, where such positions are both *defined in relation to other positions* and are immediately

⁷⁰ Note that philosophical 'realism' may be emergentist, and if so it is incompatible with philosophical 'materialism' of which there are 'hard' (physicalism) and 'soft' (epiphenomenal emergence) versions.

⁷¹ Humphreys (1997: S342) discusses criteria for 'emergence' that are not necessarily cumulative "for there is a wide variety of ways in which emergence can occur": new properties that are "qualitatively different from the properties from which they emerge", "that could not be possessed at a lower level", that "result from an essential interaction between their constituent properties", and "are holistic in the sense of being properties of the entire system rather than local properties of its constituents."

Emmeche et al. (2000) describe three ways in which such downward causation could be understood. According to a strong version, "a given level may causally inflict changes or effects on entities or processes on a lower level" (Emmeche et al., 2000: 18). The authors do not support such version because, for them, emergent phenomena are always inclusive in the sense that "they can never change the laws of the lower level" (Ibid, 93). Yet, their rejection of strong downward causation is not consensual, even in natural sciences, and there are philosophers of physics who argue we should change our traditional understanding of relations between systems' components: "Emergent wholes have contemporaneous parts, but these parts cannot be characterized independently from their respective wholes. ... it does not make sense to talk about reducing an emergent whole to its parts, since the parts are in some sense constructs of our characterization of the whole" (Kronz and Tiehen, 2002: 345; emphasis mine). Recurring to a problematic, but widely used vocabulary, the 'laws' of the parts and the 'laws' of the whole are coconstitutive. Recognising the possibility of a weak version,72 Emmeche et al. (2000) adopt a medium version of 'downward causation'; it acts through boundary conditions ('initial' and 'constraining' conditions of the system), "which select and delimit various types of the system's several possible developments" that are originated at a lower level (Ibid, 25).

Acknowledging *different degrees* of downward causation, Bickhard (2000a: 343) argues that downward causation may involve "[a] constraints *internal* to a system that are non-linear consequences of the organization of the system"; [b] "constraints *internal* to the *constituents* of a system"; [c] [strong version] "constraints on the *generative* processes—sources of constructive variation—as well as the activities per se, of lower levels."

The acceptance of the latter understanding of emergence certainly implies a revision of our traditional views about causality, and this is also supported by Emmeche *et al.* (1997: 94):

the two [macro and micro levels] are parts of one and the same process, and the scientific idea of cause is rather to be interpreted as the regularity of this process. ... What we use to call "efficient cause", close to the common sense

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⁷² Weak downward causation is identified with the existence of an *attractor*, a set of system's states in its phase space as a result of alternative lower level dynamics based on different initial conditions. This is a framework that sees the attractor as "the centre of a basin of attraction, that is, even if it is very rare on the global level, it is locally generic; stable and insensitive to perturbations. This insensibility might be the reason for the assumption of downward causation" (Emmeche *et al.*, 2000: 28).

of the word, is only the subjective focusing on one element in the causal process, an element being made solely responsible for the process.

In other words, self-organising systems bear *an emergent structured unity* built upon interactive constraint formation (Collier and Hooker, 1999), which calls for an epistemic approach somewhat different from Darwin's "cumulative causal explanation" (Hodgson, 2004a: 190).⁷³

Therefore, if we adopt the concept of self-organising complex systems it lacks sense to relate specific *causes* to specific *effects*, as suggested by the idea of "cumulative causal explanation", and "what should be meant by 'causation', either upwards or downwards, may thus ultimately have more in common with notions such as material and formal cause than with the classical notion of efficient causation" (Lemke, 2000a: 211).

3.2.2 From efficient-cause to understanding

Following the deductive-nomological model (Hempel, 1965), mainstream economics usually equates scientific understanding with the formulation of 'covering law' explanations supported by empirical regularities. The widespread use of econometrics intended by most of the users to support (if not to provide) 'causal' explanations is testimony of this (Lawson, 1997).⁷⁴ Disagreeing with the 'covering law' model of explanation, social science 'realists' (Bunge, 2004; Hedström and Swedberg, 1998) argue that in order to scientifically explain, that is, to say how reality works, we need to go beyond surface co-variations and *identify and describe sequences of causes, unobservable 'mechanisms'* that underlie co-variations. In social sciences some realists adopt methodological 'individualism' (Hedström and Swedberg, 1998) while Bunge (1997) argues for 'systemism', a stance that aims to overcome both individualism and holism, although Bunge does not openly admit that emergent properties have causal autonomy, and thus (when addressed) require non-reductive research strategies.

⁷³ Hodgson (2004a: 190) accepts an emergent levels ontology, the "emergentist materialism" proposed by Bunge (1980). However, this stance actually amounts to what Silberstein (2001: 68) labels "nomological supervenience": "fundamental laws determine everything that happens (in conjunction with initial or boundary conditions)."

⁷⁴ Lawson's (1997; 2003b) critique of the use of econometrics to look for concomitant variations proposed as 'causal' relations are particularly acute, but may be Lawson has gone too far in a nearly absolute condemnation of the *ceteris paribus* clause. See Chick and Dow (2005: 377) for a discussion of this topic.

An emergentist stance challenges directly the assumption of "causal completeness" (Dupré, 2001b), which presupposes that any phenomenon has to be explained in terms of mechanisms occurring at the physical level. ⁷⁵ Against this assumption Dupré recalls that *indeterminism is everywhere in the world*, a kind of indeterminism *more radical than the probabilistic version* of quantum mechanics, which is "still conceived as evolving according to causal laws, just laws of a somewhat different kind [from those of classical determinism]" (Dupré, 2001b: 157). In fact, rather than an outcome of absence of causes, *indeterminism is the outcome of contingent clusters of causes* of which some may countervail others. Indeed, what usually happens in the world is an outcome of many mechanisms *concurrently active at different levels of reality*, either in non-human nature, in human beings, or in social systems.

Adopting an emergentist perspective, Dupré (2001b: 162) argues:

objects at many, probably all, levels of the structural hierarchy have causal powers. One of the reasons why these causal powers are never displayed in universal laws (deterministic or probabilistic) is that objects at other levels often interfere with the characteristic exercise of these powers.⁷⁶

This understanding of causality is also adopted by Wilson (2003: 532) who finds problematic the current consensus among biologists about evolutionary selection at separate levels because the "various levels of selection are often *entwined* or *fused*, not just in the sense that they co-occur, or operate in the same direction, but in that they are reliably coinstantiated and do not make isolatable, distinct contributions to the ultimate evolutionary currency, fitness." Therefore, if there is no causal completeness at any level of reality, even at the quantum physics level, social scientists should understand 'causal powers' as *"joint determination of capacities by internal structure and external context"* (Dupré, 2001a: 319; emphasis mine).⁷⁷ Note that this openness to an external reality is a property of far-from-equilibrium processes operating in living

⁷⁵ Besides analytical reduction to the physical level, where are supposed to reside the "genuine" causes, Dupré (2001b: 157) states that "causal completeness requires that there be some quantitatively precise law governing the development of every situation."

⁷⁶ This stance seems to converge with the critical realist understanding of causality as presented by Danermark *et al.* (2002: 54-55).

⁷⁷ This emergentist understanding of social systems conflicts with some critical realist formulations such as "Realism is a 'thing-centred' ontology" (Potter, 2000: 204). Actually, explanations in terms of entities and their properties or laws refer to "an Aristotelian metaphysics [metaphysics of things-substance], which is an *inadequate metaphysics for relationships and process, most specially open process*" (Bickhard, 2000a: 334; emphasis mine).

systems, and in cognitive and social systems as well (Collier and Hooker, 1999: 246).

From the foregoing discussion of the meaning of emergence and causality we can see that ontological and epistemological matters are interdependent (Praetorius, 2003), and this calls for a more detailed look to the epistemic side of the issue. As Berger (1998: 329) puts it, "saying that science looks for mechanisms, especially causal ones, seems correct. However, this tells us very little about which mechanisms scientists consider explanatory or how the methods and theories of science generate explanations." 'Explanation' is an epistemological category; it has different meanings according to different philosophical stances about the nature and source of knowledge (Faye, 1999).

As already mentioned, the predominant meaning of 'causal explanation' is given by the 'covering law' model that most social scientists think to be typical of natural sciences, although it is well established that it is only a kind of explanation *among others*, which even does not correspond to the research practice in laboratories (Giere, 1999; Pickering, 1995). In fact, research in micro-physics and molecular biology is about looking for specific causal mechanisms *under experimentally controlled conditions* (Cartwright, 1983; Soto and Sonnenschein, 2006). However, despite acknowledging the impossible experimental insulation of social mechanisms, most realists in social science *implicitly* take natural sciences' experimental methods as the paradigm of scientific explanation. This motivates them to consider 'why' questions as the relevant type of research question, and *causal* answers as the adequate type of scientific explanation.⁷⁸ Accordingly, Runde (1998: 169; emphasis mine) concludes

The virtue of the causal approach to economic explanation is that provides a coherent means of acquiring knowledge about the world that does not presuppose the existence of such [deductive-nomological] economic laws, even if the knowledge so acquired will generally be of a qualitative, comparative, and often contingent kind.

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⁷⁸ See Lawson's (2003b: 85; emphasis mine) statement: "we all very often advance our knowledge of aspects of the world ... by way of first questioning *why* something is not quite as we expected it to be", which is followed by a paragraph of illustrative 'why' questions.

Similarly, Byrne (2005: 97; emphasis mine) emphasises that in social sciences "explanation is possible, but *only explanation that is local in time and place.*"⁷⁹.

Bhaskar (1989 [1979]), the founder of critical realism, argued for a naturalist ontology for social systems because, similarly to other levels of Nature, social reality is also open and emergent. The problem is that critical realists have attached to this ontology what appears to be a 'prescriptive' methodology. Thus, social sciences should also research and explain *in terms of mechanisms*; that is, in terms of "causal powers" and "tendencies". This methodological orientation reveals that critical realist methodology (at least as initially proposed) maintains some continuity with the Modernist paradigm of science to which Darwin subscribed,⁸⁰ which leads most critical realists to equate 'scientific explanation' with the identification of 'efficient' cause-effect sequences.⁸¹

However, both history and philosophy of sciences have for some time shown that 'mechanismic' explanations are not always useful for every type of *science*, every type of *sub-discipline*, and every type of *problem* (Berger, 1998; Calhoun, 1998). Notwithstanding the particular importance of causal explanations, the way scientific research actually works shows that "explanatory information is not always information about causes, and causal information is not always explanatory" (Berger, 1998: 312). I think there is enough methodological reflection to support the adoption of a broad meaning for 'scientific understanding', one that is not confined to efficient-cause explanations, the processes of "cumulative causation" referred by Darwin.

Another difficult point in critical realism relates to the validation of mechanismic explanations and the choice between competing theories. In order to go deeper than 'empirical' and 'actual' levels of reality, critical realists make use of abstraction ("retroduction") in a *first moment* aiming "to identify connections and relations essential to the existence and efficacy of some

⁷⁹ See Bhaskar and Lawson (1998: 12; emphasis mine): "Contrastive explanation, clearly, is concerned not so much with such questions as 'why is the average crop yield x?' but 'why is the average crop yield *in that end of this field* significantly higher than that achieved elsewhere?'"

⁸⁰ This is partly recognised by Potter (2000: 207) who states: "Realism keeps some of the positivist understanding of law, explanation, confirmation, falsification and so on. It just restricts them, transforms them and changes the emphasis."

⁸¹ This incomplete rupture underlies two interesting debates about critical realism in economics with particular incidence on Lawson's formulations. See (Fleetwood, 2005) and (Mearman, 2006).

structure of interest" (Lawson, 1989: 71). In a *second moment*, the abstracted mechanisms and the non-essential elements of reality are "synthesised into a unity that re-constitutes the concrete, although at this point more clearly and essentially understood" (Ibid, 69). According to Sayer (2004a: 1787), this methodology provides a "theoretically informed explanation of concrete objects". Although I recognise the vagueness of Lawson's formulations, I think Baert (1996: 518) may be wrong in claiming that there is a contradiction in the particular way critical realism deals with empirical reality. However, he is partly right on the hermeneutic side of his critique. A balanced reading of Kuhn's philosophy of science should lead critical realists to admit that the proof of a theory is problematic in natural sciences, and even more so in social sciences where absence of experimental practice combined with human liberty *enhances indeterminacy to the highest levels* (Calhoun, 1998: 867).

Moreover, critical realists are vague about how to choose among different theories that seem to fit empirical data, sometimes invoking the criterion of 'explanatory power' (Fleetwood, 2005; Lawson, 1997).⁸² In critical realist literature it is seldom recognised (at least explicitly) that the explanatory power of a theory is not independent of scientists' cognitive interests, background knowledge and unexamined assumptions, individually and as a community of inquirers.⁸³ Because critical realism has in its roots an ambiguity toward the hermeneutic dimension of science, a number of critical realists has difficulties to accept that scientific progress cannot be measured in terms of theories' qualities (consistency, explanatory power, unifying power, etc.) by lack of a 'neutral' algorithm (Baert, 2005),⁸⁴ which undermines the very idea of dispassionate choice between theories according to some criteria (Peacock, 2000).

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⁸² I do not want to wholly dismiss the critical realist method; only acknowledge that in some cases empirical regularity may be close to deep reality and a useful reference for research, mostly in local explanations where "a linear approximation is appropriate" (Wagner, 1999: 98). What I do want to say is that it is not always clear in critical realists' discourse that social sciences cannot test theories and that research strategies may require *non-causal explanations*, which is a rupture with mainstream views of good scientific research (Somers, 1998).

⁸³ A notable exception is Runde (1998) who explicitly discusses the role of "*a priori* and framework principles" in the assessment of scientific explanations, and refers to disagreements between different 'schools of thought' within the research community.

⁸⁴ In fact, the same applies to the ontology of social reality proposed by Bhaskar (see Cruickshank, 2004).

Does this means that science is no more than a continuous 'conversation' within a very particular community? In economics, the "rhetoric versus realism debate" led Peter (2001: 586) to acknowledge the need "to reconsider the question of what framework is necessary to ensure the validity of arguments." I accept that we need a meta-theoretical framework that goes beyond the modernist and the post-modernist ones and, for that, I think the Classical Pragmatism of Charles S. Peirce is a good source of inspiration. Against the post-modernist version, which argues we should let go the idea of 'truth' (see Baert, 2005), Peirce stressed the importance of confrontation with reality (Haack, 2004; Rescher, 2005). In post-Kuhnian times this means a continuous attempt to "avoid more and deeper errors than previous positive knowledge" (Bickhard, 2002: 26).85 On the other hand, differently from most critical realists' modernist idea that science progresses toward 'truth', namely through theories with greater explanatory power, Peirce related 'truth' to the settled opinion of a community of inquirers in a given moment. This attention to the sociocultural nature of science (indeed, its 'institutional' nature) points to the interactive process that gives rise to that "settled opinion", which largely depends on the existence of *intelligible* theories, those that respond to the interests of researchers and fit their skills (De-Regt and Dieks, 2005).86

3.2.3 Without language no social reality

From the above-presented meta-theoretical discussion I will take the following three ideas: (1) underlying empirical reality (biological, physical and social), which sometimes presents regularities, there are contingent configurations of causal processes criss-crossing different structural levels; (2) biological, physical and social systems have irreducible emergent properties, and thus take part in causal processes involving both their components and other systems, at the same or other levels; (3) science addresses different levels of reality, and different systems at each level, and for that task scientists recur to intelligible theories providing explanations of different kind (nomic, causal,

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⁸⁵ Pragmatists escape from both 'epistemic fallacy' and 'ontological fallacy' through practical confrontation with reality: "applicative praxis—not theoretical merit but practical capability—is the best available standard for assessing scientific progress" (Rescher, 2000: 89)

⁸⁶ "Intelligibility is a context-dependent value related to properties of the theory but also to scientists' skills. ... In this pragmatic conception, understanding goes beyond merely having an accurate theory: it requires that this theory is intelligible to the scientists who use it. Scientists need intelligible theories because they have to be able to use theories in order to construct models and explanations" (De-Regt, 2004: 103, 108).

functional, intentional, interpretative) according to their research interests and skills.

The foregoing enables to better frame debates in social science about "causal powers of social structures" of which (Harré and Varela, 1996) and (Lewis, 2000) provide an illustration. Harré and Varela (1996) support an understanding of social systems that could be labelled non-reductive physicalism (Van-Gulick, 2001), or 'supervenience' (Humphreys, 1997). For fear of reification, they mostly emphasise that macro-social phenomena cannot be causally efficacious on its own right because causality is only activated by individuals as 'genuinely' real entities. Recognising some pertinence to this stance, but still attempting to salvage a causal role for social phenomena (qua social) that could be consistent with free-will, Lewis (2000: 258; emphasis mine) argues that although "social structure lacks the capacity to initiate activity and to make things happen of its own accord", it is no less true that it concurs to the causal complex supported by human agency because "depending on their location in the social hierarchy, then, people are endowed with an historically given array of resources, which in turn constitutes an ontologically irreducible influence on their ability to further their interests in the future" (Ibid, 259).

In my view, it is the attachment to metaphysics of things-substance that leads Lewis to emphasise the role of resources as evidence for "causal powers" of social structures. Because the latter are non-observable, their *causal effects* (the differential access to, and use of, resources) are supposed to be the only way to postulate their existence. Lewis's formulation attributes primacy to human agency because it is endowed with efficient causation, while social structures are given an *instrumental* role as they can only be a passive, material cause (Ibid, 264). However, if we substitute metaphysics of process—both individuals and social structures are organised processes—, multi-level ontology, and causal indeterminacy, for a deterministic world of 'things' endowed with efficient-cause powers and isolatable effects, Lewis' understanding of social causality becomes inadequate.⁸⁷

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⁸⁷ Lewis's (2000: 264) argument draws on Mackie's (1974) "inus" condition: "The latter states that a cause is an insufficient but necessary part of a set of conditions which are collectively unnecessary but sufficient for the production of some outcome (a social event, say)". Despite the right intuition about 'causal complexes' at work in social reality, Lewis fails to see that both the restrictive concept of 'efficient cause' and the deterministic assumption of 'universal regularity' still underlie his argument. For a critique of naturalist

Despite recognising that social reality is best seen as "concept-dependent" processes, which calls for research strategies adequate to such specificity, critical realists still try to preserve the problematic idea of structures endowed with efficient-cause powers, perhaps to maintain methodological commonality between natural and social sciences. However, and contrary to this view, I have previously argued that social systems make up an ontological category on their own right, different from individuals that give rise and sustain them. Because social systems are real entities emergent upon organised social relations, it amounts to reductionism to recur to individuals' actions in order to acknowledge that macro-social phenomena participate in causal processes. We only need to consider that social relations constitute myriad of internal, non-linearly related roles and positions that individuals occupy in society, thereby giving rise to social systems.

In this sense there is no mystery in social systems' autonomous participation in causal processes.⁸⁸ It is the inherent *non-linearity*, and *spatio-rhythmic heterogeneity* of *meaningful* social relations, and their networks, that generate an emergent, system-wide causality. Further, as previously acknowledged, causal processes are at action in myriad of criss-crossing, non-linear ways, at different levels of reality.⁸⁹ Thus, when using the 'efficient-cause' concept we should bear in mind that most of the times it implies a strong simplification; it refers to the *epistemic focus on a fragment of the causal complex*, rather than to the property of a "particular", be it physical, biological, personal or social.⁹⁰

Therefore, if we admit that everything in the world is *organisation of relational processes* (Silberstein and McGeever, 1999), it is expected that social systems (*qua* emergent level of Nature) also participate in the causal connections that sustain and move the world. Besides, there is no risk of 'holism' in this stance

determinism (classical and probabilistic) and the "inus" condition, see (Dupré, 2001b: 166-170).

⁸⁸ Lewis (2000: 267; emphasis mine) shows that in a early work Roy Bhaskar referred to two different paradigms of the "non-actual real, viz. the powers of a particular or kind, and the relations between the elements of a system" [Lewis's quote], the latter being the adequate paradigm for social structures. However, Bhaskar did not develop this insight and maintained the language of the 'causal powers theory'. For a friendly critique of the rhetoric of 'causal powers' in critical realism see (Nash, 1999).

⁸⁹ As Byrne (2005: 105; emphasis mine) put it, complex systems "are nested in, have nested within them, and intersect with other complex systems. ... Nesting is not hierarchy. Determination runs in all possible directions, not just top down. All these levels have implications for all other levels."

⁹⁰ Because of simultaneous interactions, in some domains of research in biology "it is practically impossible to sort out causes and effects" (Soto and Sonnenschein, 2006: 372).

because *individuals* and social systems constitute each other and both lack causal completeness. In my view, the burden of proof is on those who stick to metaphysics of substance and thereby reject the idea of an equal footing, joint participation of social systems and individuals in causal processes.

At this point it should be noted that evolutionary economics literature traditionally assumes a two-level scheme in order to discuss emergence in complex systems and the micro-macro relations therein. However, such dual scheme that so far I have taken for granted sets aside important aspects of the process that a model with more levels of reality is able to reveal. Recalling the work of Salthe (1985; 1993), Lemke (2000b: 101-102) summarises: "units on level N are constituted by interactions at level (N-1) among the units at that lower level, but that of all the possible configurations that such interactions might produce at level N, only those that are allowed by boundary [constraining] conditions set at level (N+1) actually occur." In dynamic terms this means that, "new levels of organization always emerge between previously existing levels. ... the new level N reorganizes the relationships between level (N-1) and level (N+1)." For Lemke, the structural stability of a system is based on the filtering by level N of variations at level (N-1) and (at the same time) by the buffering of level (N+1) against variations at level (N-1): "what matters is the information and communicational coherence of a level (and its relations to adjacent levels)" (Ibid, 103; emphasis mine).

Acknowledging this multi-level interdependence of variations leads us to accept that, at least since the emergence of life on earth (Emmeche, 2000; Weber, 2000), the evolutionary development of complex systems (including social systems) depends on relations that involve *semiotic processes* supporting such "information and communicational coherence".

Overlooking that social systems' are made of interconnected structures, most Institutional economists assume that social processes "operate at a single characteristic scale of space and time. [However] when relations of meaning as well as of material interaction co-determine the dynamics of a system, we must take into account *scale heterogeneity* or scale-mixing as well" (Lemke, 2000a: 181). Typically, human interactions self-organise under a diversity of (meaningful) roles over a lifetime according to different scales. Thus, the *multi-meaningfulness* of semiotic processes intertwines with the *multiplicity of scales* (in time-space) of social relations, on the overall leading to the highest

levels of self-organising complexity. This particular configuration makes social reality a specific emergence in Nature. Indeed, it is *socio-cultural reality*.

Therefore, "the dynamics and development of ecosystems which contain humans who act according to cultural meaning criteria *cannot be adequately described without a description of the meaning-systems in use*" (Ibid, 183, emphasis mine). Illustrating the semiotic dimension of social life and its networked topology, Lemke (2000a: 186) states:

when I speak or act in any way, not only my internal constituency and my present surroundings, but my biographical history as a member of many communities or social networks plays a part. More than this, the tools with which and through which I so often act ... ensure that the history of my community, and the history of the tools themselves, are also essential for accounts of the full ecological and semiotic significance of my moment-to-moment actions.⁹¹

Therefore, the socio-cultural realm is structured by myriad of processes building-maintaining-changing *meaningful* social and cultural *processes* at different scales, which are organised upon roles, positions *and meanings* that interactively give rise to sociocultural systems with fuzzy boundaries (Bickhard, 2000a: 335).⁹²

About the specificity of the sociocultural level, Wight (2004: 296) recalls that "the concepts possessed by agents "matter"; they make a difference", which means that social and cultural entities are specific because they (mostly) emerge upon *language-based interactions*. The latter constitute a locus of complex and dynamic interpenetration between self-organising social systems, cultural entities and (autonomous) human beings. Assuming such coconstitutive interpenetration also enables a Naturalist understanding of human freedom different from traditional 'free-will' formulations. Opposing the idea that institutions work against freedom, I claim that the exercise of human autonomy gives rise to institutional norms, which in turn enable the exercise of genuine freedom. As Dupré (2001b: 181) states, "the causal capacities most characteristically and uniquely human are capacities that derive not solely

⁹² In a similar vein, see Hooker (2000) who argues that sociocultural systems have multi-level, multi-dimensional, multi-plexed, multi-producted, and multi-phasic, properties, which on the whole create an extreme complexity.

⁹¹ The *heterogeneity of scales* in human sociality here acknowledged also brings a new horizon of complexity into the discussion about human nature and agency presented in Chapter 2 (2.5.3).

from the internal structure of humans, or human brains, but that depend essentially on the relationship between an individual and society."

In brief, the specific nature of sociocultural systems necessarily requires the integration of semiotic processes. This specific nature renders risky the borrowing by social science of explanatory frameworks used by biologists and physicists. In fact, sociocultural systems form a new ontological level of Nature, which calls for

a radical extension not only of the range but of the dynamics of co-evolution ... the communicative creativity taking place at this interface must be placed at the center of theory (Hoffmeyer, 1998: 289).

Hence, the explanatory work of the social scientist cannot rest on finding the right analogy with another level of Nature. Notwithstanding the careful and 'local' use of metaphors and analogies, social scientists are obliged to integrate language-based semiotic processes in their conceptual framework because they refer to what is specific in this level of Nature.⁹³

3.3 Understanding institutions

In the present section I will elaborate on the distinction between the *social* and the *cultural* domains of sociocultural systems. This enables me to explain what constitutes culture and how it emerges. With such distinction of two emergent domains, and the discussion of their interdependence and mutual constitution, I am able to provide an original vision of society and its institutions, the economy being one of them. However, before that, I need to discard Searle's philosophy of institutions despite its welcoming reception in some Institutional economics literature.

3.3.1 Institutionalism and the soft-reductionism trap

3.3.1.1 Social systems or rules?

I begin by agreeing with Lawson (1997: 159) that "human life is highly routinised", which leads him to presuppose "the existence of widely known or

⁹³ I acknowledge that *semiosis is an emergent property of life* (Hoffmeyer, 1997), perhaps also present in a specific form at the physic-chemical level. Human semiosis is qualitatively different from semiosis at other levels of Nature in that it is *language-based* and makes use of material reality to produce *symbols* that support human communication (Donald, 2001).

shared generalised procedures of action, procedures that can be referred to here as *social rules* ... something irreducible to human agency and action" (Ibid, 160-162). So, according to Lawson, social life is structured in social systems, which are understood as "ensembles of networked, internally related, positions with their associated rules and practices" (Ibid, 165). But here Lawson makes a distinction: "while a social *system* is best conceived of as a structured process of interaction ... an *institution* is most usefully viewed as a social system that has been found to be (relatively) enduring ... and identified as such" (Lawson, 1997: 165, 318; emphasis mine). In a later work, Lawson acknowledges that the concept of institution is "a nested concept" because "there can be institutions within institutions within institutions", which he views as emergent social structures that give a sense of continuity to social life as they are "reproduced (through change) over wide swathes of space and (perhaps more interestingly) time" (Lawson, 2003b: 43).

The social acceptance of institutions that seems to underlie Lawson's definition ("enduring ... and identified as such") could be related to Hodgson's (Hodgson, 2006b: 2) qualification of social rules as "established and prevalent". Unfortunately, Lawson does not unpack his formulation; he is mostly interested in ontological issues, namely that institutions, like any social system, are *not reducible* to individuals' behaviour. On the contrary, Hodgson wants to articulate a Veblen-inspired Institutional economics, and for that he adopts a definition of institution that includes "language, money, law, systems of weights and measures, table manners, and firms (and other organizations)" (Ibid, 2).

Taking account of the large (and confusing) variety of meanings attributed to the concept of institution, and the diverse criteria that could be used to classify institutional phenomena in the absence of ontological guidance (see Parto, 2005), Hodgson's definition is a useful point of departure. In fact, Hodgson's work not only takes institutions as *emergent* social structures, but also aims to go beyond (Hodgson, 2002b). However, Hodgson's and Lawson's use of the concept of "social rules" is problematic; it is unhelpful for the understanding of the linkage between individuals and institutions. In the following I will discuss this central topic.

Pointing to the limitations of Archer's (1995) understanding of social emergence, Hodgson (2002b) accepts (wrongly) that *demographic* structures

have 'causal powers'⁹⁴ but notes that institutions are "more than constraints ... the downward causation of [an institutional] structure upon agent would result in a *reconstitution of purposes and preferences*, as well as behaviour" (Hodgson, 2002b: 168; emphasis mine). Such 'strong' understanding of emergence has been reaffirmed: "[institutions] depend upon the thoughts and activities of individuals *but are not reducible to them*" (Hodgson, 2006b: 2). Accordingly, we should expect Hodgson to place rules (seen as 'the stuff' of institutions) unambiguously at a supra-individual level. Surprisingly, Hodgson recurs to the philosopher John Searle (1995; 2005) and states (Hodgson, 2006b: 4; emphasis mine):

the mental representations of an institution or its rules are partly constitutive of that institution, since an institution can only exist if people have particular and related beliefs and mental attitudes. Hence, an institution is a special type of social structure that involves *potentially codifiable and* (evidently or immanently) *normative rules of interpretation and behaviour*.

In line with Veblen, Hodgson also argues that *habits* ground institutions: "For a habit to acquire the status of a rule, it has to acquire some inherent normative content, to be potentially codifiable, and to be prevalent among a group" (Hodgson, 2006b: 6).⁹⁵ Thus, according to Hodgson, rules could be *at the same time* phenomenological (*qua* "mental representations") *and* social entities (Ibid, 8). Further, the existence of a rule depends on *the spreading* of those "mental representations" to a large number of individuals so that it could be considered "prevalent". This is a formulation that I find inconsistent with a social systems ontology, and it is telling that Hodgson does not use the concept of emergence in his definition of 'rules'. In fact, rather than a 'systems' perspective, Hodgson assumes a 'population' perspective where relations between the elements are of no analytical interest.

Further, if we assume (as Hodgson does) that an institution (*qua* social entity) is ontologically distinct from a psychological entity, how can we make sense of statements about a 'double nature'?⁹⁶ A possible explanation for such

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⁹⁴ See also (Hodgson, 2006b: 21). Both Archer and Hodgson fail to see that a 'demographic structure' is *not* a social system. 'Demographic structure' is a concept that does not account for (internal and necessary) *relations* between individuals. They are *aggregations* established by the *contiguity* of individuals according to a demographic criterion. For an ontological discussion of 'aggregates', see (Weissman, 2000: 56-57).

⁹⁵ (Hodgson, 2010) provides a recent systematic elaboration of his views of 'habits' and 'instincts' as foundations of human choices and action.

⁹⁶ "Institutions are in this respect like Klein bottles: the subjective "inside" is simultaneously the objective "outside" (Hodgson, 2006b: 8).

ambiguities resides in the intellectual influence of Searle's philosophy of institutions, which is welcome in some Institutional economics literature. In my view, Searle's understanding of institutions is a soft reductionism trap for those who want to update Original Institutionalism. The importance of what is at stake calls for an extended discussion of Searle's thinking.

3.3.1.2 Searle's soft-reductionism

Searle (2005: 6) defines "a social fact as any fact involving the collective intentionality of two or more agents." By collective intentionality Searle means specific purposes, beliefs and desires that individuals hold and make them able to engage in cooperative action. Searle also makes a distinction between social facts and institutional facts. For Searle, what is specific of humans is that they have the very special capacity to create institutions by "the assignment of status functions with their accompanying deontologies [rights, obligations, empowerments, requirements, certifications] according to constitutive rules" (Ibid. 9), and the general form of this procedure is "X counts as Y in context C". In order for this assignment to be effective there must be a general acceptance, recognition or acknowledgement of the status of X and its associated deontic powers, which is largely based on the use of language.98 The crucial point is that "the acceptance of desire-independent reasons for action" (Ibid, 11) depends on Searle's assumption of a 'collective intentionality', which among other aspects of his philosophy is indeed problematic, as I will explain below.

To clarify this point we need to recall Searle's previous work of which (Searle, 2005) is only a concise presentation. For Searle there are two conditions of adequacy that an account of intentionality (individual or collective) must fulfil: "society consists of nothing but individuals"; "the structure of any individual's intentionality has to be independent of the fact whether or not he is getting things right" (Searle, 1990: 407). The first one corresponds to ontological reductionism and is nothing more than the consistent application to the social realm of Searle's epiphenomenalism about the mind (Viskovatoff, 2002). His

⁹⁷ See the choice of Searle (2005) for the inaugurating article of the recent *Journal of Institutional Economics*.

⁹⁸ About this connection Searle (2005: 13) states: "the cognitive capacity to see these things [at both physical and institutional levels] requires a linguistic or symbolic capacity. To put it very crudely: no language, no status functions. No status functions, no institutional deontology."

rhetoric about levels of reality should not be confused with an ontology of emergent levels, which does not admit the reductionism underlying the statement that "the universe consists entirely of entities we find it convenient to call particles (even though, of course, the word 'particle' is not quite right)" (Searle, 2005: 5). 99 With this it is clear that Searle wants to argue against the collectivist concept of "group mind or consciousness". However, we have not to choose between individualism and collectivism because, as argued before, there is a third way: social structures make a specific ontological category; they emerge by self-organising, complex processes that build upon social relations. In brief, *Searle has an individualist understanding of institutions* (and social reality in general), which he sees as "ontologically subjective" (Searle, 2005: 4). In this sense Searle's occasional use of the term 'emergence' should be understood as referring to 'supervenience' (Humphreys, 1997), and thus is not consistent with the Veblenian kind of Institutionalism that is closer to 'strong' emergentism.¹⁰⁰

The second condition of adequacy proposed by Searle reveals a kind of solipsistic thinking about the mind, also known in the philosophical literature by the thought experiment of "a brain in a vat". According to this condition, all intentionality has a structure independent of what the world is. The point is strictly conceptual; Searle certainly acknowledges that we are interactively connected to the world. However, in order to account for radical mistakes, he sustains that we could (logically) have intentions without any support of the world. Clearly, this way of dealing with 'wrong representations' of the world testimonies the absence in Searle's theory of intentionality of a 'normative function', a mechanism to contrast our representations of reality against reality 'itself' and produce feedback with learning effects. Thus, for Searle we cannot have representations with a wrong content; *learning (and learning how to learn) has no place in Searle's conceptual framework about mind-world relations* (Bickhard, 2004a).

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⁹⁹ The latter part of this statement, *if taken seriously*, would lead Searle to assume that quantum physics calls for an ontology consistent with metaphysics of process, which he does *not*. According to Turner (1999: 212) this kind of inconsistency also occurs in other passages of (Searle, 1995).

¹⁰⁰ About the individualism of Searle see Hund (1998: 129-130; emphasis in the original): "Searle's model introduces the idea of social and institutional concepts and facts. But these phenomena are not possible outside of interaction. *Interaction is a logical condition of collective intentionality*. And interaction cannot be located 'in the head' of any one individual. That is an impossibility. So there is really nothing to distinguish Searle's model from individualism."

Combining the two above-mentioned conditions, Searle assumes an original claim: *collective intentionality* is a specific kind of intentionality ("We" purposes-beliefs-desires) that supports human cooperative behaviour and coexists in the mind of individuals side by side with individual ("I") intentionality. According to Searle, it is collective intentionality that supports a representative of a group of people in his assignment of an institutional function, either to a particular object (*X counts as Y in C*)¹⁰¹ (e. g. a piece of paper counts as money in a certain kind of society) or, as acknowledged more recently, to a set of power relationships (*S has power (S does A))* (Searle, 2005: 16-17), and for the latter case the debit card or the corporation are paradigmatic examples.

The problem with this view is that it requires someone's *explicit enactment* (Searle, 2005: 12)¹⁰² supported by *generalised acceptance* in a group, ¹⁰³ which is given by *collective intention* in the minds of individuals. Here we have an atomistic vision of human nature that fails to see social facts such as rights, obligations or commitments as *intrinsically relational*. As Kaufman (2005: 462) states, "obligations and commitments indeed cannot be cut off from the outside world without losing what they structurally are."¹⁰⁴ Further, because for Searle we-acceptance is a mental fact, it is far from clear how acceptance becomes generalised in the moment of an institutional enactment.

Nevertheless, even if Searle subscribed to any kind of 'shared intentions' explanation the scheme would still be flawed because, as Meijers (2003: 176; emphasis mine) argues, "*cognitive* attitudes are not sufficient to explain the sharing of intentionality. *Normative* attitudes have to be part of the analysis."¹⁰⁵ In fact, the normative dimension of social life must reside outside

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¹⁰¹ As Turner (1999: 219-220) notes, Searle's view of the creation of an institution is similar to a legal enactment, which largely restricts the range of possible sources for institutions.

¹⁰² "Searle believes that we can create desire-independent reasons for action. The way he believes we do this is by making commitments by the very fact of *making certain kinds of speech acts*" (Viskovatoff, 2003: 9; emphasis mine).

¹⁰³ In Searle's (2005: 11) words, "without the recognition, acknowledgement, and acceptance of the deontic relationships, your power is not worth a damn."

¹⁰⁴ In a convergent view Viskovatoff (2003: 27; emphasis mine) argues that the creation of institutions "can be accounted for in terms of individual intentionality *and communication*, and that, contra Searle, there is no reason why we should not include the concept of communication in the ontology of our social theory. This suggests that the notion of collective intentionality is superfluous."

¹⁰⁵ Meijers (2003: 179) is very clear on this point: "agreements cannot be analysed *solely* in terms of individual intentions, beliefs, and desires. Joint acceptance of a view ... gives

the individual and relate to the experience of *compellingness*, which is an emotional outcome of one's embodied socio-cultural life (Baerveldt and Voestermans, 2005). Therefore, the idea that institutions appear by contagion of habits and associated mental representations is based on problematic choices about the basic elements that structure social and cultural entities (*relations* and *communications*, not individuals or agency), the source of institutional normativity (*culture*, not habits) and its normative linkage to persons (*emotions*, not simply cognition). Finally, an explicit enactment is a particular form of creating legal institutions, and thus cannot account for all situations of social life including important ones such as language and money. As Turner (1999: 229) acutely observes, Searle's "vision of an Adamic moment in the history of each social institution in which functions are assigned is utterly implausible."

To sum up, I suggest that current efforts to revitalise Institutional economics should avoid Searle's philosophy because: (1) his views of institutions are not congruent with the emergentist understanding of sociocultural reality that is in tune with Classical Pragmatism; (2) Searle's thinking about human and social reality is deeply individualist and based on an algorithmic view of the human mind that lacks scientific basis; (3) to mix Searle's ideas with the protoemergentism of Veblen amounts to theoretical eclecticism.

3.3.2 Opening the black-box of sociocultural reality

The above referred work of Donald (2001) invites me to look inside the 'black box' of what so far I have labelled *sociocultural reality*. It is the moment to expand on the analytical distinction between the 'cultural' and the 'social' domains, which makes me enter the crucial (though difficult) discussion about the ontological nature of 'culture' and how it articulates with the previously argued ontology of the 'social' domain.

3.3.2.1 Culture and institutions: too much fog

The absence of such distinction between cultural and social realities is at the core of Veblen's definition of institutions ("prevalent habits of thought"), which is a culture-based definition maintained by some of his contemporary followers, albeit in different formulations, such as Ann Mayhew (2009) in the

certain *rights* to members of the group to correct each other. They may claim, for example, that other members stick to this view."

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USA and Hodgson (2006b) in the UK. For Mayhew, the Institutionalism of Veblen and Commons "has been most clearly defined by its emphasis upon the importance of *culturally determined behaviour*" (1987: 596; emphasis mine). Notwithstanding the excessive word "determined", Mayhew's view provides a blend of social and cultural dimensions that I think useful to distinguish. An amalgamated understanding is also present in the words of a leading figure of American Institutionalism (Hamilton, 1932: 236):

Any simple thing we observe – a coin, a time table, a cancelled check, a baseball score, a phonograph record – has little significance in itself; the meaning it imparts comes from ideas, values and habits established about it. ... Our culture is a synthesis – or at least an aggregation – of institutions.

In order to clarify the subject, Hodgson (2001: 297) has argued that there are key differences between the social and cultural realms although "both institutions and culture have a common foundational basis in habits." For Hodgson (2001: 297-298) *culture* refers to "durable beliefs, customs and routines", which "is not a specific entity, but a set of traits that may be found in several institutions" while *institutions* are "codifiable social rules and conventions that structure social interactions." From these distinctions Hodgson concludes: "institutions refer to the underlying structures and culture to prevalent *common characteristics of different institutions*" (lbid, 299; emphasis mine). Therefore, Hodgson holds that institutions should be given analytical priority and culture treated as "*a secondary criterion* of classification and explanation" (lbid, 304).

The distinctions proposed by Hodgson make a progress in relation to two kinds of approaches: those that extend rational-choice analysis to culture, the latter treated as *a new field of enquire* disconnected from economic processes; those that treat cultural phenomena as *a context* of economic processes (Zelizer, 2002). Moreover, Hodgson rejects the analytical conflation between personal interactions and sociocultural structures that underlies some New Economic sociology in statements like this one: "shared understandings and their representations in objects and practices as *part and parcel of economic activity*" (Zelizer, 2002: 117; emphasis mine).

Notwithstanding the merits of Hodgson's contribution, including the acknowledgement of the mutual influence between institutions and culture, I still disagree with his attribution of a "subsidiary" place to culture. The latter would only differentiate institutions in time and place through people's

"interpretation and implementation of the same legal rules" (Hodgson, 2001: 304). What most strikes in Hodgson's formulations is the lack of an ontology to support his proposed distinction between institutions and culture. In fact, ontological confusion is a common hindrance in contemporary Institutionalist literature (Lawson, 2001) of which the following psychologist definition is an illustration: "institutions are regarded not as objective phenomena but as *mental constructions* produced by human beings" (Sjöstrand, 1995: 23; emphasis mine).

However, this context of vague (and sometimes contradictory) definitions of institutions, and a *nebulous view* of how they relate to culture, is not seen by Mayhew as necessarily bad (Mayhew, 2009: 282, note 281). On the contrary, and although agreeing with the Pragmatist view that this is an ongoing process of open deliberation within a community of researchers, I see the effort of clarifying these concepts as part of the very nature of science. Consequently, I will propose an ontology of culture and institutions.

3.3.2.2 For an ontology of culture

To understand cultural reality we need to make at the outset an ontological distinction that is inspired by Bhaskar's "levels of reality". Consequently, I state that sociocultural reality is better understood if we analytically distinguish the following levels and domains: a) daily human sociality ("the empirical") where we see the intertwinement of interests, needs, powers, with personal meanings, public meanings, emotional and cognitive resources, and material reality; b) the interactional-communicational ("the actual") that goes beyond the empirical to encompass events that are not perceived, and which I analytically separate in two types: inter-actions (social domain) and communications (cultural domain); c) the structural ("the real") part of reality that is made of relations, and networks of relations, plus the social and cultural structures to which they give rise. Note that this higher-level, and partially the intermediate (what is 'actual' but not 'empirical'), are epistemic outcomes of the analysis (Archer, 1995; Lawson, 1997). In this scheme I assume that: (1) the (broadly considered) structural level emerges upon the interactional; (2) at both the bottom and the structural levels there are two kinds of entities: those of the social domain and those of the cultural domain (see Table 1).

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¹⁰⁶ It is surprising that Hodgson does not refer to the work of Archer (1988; 2000a), the first of Bhaskar's disciples to study culture and its relations to social structures.

Table 1 - Analytical distinctions about sociocultural reality

ONTOLOGICAL LEVELS OF SOCIO - CULTURAL REALITY	DIFFERENTIATION OF SOCIAL AND CULTURAL DOMAINS	
	SOCIAL	CULTURAL
STRUCTURAL (real)	AUTONOMOUS SYSTEMS (organisations, societies) NON - AUTONOMOUS SYSTEMS (networks of individuals and/or organisations)	SELF-ORGANISING COMPLEX SYSTEMS (language, worldviews, Kuhn's paradigms) DISCOURSES MEANINGS
INTERACTIONAL COMMUNICATIONAL (actual)	PRACTICES EVENTS ENCOUNTERS SITUATIONS	PRACTICES EVENTS
	TANGLED REALITY OF S	SOCIO - CULTURAL LIFE

In section 2.5 of this thesis I have already provided theoretical support for a multi-layered understanding of social structures but at that moment I had to delay the distinctions made above. Now my focus is on the cultural domain (right side of Table 1), and thus I emphasise the distinction between the emergent cultural entities *and* the actual level at which occur communicational processes that give rise to the former (Archer, 1988: 504). More precisely, the 'culture' of a community is a multi-layered structural domain encompassing a huge variety of entities such as meanings, ideas, values, norms, concepts, theories, worldviews, etc., that is, socially regulated outcomes of a cultural nature that *emerge upon individuals' communications*. For the moment I keep indistinct the 'ideational' and the 'material' dimensions of these processes and assume that 'culture' (in the singular, and in a wide sense) "refers to the

totality of human products that produce humans" (Vandenberghe, 2003: 462). Obviously, these processes take *specific spatio-temporal forms*; they differentiate societies and thus force us to use the plural form, 'cultures'. From the structural level point of view, culture can also be understood as a particular system "internally differentiated into several fields and subfields of cultural production" (Ibid, 462) nested within the societal system.¹⁰⁷ Below this chapter I will return to these ontological distinctions in order to enrich it with a semiotic understanding of culture to which I turn now.

3.3.2.3 Culture is semiotic by nature

I proceed with an in-depth discussion of the processes at work in the emergence of the cultural domain of society. I will bring into the analysis the semiotic linkage between individuals and emergent cultural entities, which has been absent from most contemporary social theory despite the established uniqueness of human intelligence and symbolising capacities (Donald, 2001).¹⁰⁸

I adopt the Interactivist model already referred in this thesis (see subsection 1.2.3). Ontogenetically, this approach takes human knowledge as a structured, evolutionary developmental process that emerges from individuals' interactions with a socially organised environment (Christensen and Hooker, 1999). Within this process, individuals' mental representations about the environment arise and organise in different levels of complexity (elementary meanings, mental schemes, reflexive consciousness). This means that human beings have acquired a regulatory process at the cognitive level that serves human adaptiveness (Christensen and Bickhard, 2002). Such regulatory mechanism involves (positive and negative) *feedback and feedforward processes*, which by sending signals of differences enable the interactive construction of a representation-reference, a cognitive *pattern* or *invariant*.

This is the way we construct personal meanings about the world. In the words of Hooker (1995: 75):

We may understand this cognitive achievement as the representation in the brain of an invariant three-dimensional spatial reference framework that

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¹⁰⁷ See (Dupré, 2001b: 107-108; emphasis mine): "cultures are at least partially integrated wholes ... and the persistence of a cultural item will always owe something to its role in that integrated context over and above any benefits it may be seen to provide in isolation."

¹⁰⁸ An exception is Sayer (1999; 2000).

transcends any momentary egocentric point of view, and in which all of those points of view are represented as so many varying two-dimensional perspective projections. In this way the young child is able to organize and unify experiences.¹⁰⁹

Cognitive normativity has two points of entry in this model of human epistemology: *externally*, through communications that ultimately settle objective meanings for a community ('what means'); *internally*, through individuals' cognitive regulatory process that settles personal meanings ('I mean'). Obviously, such theoretical framework is not compatible with the algorithmic psychology adopted by those who take *mental schemes as preformed 'rules*' that provide guiding information underlying the invariants of human behaviour. Opposing such codificationist perspective, Lemke (1996: 354) states:

The invariants are emergent; they neither have nor require such sources or executives. The proposed cognitive schema executives are simply the observed invariants restated as *causes*, when in fact they are themselves rather the *products* of what is going on in each performance.

On the other hand, the approach I adopt enables to see that the emergence of human order, both in cognition and behaviour, is based on interactions that are ignored by individualist approaches. It needs a socially organised environment where *signs play a crucial role*, namely the complex system of signs we call language. Within this framework language is treated as an evolved 'sign tool' that enhances inter-actions, helps to manage uncertainty inherent in situations where persons meet, and ultimately has enormous effects in the development of child's mind.¹¹⁰ Again, Lemke (1996: 356) is helpful with his developmental psychology formulation:

The order in language-using behaviour should emerge from interdependencies within a larger complex of perceptual-motor and embodied cognitive-semiotic processes of the child's participation in the community (as culture and as material ecology). ... Surely in *all* this, taken together, as it is lived, there is more than enough informational redundancy to account for the self-organization of the developing organism into all the semiotic orders of the community, simultaneously and in concert.

different mechanisms of cognition in Eastern and Western societies (Nisbett *et al.*, 2001; Norenzayan and Nisbett, 2000).

^{109 &}quot;The appropriate criterion for what is fundamentally *real* will then be what is *invariant* across all points of view. Thus we regard three-dimensional physical objects as real" (Hooker, 1995: 75; emphasis mine). Thus, personal knowledge is also an 'object', in the sense of an 'invariant' of different subjective perspectives about something in the world.

110 This explains the strong embodied effects of socialisation, which give rise to very

Now I introduce the distinction between *psychological* and *material* dimensions of semiotic processes. A first approach has been proposed by Twardowski in 1912 and is summarised in (Bobryk, 2002: 489):

According to Twardowski's theory, three ontological categories of actions and [inseparable] products may be distinguished: *Physical* actions and products (walking – a walk), mental or *psychological*, actions and products (thinking – a thought), and *psychophysical* actions and products (speaking – a speech, painting – a picture).

The latter case is particularly relevant for the understanding of 'signs' (of which language is a particular case) because it involves an epistemic, interactive-constructive process linking the mind to a material product, hence the term 'psychophysical' referring to *signs* (speech, picture).

Using this semiotic insight, we are able to see how human communities settle the *cognitive invariants across individuals* ('public knowledge) they need to live in common. The emergence of public knowledge is always a triadic process *for each person* involved in a communication (see Fig. 6); its elements are public meaning, symbolic material (mostly linguistic), the person who interprets the symbols. Therefore, our relation to symbols is at the same time 'private' (personal knowledge, an emergent *first level* invariant) *and* 'public' (public knowledge, an emergent *second level* invariant). This view is consistent with the interactivist-constructivist approach in psychology and relates to the 'semiotic'¹¹¹ of Charles Sanders Peirce who's philosophy contributed to the sociology of George Mead, the psychology of William James and John Dewey, and to the economics of Veblen (Kilpinen, 2003; Liebhafsky, 1993).

For Peirce, semiotic processes involve three poles: the *representamen*,¹¹² a sign that mediates between the person's internal processes and some object, material or ideational; that sign relates both to the *interpretant* and to *the object* in some respect, the latter comprising not only material objects but also cultural objects (concepts, theories, etc.) (Nellhaus, 1998: 4).

112 It is Peirce's word for one of the components of the process: "something [representamen] which stands for somebody [interpretant] for something [object] in some respect or capacity" (Peirce quoted by Nellhaus, 1998: 3). In a late and not published paper entitled 'Pragmatism' this formulation is expanded to encompass a wider and more

complex understanding of the interpretant (Bergman, 2003).

¹¹¹ The term 'semiotic' refers to the specific kind of sign theory developed by Peirce.

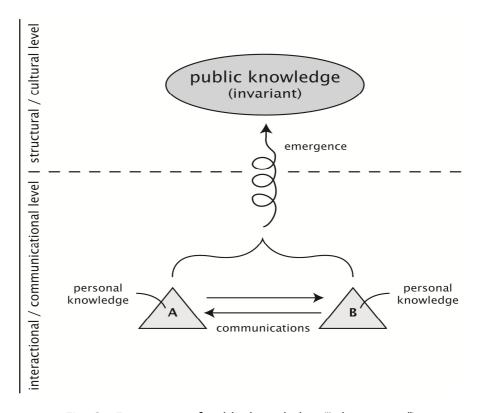


Fig. 6 - Emergence of public knowledge ("what means")

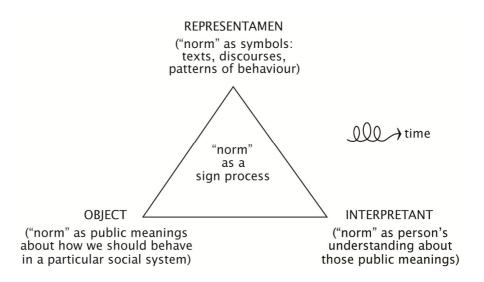


Figure 7 - Peircean understanding of institutional 'norms'

The semiotic triad could be illustrated by the following example: written characters such as 'red' make a *representamen*; the meaning of 'red' that arises in the person reading the word is the *interpretant*;¹¹³ *the object* is 'red colour', public knowledge seen as a *second level invariant* of different persons' knowledge, to which both representamen and interpretant refer (the 'referent') (see Fig. 7).¹¹⁴ In fact, Peirce's triad is more sophisticated; in a late formulation, the 'interpretant' is not reduced to a personal meaning, "the *semiotic effect* that a sign determines in an interpreter. ... Indeed Peirce explicitly states that there are interpretants that are emotions or actions, as opposed to interpretants that are conceptual signs" (Bergman, 2003: 12).

I take Peirce's triad as an important tool that links my present discussion of cultural emergence to the other levels of Nature, as aptly summarised by Brier (2006: 263-264; emphasis mine):

Peircean (bio)-semiotics is special to other semiotic paradigms in that it not only deals with intentional signs of communication but also encompasses non-intentional signs such as symptoms of the body and patterns of inanimate nature. *It then encompasses both nature and culture*.

Because Peirce's semiotic is consistent with the ontological levels proposed by critical realists (Nellhaus, 1998), it is convenient to make the following clarifications about sign processes: a) *the actual*, composed by *what exists and what happens* in the world, independently of being experienced or not by an observer; b) *the real*, which goes beyond the 'actual', comprises two domains: b1) *what remains possible*; b2) *the general character of what will occur*, "the mode of being of a law, or concept" (Peirce, 1903: Lowell Lectures; CP 1.536.537).¹¹⁵

¹¹³ Here 'meaning' is an outcome of a complex process: the reading of 'red' produces a mental image that is linked to the memory of personal experience of socialising with coloured materials at the age at which children *learn colours*.

¹¹⁴ The triadic relation is *irreducible* to any of the three poles, or to a dyad as in mainstream, 'object-sign' semiotics: in the example, it is *at the same time* 'written characters-personal meaning-objective colour', and neither dimension prevails over the other. Further, it is a *process*: "Although the sign may appear as a static entity in its definition and illustration, the intent of Peirce's formulation is one of continuous change and development" (Smith, 2005: 193).

¹¹⁵ At this point it is important to acknowledge that Peirce's logic categories were formulated early in his life for *a pragmatist theory of cognition*—"a continuous and infinite social semiotic process, in which Man is a sign" (Burks, 1996: 323)—and were later reformulated and expanded into an evolutionary developmental understanding of different domains of reality and the whole cosmos (Ibid, 371). Peirce named this expanded system of ideas 'Pragmaticism' and took distance from William James' Pragmatism.

To close this cursory review of Peirce's semiotic I recall that *everything material is a sign*—icon, index or symbol¹¹⁶—although some artefacts (e.g. human voice, books, films), due to their language-based constitution, have a richer semiotic potential than others (see Miller, 2002).

3.3.2.4 Why Peirce's semiotic is indispensable

An evident implication of the use of Peirce's semiotic is that language (spoken or written) cannot convey 'explicit' or 'codified' meanings. Certainly, language is the richest sign-tool that humans use for communication, but nevertheless it is nothing more than *a symbolic tool*. Social interaction is always needed for the emergence of the 'public' knowledge that language symbolises, and the latter always needs 'interpretation' as acknowledged by Peirce.

In more general terms, Peirce's semiotic enables us to gain a better grasp on human and social phenomena for different kinds of reasons. *Firstly*, a better grasp of human knowledge. Because the constructive nature of our epistemic relation to the world is powered by the high reflexivity of the human mind—it works with elementary representations of the world upon which it builds evermore abstract representations of representations—we can say that "knowledge consists solely of signs" (Nellhaus, 1998: 4). But, whatever the level of abstractness, cognitive processes can only occur *interactively* in the world. As Hutchins (1996) and others have shown, "the mind is frequently engaged in interaction with objects, symbols and other people, and these are inextricably tied to the thinking that occurs" (Gauvain, 2001: 130).

Secondly, it provides a better grasp of human interactions either seen from a social or a cultural perspective, as I will substantiate below. In fact, Peirce provides the conceptual key to deepen our understanding of the interlocked levels (interactional-structural) and domains (social-cultural) that constitute social life. Today, researchers in different disciplines return to Peirce, and Wiley (2006: 36-37) acknowledges that Peirce's thinking "was very close to, if not identical with, the concept of culture, and therefore influenced one of the

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¹¹⁶ In Peirce's semiotic artefacts have a representational role under different qualities: they conventionally represent a category of objects (*symbols*); they point to an object or are an effect of it (*index*); they have some sort of analogy with an object (*icon*) (Nellhaus, 1998: 5).

main ideas that would clarify or fill in the paradigm space of American sociology and anthropology" at the beginning of the twentieth century. 117

Thirdly, and no less important for a discussion of institutions, Peirce's semiotic enables to grasp the foundations of social normativity by showing how semiosis plays a normative role for the self (Valsiner, 2001: 87):

signs create relative stability within the field of experience - 'capturing' some (generalized) features ['invariants'] of the irreversible flow of experience of a personal kind. Through that relative stability, human beings can bridge their past and present with the immediate next future-in-the-construction.

Moreover, those signs have a material dimension that supports the connection between life's normativity and the rhythmic of human and social life. Urban and rural landscapes, monuments, buildings, libraries, objects of art, jewels of family are examples of material reality that outlast persons and even generations. They are representamina (the plural form of 'representamen') of social and cultural systems that endure; they are part of semiotic processes underlying human relations in different institutional settings. If we consider shorter time scales, the materiality of the human body lasts exactly the time of human life, while a huge variety of artefacts (machines, consumption goods, books, road maps, cloth fashion, etc.) are transient. The latter mediate human interactions and bear variable affective value for their users or owners which means that their normative role varies considerably. Interestingly, Miller (2002: 408) points out that "artefacts may be most effective in determining our perception when they express a sense of humility in which they avoid becoming the direct focus of our attention."

Finally, with Peirce's semiotic we are also able to understand why languagebased cultural artefacts (books, films, machines, etc.) have not in themselves an 'objective knowledge', as Karl Popper (1972) argued;118 rather, those artefacts are only the material part of semiotic processes that have a triadic dimension ("Representamen-Object-Interpretant") and occur within an institutionalised setting. Actually, this institutional dimension of knowledge

¹¹⁷ See also the following passage: "If we refer to the Chicago School's position as 'symbolic interactionism' [mostly associated to Mead], even though the term was invented by Herbert Blumer, this expression could also be used to refer to Peirce's sociological ideas" (Wiley, 2006: 44).

¹¹⁸ On this point Peirce's semiotics takes me apart from Archer (1988), Layder (1997) and Willmott (1997) in their acceptance of Popper (1972) in equating signs with 'encoded' knowledge ("third world"), which he sees as more or less independent from the physical (first) and the mental (second) worlds. For a critique of Popper's philosophy, see Hooker (1995: Chap. 3).

was present (but unacknowledged) in Popper's argument, as we can see in the following passage: "People involved in a fruitful discussion of a problem often [in fact *always*] rely, if only unconsciously, upon ... a considerable amount of common background knowledge" (Popper, 1972: 238).

In fact, Popper's "common background knowledge" is what I name 'public knowledge', 'the stuff' of *institutional norms*; "a set of social practices of the relevant community determining which components of this background knowledge are in fact accepted, as opposed to those that are not. ... they are again *the result of a socially negotiated consensus*, proceeding according to the familiar patterns of social consensus formation" (Hooker, 1995: 164; emphasis mine).

The evolutionary developmental process of human beings and their communities gave rise to language, worldviews, moral, political, scientific and aesthetical ideas, customary tastes, taken-for-granted assumptions, folk beliefs, etc.¹¹⁹ *It is this vast array of sign-based cultural entities that makes up culture*, Margaret Archer's (1988) Cultural System.¹²⁰ Archer has been inspired by Karl Popper's (1972) logic-based philosophy of science, which led her to exclude from the Cultural System *non-logical* objects such as values, myths or widely accepted background assumptions. Although respecting Archer's contribution, I prefer a larger understanding of culture (Adams and Markus, 2001: 288):

cultural influence is also mediated by implicit, unrecognised nameless or 'positionless' patterns that are embedded in local meanings, institutions, practices and artefacts. A full account of the relationship between culture and self requires an appreciation for this shaping of self by patterns that are implicit in everyday life.

The fact is that, although discussing some ideas of Peirce, Archer does not recur to his semiotic. I prefer to side with those who argue that *culture is about human processes of meaning development-cum-signs*. Through communications, individuals interactively elaborate and stabilise (*give rise to*) useful patterns of meanings and derivative elaborations of these, that is, new

¹²⁰ Archer (1988: 105) gives the following definition: "the Cultural System is composed of entia which stand in logical relations to one another – the most important of which are those of consistency or contradiction between items since *both* are vital elements in an adequate theory of cultural stability and change."

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¹¹⁹ A crucial outcome of this evolutionary developmental process is human *intelligence*, a highly complex kind of autonomy that is based on the capacities for: a) developing linked levels of progressively higher degrees of cognitive abstraction (Valsiner, 2001); b) improving learning processes (Christensen and Hooker, 2000).

and more complex cultural entities of varying degrees of abstraction supported by symbolic artefacts that are used across space and time. This is specific to human sociocultural emergence. In social science, any conceptual framework that ignores culture, or makes it accessory, fails to grasp the deep reality of its object of study.

3.3.2.5 Ontological implications for sociocultural systems

Now I need to connect the foregoing discussion of Peirce's semiotic with my 'two levels'-'two domains' ontology of sociocultural reality (see 3.3.2.2). There, I made clear the need to analytically distinguish between two kinds of processes. At the 'actual' of sociocultural life we have: interactions, made of people's practices and embodied relationships; communications, made of sequences of semiotic processes that also give meaning to those interactions. At the 'structural' level of sociocultural life we have: social organisations comprising both networks and systems; meanings-based cultural objects, discourses and systems. Supporting both kinds of processes, we have a huge diversity of material reality. Then I made a step forward by articulating Peirce's semiotic to the interactivist-constructivist paradigm, which I used to shed light on everyday sociality seen as the interface that sustains the emergence of both organisations and culture.

Now, instead of saying that social structures are concept-dependent as critical realists usually do, 121 I state that social relations, and the structures they form, are sign-mediated; they emerge upon interactions supported by (sign-based) communications. 122 In brief, despite ontologically different from culture, social systems depend on semiotic processes occurring at the level of daily sociality to emerge and change while enduring.

Note that although a cultural entity belongs to the structural level, it is an element of Peirce's triad (the 'object' to which a sign refers), and thus it takes part in sign processes involved in the communications through which individuals make sense of their relationships. Differently, social systems are

formulations.

¹²¹ This is not a uniform stance in critical realist quarters as Sayer (2000: 28) acknowledges. See also Cruickshank's (2004) critique of Archer's ontological

¹²² Recent work by critical realists (Fairclough et al., 2002; Lopez, 2003) aims to bring semiotics into their ontological reasoning. However, I see some problems in those contributions such as the lack of affiliation to Peirce's triadic semiotic, codificationist understanding of knowledge and language, and acceptance of Neo-Darwinism.

contingent and external to semiotic processes;¹²³ they depend on the latter through the meanings that individuals use to enact their roles, that is, to create, maintain and change social relations. Therefore, we need to keep in mind two things: 1) the *social* and the *cultural* domains are ontologically different; 2) the *social* and the *cultural* domains are asymmetrical in their relation to sign processes supported by material reality.¹²⁴

Archer (1988) opened a new path to Institutionalists by calling attention to the 'autonomy', though not independence, of both domains: we can have a clash of ideologies without social disruption if the dynamic of current interests of individuals and social groups maintain the stability of social structures. Conversely, social conflict can happen, and actually is happening in modern developed societies, without giving rise (so far) to important changes in prevailing ideologies.

The ongoing inter-dependence of both domains is easy to see when a set of beliefs and values (worldview, religion, ideology) becomes a powerful source of social transformation (Somers and Block, 2005), or when scientific theories originate 'general purpose technologies' carrying with them wide changes in societies (Lipsey *et al.*, 2005). Conversely, society's organisation, and the social tensions that inhere in it, have causal effects on how much *resources* are available for cultural activities, *what groups* have access to these activities and their outcomes, and thus which new *ideas and values* appear and are disseminated (Zeuner, 2001). A methodological implication of such an emergentist approach, which always requires bottom-up causation, is that it may be adequate to analyse social and cultural interactions at a macro-level without giving the details of what occurs at the micro-level.

The foregoing discussion is illustrated in Table 2.¹²⁵ This exercise obviously raises classificatory difficulties taking account that the same material object may have a hybrid nature and/or different semiotic dimensions.¹²⁶ To better

¹²³ Note that even when the 'social system' becomes an 'object' in a semiotic process, for instance as a scientific concept, the researcher that uses the concept works within an organisation that is *contingent and external to that semiotic process*.

 $^{^{124}}$ An illustrative case is given in Wiley (2006) who refers to the disputes within anthropology at the turn of 19^{th} to 20^{th} century.

¹²⁵ Material reality is placed in a continuum at the centre of Table 2 intending to suggest that it connects to both 'levels' and 'domains'.

¹²⁶ According to Nellhaus (1998: 22), "Peirce left the question of the representamen's materiality unexplored." At least for this reason, the inclusion of material reality in Table 2 leaves open the precise correspondence to levels and domains.

see those difficulties, consider for example the human body: it takes part in interactions that create-maintain social relations, and at the same time participates in communications that give rise to conceptual elaboration. Another example: an artefact like the car is both an icon of social relations of production, and a cultural index of the driver's social status (Nellhaus, 1998: 15). Nevertheless, Table 2 may be useful to highlight the central role of material reality in sociocultural life, and so to shed light on the *semiotic interface* between individuals' social life and the self-organising complex entities of social and cultural kind they give rise.

Table 2 - Understanding sociocultural reality

Ontological level of	Social and cultural domains (Analytic distinction)		
sociocultural reality	Social	Material basis of sign processes	Cultural
Structural - Systems: . autonomous . self-organising . networks - Non-systemic structures: . social settings	- Autonomous social systems: firms, unions, state bodies, public services, political parties, non-for-profit organisations - Self-organising social systems: family, education, market - Networks: leisure, scholar, business - Bonding relations: love, friendship, care, contract, command	Landscapes Natural resources Infrastructures Buildings Financial titles Coins Texts Films Artistic objects Road signs Maps Flags Rings Badges	- Self-organising cultural systems: language, religions, ideologies, worldviews, industry recipes, corporate culture - Values: moral, aesthetic, civic - Rules, customs: public law, currency, traffic rules, gender roles - Meanings: everyday, scientific - Ideas, beliefs, metaphors - Theories: common sense, scientific - Scientific and philosophical knowledge: - Models: logical, architectural, linguistic - Identities: national, regional,
		Logos Iconic goods	ethnic, corporate Brands
Interactional/ communicational	- Situations: being in a traffic jam - Encounters: corporate meeting, academic conference, family dinner	(LEVIS, COCA COLA) Material settings Human bodies Animals Machines	- Events: painting exhibitions, Tunick pictures - Performances: theatre play, football match - Practices: listening music, reading, writing,
- Actions - Communications: . linguistic . non-linguistic	- Events: anniversary celebration, political party convention, football match - Practices: production, trade, consumption, Christmas gifts, volunteering, caring	Artefacts Raw materials 	seeing tv, going to cinema, attending religious service - Consumption: wearing fashion clothes, cultural tourism, travelling in nature - Discourses: in family, in office, in shopping

3.3.3 Institutions: between society and persons

3.3.3.1 Emerging from the rest of Nature

Now it is time to make important distinctions within sociocultural reality. Consider the cases of 'markets', 'state', or 'science', which Veblen labelled 'institutions' and, in a vague sense, treated as emergent phenomena (see 2.2). Supported by the above presented ontology of sociocultural reality, in this thesis I argue that such entities actually are sociocultural systems and, when we adopt a high level of abstraction, we may recognise that they have properties of self-organising complex systems belonging to other levels of Nature (Collier and Hooker, 1999: 246). Indeed, the properties of *complexity* and *organisation* appear in sociocultural systems in varying degree of scale and strength.¹²⁷

On the other hand, we know that markets, state, and science are made of lower-level systems such as networks and organisations. The latter have properties of *autonomous systems* by which I mean that, besides self-organisation, they "exert a degree of influence on the conditions under which they exist" (Christensen and Bickhard, 2002: 17). In fact, just as human cognitive capacities comprise a *normative function* that enables us to make crucial distinctions between true and false (or incorrect) representations of the world, *organisations also have a normative function* that monitors their relationship to the environment and provides information with survival and flourishing value (Stacey *et al.*, 2000).¹²⁸

This 'normative function' of sociocultural systems is analogous to what we find in autonomous systems at other levels of reality. As Bickhard (2004a: 130) puts it,

all of mind and mental and social phenomena are fundamentally normative, and they all emerge in a hierarchy with biological functional normativity at its base. Some other locations and levels in the hierarchy include representation, perception, memory, learning, emotions, sociality, language, values, rationality, and ethics.

Besides the self-organising nature that they share with the institutions to which they belong, organisations have *normative functions* that not only make them

¹²⁷ Similarly to the properties of *complexity* and *organisation*, Collier (2000: 289; emphasis mine) argues that "autonomy is *a matter of degree*".

¹²⁸ I recognise the difficulty of defining the content of 'flourishing'. On this point see (Sayer, 2004b: 15).

adaptive to changes in their environment but also enable anticipative behaviour that improves their autonomy. 129 We could also say that organisations are 'relationship-maintaining' systems. According to this view, rather than narrow 'goal-seeking' systems, organisations are best understood as systems that, in order to survive, *attempt to maintain a complex web of* (sometimes conflicting) *relations* (West, 2005). Because organisations define their own objectives, and manage their interaction with the environment, organisations are key components of institutions as much as the cultural entities that give institutions a normative character ('norms').

Drawing on this Naturalist view, I immediately give a preliminary definition of 'institution': it is an emergent sub-system of society that organises individuals and organisations interactions-communications according to a set of normative distinctions about what is adequate-inadequate (good-bad) for the function that the sub-system serves for society.

Of course those 'normative distinctions' are of different kind depending on the function that is served (provisioning, education, scientific knowledge, public order, etc.). This is so whether or not current individuals have made (explicit or implicit) agreements about those distinctions, whether or not they (more or less) ignore them, even whether or not they have any idea about their usefulness.¹³⁰

While institutions are self-organising systems that serve societal functions, *society* is an autonomous system that, in order to survive and flourish in the world, depends on these institutions. As an autonomous system, *society manages its openness* and subsists by balancing positive and negative feedbacks stemming from its interactions with the rest of the world. At the same time, society as a whole maintains, constrains and changes its institutions (see Fig. 8).

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¹²⁹ Christensen and Bickhard (2002: 22) identify "three dimensions to increases in autonomy: (i) increasing collective benefit, (ii) increasing dependency of component processes on collective activity, (iii) collectively imposed constraints on membership of the system." For these authors, "autonomy also has wider relevance since socio-cultural systems such as businesses, cities, geo-political regions, and nations can also be autonomous" (lbid, 4).

Humans are trained in the use of language without being aware of the critical role of this process to their development.

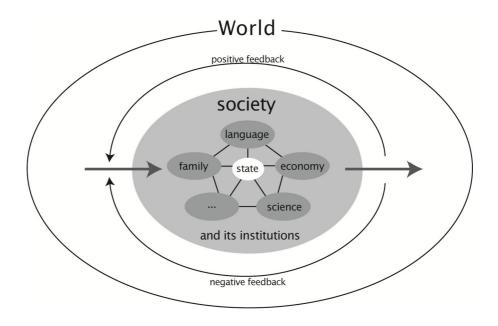
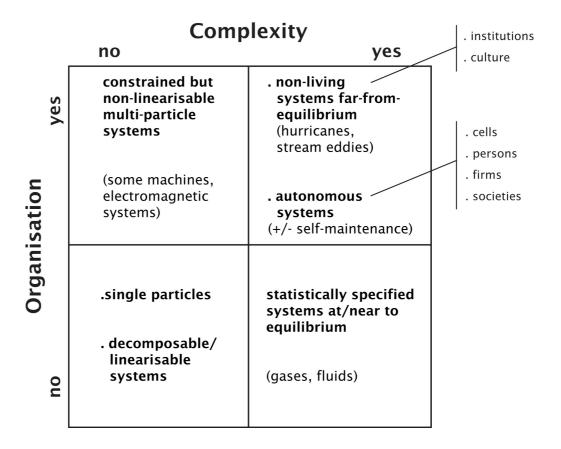


Fig. 8 - Society as an autonomous system (adapted from Taylor, 1976)

The fact that in my definition of institutions and organisations I have recurred to a concept such as 'self-organising complex systems' does not mean that I have forgotten the specificity of social reality. It only means that social systems' properties are *consistent with*, and perhaps in some sense analogous to, some properties of living systems and of self-organising physical systems such as flames, hurricanes and tsunamis (see Table 3; Collier and Hooker, 1999: 246). I acknowledge the heuristic usefulness for social science of borrowing a few terms used in other disciplines to describe and classify systems, but I also bear in mind that they only allow to grasp in very abstract and loose terms (van-Uden, 2005) some analogies because they have emerged upon these 'primary levels' of reality. Beyond local analogies, I follow Emmeche *et al.* (1997: 113) who argue that *emergence at each level of reality depends on mechanisms specific to each level* and that

it may not be possible to sketch a general theory of interlevel relations in the emergence of primary levels, because the genesis of four primary levels [physical, biological, psychological and social] are asymmetrical or nonhomomorphic.

Table 3 - Organisation and complexity in Nature (an interpretation of Collier and Hooker, 1999)



Acknowledging the specificity of sociocultural reality, I only borrow a typology of systems that seems helpful in terms of analogy, and move on to consider fundamental issues about institutions. One of them is the debated question of how institutions articulate with human behaviour.

According to Hodgson (2006b: 21): "Repeated, conditional, rule-like behaviour acquires normative weight as people accept the customary as morally virtuous and thus help stabilize the institutional equilibrium." In my view, an explanation of institutional normativity that is based on individuals' *habits* misses the identification of its source. Widespread behaviour may exist as an outcome of societal enforcement, but in itself does not provide the legitimacy that appears associated to the normativity of a social rule. Institutional normativity is exerted by *cultural entities* such as concepts, ideas and values

to which we have been socialised, and its strength depends on the emotional stress aroused in individuals by a deviant behaviour.¹³¹

Let us see this point in more detail. When facing uncertainty resulting from a conduct (others' and ours) inconsistent with social norms, individuals typically feel some degree of compellingness, which depends on what is at stake. This compellingness is caused by persons' emotions, that is, the way human beings deal with their internal uncertainty (Bickhard, 2000b). Therefore, when *emotions are socially expressed* they constitute a powerful mechanism of control (von-Scheve and von-Luede, 2005), thereby leading to repeated behaviour, and *the consequent habits*. Moreover, current neurobiological studies highlight that emotion-based feelings *depend upon*, *but are not reducible to*, "rapid, automatic, and stereotyped emotional responses", or vague "dispositions" triggered by rules' incentives and constraints (Dolan, 2002; Hardcastle and Stewart, 2002).

Here lies a divergence with Hodgson's treatment of habits. His persistent regress to biological and mental causes of human activity omits that these levels are subsumed in the higher-level system that the person is.¹³² In fact, the causal autonomy of the (emergent) person is source of 'downward causation' over the neurophysiological processes that underlie emotions and feelings, and over the interactions motivated by conflicting feelings and needs (e.g. personal insecurity and the need to manipulate and gain power, need to make different experiences stimulated by human creativity, need of rebalancing personal commitments in order to achieve a new meaning for life) (Bennett and Hacker, 2003; Bickhard, 2008a).¹³³ In fact, Hodgson misses the concept of (emergent) 'person' and mistakes the consequences (habits) for the causes (emotions) of institutional normativity. Further, by sticking to the concept of 'habit', Hodgson cannot capture the source of the diverse, and frequently

Underlying this point there are two important ideas that I will not detail: a) Georg Simmel's idea of variable degree of 'institutionalisation' of human interactions

⁽Nedelmann, 2001); b) the existence of a strong link between *reason* and *emotion* in both 'rational decisions' and 'expression of emotions' (Robinson, 2004).

132 See the following statement as an illustration (Hodgson, 2010: 2, note): "This leaves

unanswered the vital question of what viable neural and psychological mechanisms actually underlie preferences or choice."

¹³³ For a discussion of the so-called 'social emotions' see (Baerveldt and Voestermans, 2005: 467): "Emotions are indeed embodied beliefs, but their body is not just my own, but that of my body and yours, acting in synchronized spontaneity, thus consensually enacting a world that has normative force for both of us."

contradictory, motivations of daily human behaviour, even in the more routinised mode.¹³⁴

The foregoing discussion also relates to a different understanding of culture, which I see by itself normative, even for non-institutionalised behaviour. Note that sign processes are intrinsically normative, which stems from the realism of Peirce's semiotic. Both 'representamen' and 'interpretant' refer to an 'object', indeed to real objects in the world; for Peirce reality is the ultimate norm. Signs involving different degrees of abstraction enable humans to make distinctions of right-wrong or good-bad ways of speaking a language, eating at table, rearing children, making politics, or doing science. The referents for such normativity are *cultural entities*—'objects' such as values, beliefs, models, norms, laws—associated to different kinds and degrees of compellingness according to persons' emotions such as esteem, empathy, shame, guilt and embarrassment. Therefore, cultural objects act upon individuals through sign processes, which elicit a normative assessment of the situation and the arousal of emotions (Barbalet, 2001).135 This macro-micro linkage enables us to understand culture "as an inherently normative order and emotions as the primary way in which we are tied to that order" (Baerveldt and Voestermans, 2005: 468).

For those who do not share the algorithmic view of human nature, the *knowledge* of a situation, the *emotion* dealing with the uncertainty of the situation, and the *motivation* for action (which is a selection among possibilities of what to do next) are *different but interlocked dimensions of the same process* that maintains human beings alive in a instituted world (Bickhard, 2000b; Summers-Effler, 2002). It is through such dynamical mechanisms that *normativity works in a process that is driven by persons' autonomy*, thus necessarily implying the 'interpretation' of roles and inherent on going (even if small) deviations from the 'norm'. ¹³⁶ Therefore, habits-based

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¹³⁴ In a similar vein, see the concluding words in Layder (1997: 254): "In all I have attempted to develop a conception of individuals who experience contradictory impulses, are sometimes only partly aware and in control of their behaviour and reactions and who are both rational and irrational at various times."

¹³⁵ von-Scheve and von-Luede (2005: 318) side with those who argue for the idea that "emotion regulation is part and parcel of emotion elicitation and that, in some way, emotions are always regulated."

¹³⁶ Micro sociocultural changes *are filtered* across networks into higher-level structures of institutions by layers close to the interactional level (social settings), which makes the change of some *norms*, or overall change, typically slow and difficult to be perceived. And

explanations of institutions fail to acknowledge that: (1) the cultural nature of *norms* provides institutions with normativity; (2) *emotions* are the source of individuals' feelings of compellingness; (3) emotion-fuelled *motivations* are the source of continuous social change, even in the midst of habitual behaviour.

Therefore, through the biological basis of human cognition and emotions, and supported by the material reality of signs, institutions are deeply connected with, as they have emerged from, the rest of Nature.

3.3.3.2 What are institutions?

In a friendly debate with Douglass North, Hodgson (2006b: 10) argues for the treatment of organisations as 'institutions':

Organizations involve structures or networks, and these cannot function without rules of communication, membership, or sovereignty. The unavoidable existence of rules within organizations means that, even by North's own definition, organizations must be regarded as a type of *institution*.

My stance is different from Hodgson's.¹³⁷ In the case of some organisations (e.g. large corporations, universities) I admit that specific departments endowed with particular norms (legal and non-legal) could constitute a microinstitution because they too serve a function for the system to which they belong, the whole organisation.¹³⁸ Such case does not preclude the existence of a corporate culture constituted by a diversity of norms, the 'rules' to which Hodgson refers. In brief, in my conceptual framework organisations are *components of* society's (*macro*) institutions; organisations are not institutions, but some of them may contain (*micro*) institutions. Societies are autonomous systems that need institutions (sub-systems) to serve particular functions.

The discussion between leading figures of New Institutionalism and contemporary Original Institutionalism has also extended to the theoretical status of non-legal 'rules', mostly non-written, which for Hodgson (2006b: 19-21) are "informal institutions" while for North *they are not* institutions. North argues that, contrary to formal rules enforced by courts, non-legal 'rules' that he labels 'norms' "are enforced usually by your peers or others who will

yet we know that there are periods of acceleration leading to large-scale changes. This topic is developed in Chapter 5.

¹³⁷ "Institutions are systems of established and embedded social rules that structure social interactions" (Hodgson, 2006a: 157).

¹³⁸ This parallels Lawson's (2003b: 43) idea of institutions nested within institutions.

impose costs on you if you do not live up to them" (Ibid, 20-21). The dialogue turned around the 'formal *versus* informal' distinction about the entities covered by the term 'institutions', and the respective differences in mode of enforcement.

In my view, the terms of the debate are problematic. Firstly, both authors understand *normativity* as *enforcement*, and this is a weakness. As I have argued, normativity is inherent to the nature of institutions and comes from its cultural components (values, beliefs, laws, theories, etc.), which define 'the way things should be'. Enforcement is of a social nature; it is action-based, addresses deviant behaviour (sometimes also deviant thinking), and comes from different sources (police, courts, chiefs, peers, friends, neighbours) in different forms (judiciary, command, injunction, emotional expression). In my understanding, 'norms' are 'necessary and internal' (cultural) components of institutions; they account for the normativity that Hodgson fails to capture with the concept of 'habit'. Enforcement is additional to normativity; it is an aspect of the functioning of institutions' organisations that ultimately relies on the enforcement of last resort provided by the state.

In combining *cultural* components ('norms'), endowed with different kinds of normativity, with *social* components (networks, organisations) that functionally serve society and frequently provide a *front-line enforcement*, my definition of institution dissolves the distinctions made in the 'Hodgson *versus* North' debate. It places norms of different kind (legal and non-legal) at the core of institutions (sub-systems of society), thus preventing not only dichotomous thinking (formal *versus* informal) but also risky voluntarism in policy-making. In fact, *change in legislation is only one move* in the overall process of institutional change, which also depends on other norms such as ideologies and business models, *and* on the 'social' components of institutions where power and interests are of prime importance.¹³⁹ Unfortunately, power and interests cannot be accounted for by the algorithmic concept of 'rules'.

Having clarified my stance in relation to other formulations of what are institutions, in the following I attempt to go deeper in my understanding of the latter. To repeat, I see institutions constituted by two domains, the 'social' and

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¹³⁹ Pelikan (2003: 241) acknowledges that pro-market reforms in Eastern countries "could be slower in coming than may have been naively expected" because "informal institutions" may constitute a constraint to the pace of formal-legal institutional change (Ibid, 240). Like Hodgson, Pelikan treats values and customs as "informal institutions".

the 'cultural', both of them organised at an interactional-communicational and a structural level. *Connecting both levels there are semiotic processes* that relate persons, material reality and norms. In Fig. 9 I attempt to detail the processes that lead to the emergence of social systems and culture and are not visible in Table 1. Observed from the top (the macro-level), we see that the institution is made of an ecology of social systems constituted by networks and organisations that use a system of norms specific to that institution. As discussed about Table 1, they are ontologically different but closely interdependent. Still, *the institution is the overall self-organising complex system*, which can be studied at other levels, that is, observed according to other perspectives. For the sake of simplicity, besides the macro-level it is only represented the bottom level (the micro-level) where persons interact and communicate.

Building on the foregoing, I proceed with a second and more elaborated definition of 'institution': it is a sociocultural system emergent from interrelated organisations, networks, norms and material reality, which structure individuals and organisations according to a set of normative distinctions, thereby serving with reliability a societal function.

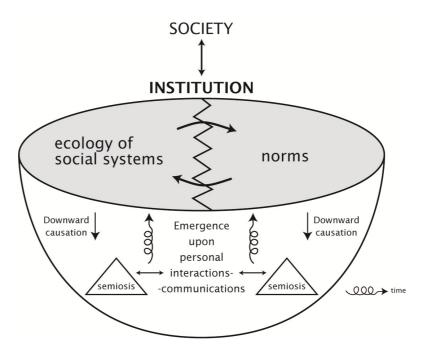


Fig 9 - Institution as an emergent socio-cultural system

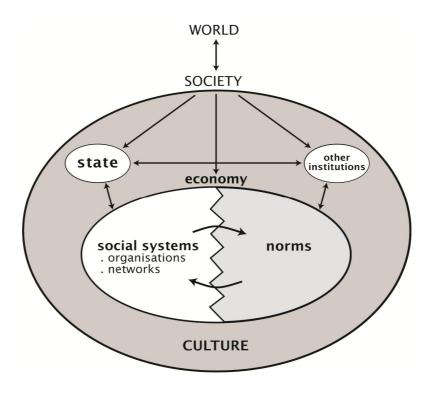


Fig. 10 - The economy as an institution of society (macro-perspective)

To a better understanding of the definition, I refer to Fig. 10 and add three notes:

- (1) social and cultural entities have distinct roles in institutions. The cultural components (norms) provide normativity while social systems (organisations, networks) provide functionality;
- (2) analytically, four levels are assumed (interactional-communicational, institutions, society, world), each relatively autonomous to the others;
- (3) different combinations between social and cultural elements account for a range of institutions and for the existence of tensions between social and cultural domains, and between institutions themselves (which in turn may form second order institutions) and the whole societal system.¹⁴⁰

The heterogeneity of institutions has inspired a huge literature, some involving the elaboration of a typology. I will not discuss this literature as my definition is general enough to account for typologies based on different criteria such as the level of complexity and organisation, level of autonomy, systemic function or spatial scale. I remind the reader that the generality of the definition is built upon a process metaphysics and a multi-level ontology, and therefore is not compatible with most of what appears in that literature, namely with institutions: seen as patterned behaviour; written rules taken as scripts for behaviour; cognitive rules 'internalised' by individuals; 'social practices' à la Giddens; whatever combination of these approaches (see Parto, 2005; Scott, 2008).

An implication of my definition is that *institutions cannot exist without organisations;* the latter are needed in order to provide some function for society, that is, in order to 'organise' particular processes that sustain society. Therefore, an institution comprises the interacting *individuals* and the *structural levels* of networks, organisations and norms that emerge from those interactions, *the whole making a sociocultural system* – an institution – that serves a function for society (Fig. 9).¹⁴¹

¹⁴⁰ Not least, tensions and contradictions between particular institutions and the state.

¹⁴¹ This interdependence between organisations and norms is acknowledged in a statement by Khalil (1995: 463): "It is organizations which, in the final analysis, embody and interpret the scheme of norms and rules according to their preferences." However, differently from my understanding, Khalil fails to grasp the systemic nature of this whole and uses the term 'institutions' for what I name 'norms'.

The heterogeneity of existing institutions should also be understood in terms of degree of institutionalisation, by which I suggest that the structuring of human interactions is variable and depends on the degree and kind of normativity involved, the type of enforcement at work, the exercise of individuals' agency, and the material basis associated. Taking account that 'upward' and 'downward' causal processes connecting the interactional and the structural levels are of a different nature, such multifaceted heterogeneity is also manifest in the fact that the pace of institutional change is highly contingent in space and time.

Another implication of my definition is that it dispenses with the use of the 'embeddedness' concept in the sense commonly used. In my understanding, it is an oxymoron to say that economic action is embedded "in networks of interpersonal relations" (Granovetter, 1985). Obviously, *all economic activity is carried through interpersonal relations* (the interactional-communicational level of the institution 'economy'), which self-organise in networks that connect with other networks, sometimes non-economic. All these networks are sociocultural because the economy is a sub-system of society. Further, the concept of 'social networks' not only conflates structures with interactions but also does not account for the analytical distinction between the 'social' and the 'cultural' domains; it is an obstacle to the understanding of the differences, and causally autonomous inter-dependencies, of these domains. Of course, such critique also extends to the concept of "cognitive embeddedness" (see Dequech, 2003), which ignores the ontological distinction between individuals' meanings and the emergent 'public knowledge' involved in sign processes.¹⁴²

My definition of institutions has the advantage of providing a conceptual clarification in the legacy of Original Institutional economics that was for a long time needed. This literature gives us diverse definitions of institutions from "habits of thought" (Veblen) to "ways of thought or action" (Walton Hamilton) or "patterned behaviour and the ideas and values associated" (Neale). In all these meanings institutions are reduced to 'personal' habits, patterns of behaviour, or a mix of both.

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Note that Hodgson accepts that 'rules' emerge from human interactions. However, how can we understand his use of the term 'embeddedness' and the omission of the term 'emergent'? (See Hodgson, 2004b: 424).

Contrastingly, I argue that institutions combine *three interlocked components*: social systems, cultural elements and the material basis of semiotic processes. An illustration of our different understanding is the case of 'language', which Hodgson assumes to be "the basic institution". ¹⁴³ In my view, when seen as a 'system of signs', language is a cultural system within the culture of society. However, according to my definition, I also consider *language an 'institution'*: a sociocultural system that involves relations between a 'system of signs' (language as culture), professional organisations and state organisations, and material artefacts that support sign processes (e.g. dictionaries, grammar books, literary books, etc.). Consequently, the English language is a cultural tool used by educated people at a global level, whereas in the UK and in some other societies the English language is much more than a cultural tool that persons use; it is *an institution* that serves societal functions of coordination and integration. After all, it is for some reason that citizenship is only accorded to immigrants that are able to speak the national language.

Similarly, I argue that the economy, state, marriage and science are best seen as self-organising complex (sociocultural) systems comprising *social systems*, *cultural entities* and *material* reality, each one with an history; they are institutions.

Now consider 'money', unanimously classified in the literature as an institution. According to my definition, to define money as an institution we need to put in relation *organisations* (Central Bank, commercial banks, credit card firms, printing offices, etc.), *cultural entities* (laws, accounting regulations, ideas, theories, values), and *material artefacts* (cheques, cards, banknotes and coins). Further, the institution-money serves crucial functions for the macro-institution 'economy', among others as means of payment and storage of purchasing power. Similarly to other institutions, the enforcement of monetary laws and regulations is not completely guaranteed by the organisations of the institution; enforcement of last resort belongs to the state, the *meta*-institution of modern societies. In brief, money is best seen as a *meso*-institution, a sub-system of the *macro*-institution economy.

Another example is the state. In my view, the state is a case that is inadequately treated with Hodgson's (2006b: 13) *rule-based* definition.

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¹⁴³ Agreeing with Searle, Hodgson (2006b: 13) states that language is the basic social institution because "all institutions involve at least rudimentary interpretative rules."

Hodgson puts under the conceptual umbrella of "systems of social rules" different realities such as public services and state bodies, which I treat as *organisations*, ¹⁴⁴ and laws, which I treat as *cultural entities*. Further, because for Hodgson culture is outside institutions, it is unclear how beliefs and values are put under the label of 'informal' institutions although they clearly are cultural entities. In my view, this tension stems from the lack of an ontology that could make the distinction between culture and social reality, and the absence of an emergentist theory of systems. ¹⁴⁵

To conclude this chapter I want to acknowledge that my definition of institutions runs the risk of being criticised for its connection to Parson's thinking. In fact I assume that the macro-institution 'economy' serves a provisioning function for society. This has been the object of a debate between Old Institutionalists and the sociologist Talcott Parsons concerning his systemic approach and attribution of 'functions' to sub-systems of society. I will not revisit the debate. However, I want to highlight that my theoretical standpoint differs from Parsons', even if I also adopt a systemic framework and see a functional aspect in institutions. However, as Krippner (2001: 790) has stated, "Parsons endorsed a view of the economy as sharply separated from the social world [the rest of society]. This separation was for Parsons an analytical one and in no way reflected a claim about *reality*."

So, while for Parsons 'systems' and their 'functions' were *analytical tools* used to abstract aspects of the empirical reality of human social life, my systemic framework is suggested by a multi-level ontology that sees sociocultural systems as *really* existing. My analytical stance admits an *interpenetration* between the emergent structures of sociocultural systems and individuals' interactions and communications. This is a central difference insofar Parsons lacked a clear ontology that could support a discussion of the so-called 'agency-structure' problem. Hence the critique of Parson's 'structuralism', which does not apply to my emergentist stance.

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¹⁴⁴ On this point Pelikan (2003: 241) has good reasons to say that Original Institutional economics is wrong when it treats organisations "especially large lasting ones, such as ministries, central banks, or universities" as 'institutions'. Khalil (1995) also argues for a theoretical distinction between organisations and institutions. Both authors name 'institutions' what I name (institutional) 'norms'.

¹⁴⁵ Hodgson labels "informal institutions" the established customs, moral judgements, or religious beliefs, which is not helpful to make a distinction between *culture* and *institutions*. On this, Hodgson gives continuity to the ambiguities of Veblen's Institutionalism.

However, I argue that we need a methodology that goes beyond the traditional reductionisms of the past in order to produce new insights about institutions. For this, I "study social processes from the point of view of the fundamental preconditions for the maintenance or survival requirements of the system [society]" (Mouzelis, 1974: 400). Insofar I have present a detailed description of how institutions (*qua* sociocultural systems) emerge, to acknowledge that markets serve a provisioning function for society has nothing to do with 'functionalism'. Having provided this clarification, in the next chapter I turn to a detailed study of markets.

Chapter 4

Markets as institutions

4.1 Introduction

In the previous chapter I have presented an ontology of institutions, which are understood as sociocultural sub-systems of society. Their multi-layered emergent nature, and the ontological distinction between the social systems (networks, organisations) and the norms of the institution have been emphasised (see Fig. 9 and Fig. 10).

I intend to use this ontology of institutions to answer the research question 'What are markets?'. The analysis maintains its abstract nature, though the analytical interest is now focused on a particular subset of contemporary societies. As sociocultural phenomena, markets are viewed as irreversible, historical processes. *Markets 'structures' are the subject of the present chapter*. But they are not seen as 'things'; rather, they are treated as organised processes of a self-organising, complex and open system. The discussion of the 'motion' aspects of markets are dealt with in the next chapter.

My point of departure is the contribution of Karl Polanyi who forcefully argued that markets are institutional forms that human societies have adopted in the course of their history in order to organise their provisioning.¹⁴⁶ Perhaps due to the influence of Talcott Parsons thinking, the late work of Polanyi has a systemic tone that also surfaces in the texts of his collaborators. For instance, Hopkins (1957: 287; emphasis mine) states that:

all societies, viewed as self-maintaining social systems, have certain fundamental requirements which must be met if they are to continue in

¹⁴⁶ With the hegemony of economics' neo-classical synthesis after the thirties of twentieth century the term 'provisioning' has been abandoned in economics. It belongs to the discourse of Polanyi's "substantive economics" (Polanyi, 1968 [1947]). Veblen (1899a: 136; emphasis mine) aptly summarised the basic difference: "the utilitarian economists make exchange value the central feature of their theories, *rather than the conduciveness of industry to the community's material welfare.*"

operation. ... Furthermore, all societies in fact have structures of social relations through which this supply is maintained, and in any given case that structure (or structures) is its economy.¹⁴⁷

I assume Polanyi's late intuition: the economy is the institution that serves the provisioning function of society. In the next section (4.2) I expand on this view, while in the remainder of the chapter I provide details of the specific institutional nature of markets (4.3) and contrast my stance with other views in contemporary Institutional economics and other heterodox streams of the discipline (4.4).

4.2 The macro-institution economy

4.2.1 Economy and society

It should be noted at the outset that my research builds on the relevant concepts and theories available whatever their disciplinary source, be it economics, sociology, political science or other. In fact, the present state of economics has made Heiskala (2007: 244) to state: "the centrality of the economy in the modern world could make us think that among the social sciences it is economics towards which one should turn for an illuminating account of the economy/society relationship. Curiously enough this is not the case, and it is sociology rather than economics that one will have to consult for an analysis of this relationship".

Therefore, my point of departure for the discussion of the economy as a subsystem of society leads me to revisit the 'embeddedness' debate introduced in Chapter 3. There I referred to an unresolved ambiguity in the work of Karl Polanyi, which is related to the use of the term 'embeddedness'. I concur with those who judge Polanyi's claim – that since 19th century English markets became "disembedded" from society – a very problematic one. The historically documented role of the state in the construction and maintenance of national markets through the use of general law, taxes and (more or less developed)

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¹⁴⁷ See also Pearson (1957: 308): "in principle the Parsons-Smelser book [Economy and Society] conceives the problem of economy and society in the same way as it is here conceived. ... A functionally defined economy is seen as performing within the structural context of society."

welfare systems, should suffice to drop that meaning of (dis)embeddedness (Harvey, 2007a).¹⁴⁸

On the other hand, it neither makes sense to argue that markets are "always embedded in society" (Barber, 1995), mostly if by this it is suggested that the nature of markets is non-social, but nevertheless they are surrounded and conditioned by, or linked to, the social environment. In fact, such understanding of "embeddedness" lacks an ontology of sociocultural reality: economic phenomena occur through interactions and communications between persons, which make them inherently sociocultural, as much as other phenomena of the human sociality. Here I recall my basic understanding of institutions (subsection 3.3.4), which applies to the present discussion of markets: human interactions give rise to (and are conformed by) emergent levels composed of a huge variety of norms (laws, regulations, technical standards, moral), organisations (most importantly firms) and networks (lobbying, innovation, etc.) of different levels of complexity and organisation. Therefore, whatever the level of analytical focus, be it interactional, mediumstructural or high-structural, the economy should be treated as a *sub-system of* society.149

Such understanding accords with Gemici (2008: 24), who noticed a *double meaning* in Polanyi's rare use of the term "embeddedness":

When he formulates embeddedness as a gradational variable, Polanyi's analysis rests on a restrictive institutionalism which understands *economic life as the exchange of goods and services*. On the other hand, embeddedness as a methodological principle is derived from a holistic [systemic] view of society, from looking at the various ways economic life is structured and shaped by social institutions and relations.

Notwithstanding Gemici's alignment with Giddens' sociology, which I do not follow, his exegesis of Polanyi's texts shows that my understanding of *the economy as a sub-system of society* is consistent both with Polanyi's methodological meaning of embeddedness and his substantive understanding of the economy.

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¹⁴⁸ See also (Fligstein, 2002: 71) about the co-evolution of state and markets.

This understanding is assumed by someone very close to Polanyi's late research (Hopkins, 1957: 295; emphasis mine) in the following statement: "To explain these variations in men's economic activities, then, one must turn to the wider system of social actions, the society, of which the economy as a social process is a part."

Moreover, we should not forget what ultimately motivated Polanyi's intellectual endeavour: the fundamental idea that, in order to survive, societies need some level of protection for labour, nature and money, which he labelled 'fictitious commodities'. Here I recall that in Polanyi's thinking these 'fictitious commodities' are not created for exchange. In fact, nineteenth century England has been the first society to organise these three realities as if they were commodities subjected to market exchange. Fred Block addresses the tensions between labour and the owners of capital in following terms (Krippner et al., 2004: 133; emphasis mine): "central to Polanyi's whole analysis is the fundamental understanding about the labour process—the relative power of workers and capital, and how the specific forms of political structuring of the market effect and shape those relative amounts of power." Therefore, if we pay attention to this (relative) "power perspective", and the decisive role that the state plays in managing the tensions arising in society from the existence of 'fictitious commodities', it remains useful to see "embeddedness" in gradational terms. In doing so, the analytical focus becomes one of understanding how society and its institutions interact with the economy, and how it (more or less) protects "fictitious commodities" from full commodification.

In the particular case of *labour*, such protection translates into the question of how society gives more or less 'bargaining power' to labour. Such 'protective' dimension, implicit in the institutional interdependency between state and the economy, enables us to reconcile Polanyi's two-fold understanding of "embeddedness": (1) The "methodological" meaning of embeddedness – *the economy is a sub-system of society* and, as such, it is interdependent with the other institutions, most importantly the state. In its functioning, the economy *constitutes* other institutions and, at the same time, *is constituted by* each of them and the whole society; (2) The "gradational" meaning of embeddedness – These interactions between the economy and the rest of society create different *types and degrees of power exercise* involving the state, which have implications on the level of protection of the "fictitious commodities" (see Fig. 9, Chapter 3).

Now I turn to *money* in order to provide another illustration of the analytical pertinence of that "gradational" dimension of Polanyi's "embeddedness". Here I

want to highlight the deep relations between the economy and the state, indeed an evolutionary developmental aspect of capitalist society.

It is known that by the fourteenth century the European bourgeoisie had already evaded the economic barriers of feudal territories with recourse to financial instruments other than local currencies. After the invention of the "double-entry" book keeping, there appeared the "letter of credit" and other similar instruments related to long-distance trade. However, as Nitzan and Bichler (2009: 292) note:

the magnitude of private credit paled in comparison to the size of state finance. Wars, whose cost soared in tandem with their material scope and unit price, were the most financially demanding expenses. ... There were two ways to raise money – taxes and borrowing – but it was their *combination* that proved the most effective.

Here lies the beginning of what has come to be the most important financial instrument of modern states, *the bond*: "the first systematic capitalization of power, namely, the power of government to tax" (Ibid. 294). Therefore, "over the past century, the government bond market has become the heart of modern finance. It provides the biggest and most liquid security market; it offers a vehicle for both fiscal and monetary policy; and it reflects, through its benchmark yield, the universal normal rate of return" (Ibid. 297). In brief, we can conclude that the contracts involving the exchange of 'money' for bonds became institutionalised as a financial instrument of the economy *only after* its adoption by the state, which has been an historical process.

Another case of deep interconnection between the economy and the state is given by the central bank. Because it concerns the creation of money, this has been central to Polanyi's discussion of the "fictitious commodities" (Polanyi, 1944: 74-75; emphasis mine):

Up to the end of the eighteenth century, industrial production in Western Europe was a mere accessory to commerce. ... It was not the coming of the machine as such but the invention of *elaborate and therefore specific machinery and plant* which completely changed the relationship of the merchant to production. ... Industrial production ceased to be an accessory of commerce organized by the merchant as a buying and selling proposition; it now involved *long-term investment with corresponding risks*.

I need not go further in quoting Polanyi to recall that the execution of "elaborate and specific" kind of innovative industrial projects required "borrowed money", mostly through *banking credit*. According to Schumpeter,

such involvement of commercial banks in risky projects finally laid down the dominance of industrial capitalism over its previous forms (Ebner, 2006b). The history of early banking crisis is known and has motivated an acute statement by Polanyi (1944: 75) that reminds us of contemporary bailouts of banks: "the more complicated industrial production became, the more numerous were the elements of industry the supply of which had to be safeguarded."

As Ingham (2008: 72) recalls: "Greater stability and, consequently, faster economic growth were gradually achieved when the private banking networks were integrated with public currency and the sovereign debt of the most powerful and secure states. This occurred first in the Italian city states during the sixteenth century, spread to Holland, and was most successfully accomplished in England with the foundation of the Bank of England in 1694." And Polanyi states: "The fact that the currencies were managed became of prime importance, since it meant that the *central banking methods were a matter of policy* i.e., something the body politic might have to decide about" (Polanyi, 1944: 197; emphasis mine).

What the history of the creation of the central banks also shows, and is crucially confirmed by the Great Recession we are living today, is that contemporary capitalism can only survive through a close interaction between the economy and the state. This includes the protection of the banking system from itself in order to avoid the collapse of the economy. A brief review of history shows that the control of the state over the financial system has been at the same time *a mater of degree* and, also for that same reason, a matter of *political contestation* (Ford, 2009). After all, each of these institutions (economy, state) bears a specific logic, which builds on organised interests, powers, ideas, worldviews that make them autonomous (but not independent) sub-systems of society (Block and Evans, 2005).¹⁵⁰

Accepting the conceptual framework argued in this thesis has the advantage to escape the use of antinomies between markets, state and family in social science research of past or contemporary societies. For instance, there is not one capitalism but a variety of capitalisms (Whitley, 1999) due to the fact the

¹⁵⁰ As Fligstein (1996: 660) insightfully noted, "modern capitalist states have been constructed in interaction with the development of their economies, and the governance of economies is part of the core of state-building".

institutions that make up a capitalist society mutually constitute themselves, and in doing so (within particular historical conditions) provisionally settle their tensions through normative arrangements that attribute *more or less weight* to the requirements of the market economy. In my view, such is the deep meaning of Polanyi's (1957: 250) insightful statement:

The study of the shifting place occupied by the economy in society is therefore no other than the study of the manner in which the economic process is instituted at different times and places.

The view of the economy as a macro-institution connects with important strands in sociology and political science in researching the institutional make up and change of modern varieties of capitalism (Crouch *et al.*, 2005; Deeg and Jackson, 2007). In fact, the perspective here argued provides an adequate theoretical framework to deal with the issues debated by these authors precisely because it builds on a ontology of institutions that this literature lacks. Such weakness is well illustrated in the concluding words of (Deeg and Jackson, 2007: 173):

basic insights of institutional analysis – that institutions are collective phenomena external to and constraining on individuals, that institutions do matter for economic performance and that the states have a central role in the enforcement of institutionalized behaviour.

This formulation is pervaded by the mindset of New-Institutionalism to which most of that literature subscribes: rather than being emergent upon individuals relations, institutions are external to individuals; rather than seeing the economy as an institution in itself, economic activity is seen as impacted by surrounding institutions; rather than being directly constituted by, and constituting, the state, the economy is pictured as a beneficiary of state enforcement of institutionalized behaviour (see Deeg and Jackson, 2007: 158-161).

Up to this moment, and Similarly to Parsons and Smelser's *Economy and Society* (1956), I have been silent about the openness of national societies. However, my Naturalist understanding of institutions has no difficulty in accounting for transnational phenomena, and thus it is not touched by the critiques addressed to Parsons' framework. This is so in result of the semiotic nature of culture which permeates society and its institutions and whose operations, because they are based on the symbolic system of language, can be extend over a multi-scaled time and space (see subsection

3.3.3). Actually, as open systems, institutions and societies *constitute* themselves in the process of interacting with the world environment. This idea is well formulated by Sorge (2005: 2; emphasis mine) when he states that "internationalization feeds into the build-up of *societal specificity*".

I have acknowledged that the interdependence between the economy and the state is strong. The same could be said of the interdependence between the economy and the family institution. For instance, the non-paid work that family members provide (mostly women) in caring for children, disabled, old or/and seek members, and provisioning personal services to the members of the family that take part in market operations, is certainly a crucial part of social provision, and therefore belongs to the capitalist economy albeit not to its market system. In the following I discuss this most relevant distinction.

4.2.2 Economy: markets and non-markets

The idea that the economy is a macro-institution of society that goes beyond its markets is not easily acknowledged, even in some heterodox quarters. Most frequently, non-market provision is subsumed under the broader concept of society (see Dolfsma *et al.*, 2005). In fact, this corresponds to the analytical occultation of a large part of the activities that make up the provisioning of all societies, even in the more developed ones. As Williams (2005: 5-6) states, "even in the heartlands of commodification – the advanced 'market' economies – survey after survey uncovers that non-market work is not some minor remnant left over from precapitalist formations and rapidly dwindling as a mode of producing and delivering goods and services."

In order to fix at the outset a few guidelines for the discussion, I recur to the definition proposed by Williams (Ibid, 14): "Commodified work, therefore, is composed first of goods and services produced for exchange; second of monetized exchange; and finally of monetized exchange for the purpose of profit. If any of these constituent components are missing, then the economic practice cannot be described as commodified."

Also Carvalho and Rodrigues (2008) review the debate about what is commodification and recall Hodgson's (1988) clarifications, namely that in markets objects become commodities when their property, or temporal control is transferred between individual or collective actors and, their value is 'crystallized' in a price. These authors emphasise the *institutional nature* of

such process, most importantly the enforcement of the property rights over the object that guarantee its "physical and/or moral separation from its owner, the seller, on a formally volunteer basis, as when the buyer and the seller agree on its monetary value" (Carvalho and Rodrigues, 2008: 268).

The nature of markets, and the delimitation of their boundaries, has been object of an extended debate, not least because sociologists have long trespassed on the disciplinary boundaries 'negotiated' by Lionel Robbins and Talcott Parsons. For years markets have been studied by sociologists, which gave rise to the so-called 'economic sociology'. Two decades ago, in a paper discussing the research strategies developed by sociologists in their approach to markets, Viviana Zelizer (1988) attempted to summarise crucial points that I think are still relevant about the distinction between a market and a nonmarket realm. In line with Polanyi's views, Zelizer states: "In contrast to the neoclassical assumption of the market as a universal and exclusive form of economic arrangement, market revisionists define the market as one among many different possible social arrangements, such as barter or gift exchange, that involve economic processes" (Zelizer, 1988: 618). In this paper Zelizer addresses the different analytical strategies that have been used in the understanding of markets and presents some arguments in favour of her preferred alternative, the "multiple markets model".

On the one hand, Zelizer (1988: 617) shares the much-known critiques to the tenets of the New-Institutionalist understanding of markets, "namely: (1) that modern markets are autonomous, self-subsistent institutions, undisturbed by extra-economic cultural and social factors; (2) modern markets are not only "free" but powerful determinants of social institutions and cultural values; (3) noneconomic factors are thus dependent on the market and irrelevant as explanatory factors; (4) individual behaviour is best explained by the ahistorical rational choice model." Nevertheless, Zelizer admits that the critiques to the conventional understanding of markets overemphasise either the *cultural* or the *social structural* factors, and thus place the market in a "subordinate" position to the meanings prevailing in the cultural system or to non-economic social relations.

Up to this point I have no difficulty in accepting Zelizer's point of view and I am happy that she sets aside the dichotomy of the "amoral market" versus the

"moral society". However, Zelizer (1985: 112) exposes theoretical difficulties when she discusses a particular case:

The transformation of children's economic roles during the first half of twentieth century illustrates the interaction between economic and non-economic factors in advanced industrial societies. ... As children became increasingly defined as exclusively emotional and moral assets, their economic roles were not eliminated but transformed; child labor was replaced by child work and child wages with a weekly allowance. A child's new job and income were validated more by educational than economic criteria.

The analysis of this historical process shows how Zelizer misses important aspects that a multi-level and multi-domain ontology would illuminate, namely the change in ideas about childhood, child education and child-parents relations (the new culture) from the status of *cultural weapons* used in the political struggle into the status of new *institutional norms* of the relevant institutions. In the economy, new institutional norms delegitimized child labour (with a few exceptions in the beginning of the process), while in the institutions of family and education previous norms were reformulated in order to enforce a new understanding of the child—what rights he/she is entitled to, what should be the appropriate contribution of work and play to his/her personal development.

In describing the movements, ideas, vested interests, and the exercise of powers by the opposing groups, Zelizer fails to make crucial ontological distinctions: (1) ideas (culture) on the one hand and interests, social positions, organisations (social entities) on the other are different processes that appear amalgamated; (2) the work of children, and the activity of legislators, pedagogues, parents and industrialists (social realities) are mixed with the ideas, values and worldviews object of dispute (cultural entities), all placed at the interactive level.

Therefore, the particular *nature* and *timing* of the different levels and domains involved in the removing of prevailing norms, and in the institutionalisation of new ones, does not receive the identification that could better explain the overall process. In fact, with the transition of the economy of industrialised societies into mass production, it took six decades to emerge the *institutional reconfiguration* that led to the way developed societies now raise and educate their children.

¹⁵¹ For a critique of Zelizer's understanding of money, see (Ingham, 2001).

The discussion of the influential work of Zelizer is useful for different theoretical reasons: *first*, it highlights that a complex interdependence of elements of different nature (social, cultural) has been necessary to enable the emergence of new institutional norms; *second*, it highlights the long time it takes to deinstitutionalize old norms, which is related to the different velocities of change in the institutions involved; *third*, it highlights the existence of a strong interdependence between markets, the family, and the state. The different processes that sustain such interdependence should be acknowledged when political actors think about reforms in our societies.

My next step is to take a stand on the present discussion about the moving borders between market and non-market forms of provision, the so-called "commodification" debate (Rodrigues, 2008; Satz, 2010). In fact, there is a feminist literature (Folbre and Nelson, 2000) that makes a distinction between "work" and "labour" and emphasises that the former comes associated with "complex meanings and motivations" while the latter appears only associated to the pay, to the striped act of mercantile exchange, that is, plain commodification. This leads these authors to highlight the idea that in 'labour market' work has cultural dimensions that may be valuable and personally enriching. Thus, against the position of Walzer (1983) who argues that for moral reasons the commodification of some activities should be blocked, they take a nuanced stance: "whether markets inevitably lead to commodification is really an empirical matter" (Folbre and Nelson, 2000: 133). Zelizer presents an extreme case in this literature because she insists that "markets and money mingle endlessly with social life; but the latter is not necessarily endangered by the rationalizing power of money, because money is subjected to a broad array of new meanings and interpretations provided by the local contexts into which it enters" (Steiner, 2009: 107).

Although this literature rightly calls the attention to the "non-market" dimensions of market interactions, in my view it falls again into a flat ontology of social reality, one that remains at the interactional-communicational level. It does not consider the structural layers of markets (*norms* making profit the viability criterion; *organisations* structured to obtain profit) and their downward causal powers over individuals' interactions. In fact, we should acknowledge that the causation of the structural level does not only *constrain* but also *transforms* the persons that interact in commodified settings, namely

promoting motivations that conform to the profit norm and excluding behaviours that fail to produce profit.¹⁵² This is the reason why "the normative elements are particularly relevant to the research on commodification, since, as we have noted, the expansion of markets and of market rhetoric can have adverse consequences on the plurality of moral values that structure and give meanings to human interactions" (Carvalho and Rodrigues, 2008: 282).¹⁵³

The inequalities of power in sociocultural systems are also reminded by Carvalho and Rodrigues (2008: 280):

The issue of power is related to the social relations that form the background conditions of individuals who participate in markets, thus engendering a potential asymmetric capacity to structure the terms of market exchanges, and conditioning the degree of autonomy possessed by individuals.

Because of unequal power in social relations, Walzer (1984: 315) notes that even the liberty of the market needs to be carefully preserved because "market success override the limits of the (free) market in three closely related ways. First of all, radical inequalities of wealth generate their own coerciveness, so that many exchanges are only formally free. Second, certain sorts of market power, organized, say, in corporate structures, generate patterns of command and obedience in which even the formalities of exchange give way to something that looks very much like government. And third, vast wealth and ownership or control of productive forces convert readily into government in the strict sense: capital regularly and successfully calls upon the coercive power of the state."

At this juncture it is time to take stock of two central ideas discussed in this section: *first*, the economy is a macro-institution that aims the provisioning and flourishing of society. The activities involved in this process are of a large variety. Certainly, the most studied organised form of provisioning is markets, which deal with the monetised production, exchange and distribution of goods/services aiming to make a profit.

¹⁵³ "For example, in education to treat students as 'consumers' is to potentially transform the nature of the relation of teacher and student in contractual terms" (O'Neill, 2009: 323).

¹⁵² In the words of Bowles (1998: 75), "Markets and other economic institutions do more than allocate goods and services: they also influence the evolution of values, tastes, and personalities."

However, I have also highlighted other (much less studied) forms of nonmarket provisioning. For instance, Williams (2005) shows the importance of subsistence work, non-monetized exchanges, and different categories of notfor-profit monetized exchange, which include public services, non-for-profit organizations, the "cash-in-hand" economy, and goes even to some types of markets whenever the participants "are not so much oriented towards profit or exchange-value but rather do it 'for love'" (Williams, 2005: 78).154 In a similar vein, Lapavitsas (2003: 42-43) recalls that "the educational and health-related activities that produce labour power have an irreducible non-market and noncapitalist aspect. Consequently, they are permeated by morality, ethical concerns, mutual obligation, and a sense of duty and commitment that have nothing to do with profit-making." Bringing to the foreground the existence of multiple forms of societal provision, besides markets, helps to countervail the belief much engrained in conventional economics that non-market forms of provision are either pathological residues of the past, or mere supplements, or variants, to modern market organisation (Adaman and Madra, 2002).

Second, the connection with the debates about the contestability of market boundaries is important as it helps to draw a much realistic (even if messy) picture of the macro-institution economy, its markets, and their relations with other institutions. This is a picture in which economists are called to acknowledge and assess different dimensions in societal provision, such as effectiveness, efficiency, equity, liberty and morality. As van Staveren (2009a: 43) recalls,

this in no way implies that the one sphere should be made instrumental to another. To the contrary: the recognition of distinct but not unrelated spheres [institutions] in social life, including economic life, helps to see how morality is related to agents' motivations, behaviour and economic results.

Last but not least, to acknowledge such distinctions makes us more vigilant about economists' (frequently sub-conscious) ideological preferences (see Nelson, 2002: 207-208).

working for wages and that ensures the reproduction of the labour force - is often

ignored."

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¹⁵⁴ See Ortiz (2002: 892): "By concentrating on the narrower analytical definition of labour, economists have excluded from their analysis, until recently, the impact of other work efforts that make the availability of a given quantity of productive labour possible. For example, the time spent by the wives and daughters of the wage labourers preparing their meals and washing their clothes – effort that allows the labourer to spend more time

4.2.3 What about economic rationality?

The idea that the economy of a society is equivalent to its markets has grown in parallel with the progressive elimination of the strands of economics that were dominant in the first half of the twentieth century, the Old institutionalism in the USA and the German Historical school in Europe. Lionel Robbins at the London School of Economics and Talcott Parsons at Harvard were the scholars that played a pivotal role in the ensuing process of transformation of economics and sociology (Hodgson, 2001). Hodgson (2001: 195-196; emphasis mine) refers to that division of knowledge and the disciplinary interests behind it: "Robbins redefined economics as the universal 'science of choice'. Economics was about the rational choice of means to serve given ends. ... For Parsons, sociology was about the social and normative origin of the ends that Robbins has taken as given."

In fact, both scholars converged on the understanding that human beings display a particular rational behaviour in economic contexts. This common view of "economic rationality" is well summarised by Hargreaves Heap (2009: 416; emphasis mine): "The dominant model of individual rationality in economics, sometimes known as the rational choice model, identifies individuals with their preferences and *casts reason in the role of deciding how best to satisfy them*. This is a calculative, instrumental sense of reason. Its task, much as David Hume suggested when famously averring reason as 'slave of the passions', is to work out the means to given ends." Also Vernon Smith (2008: 40, note 12) sates in a crude formulation that "within economics there is essentially only one model to be adapted to every application: optimization subject to constraints due to resource limitations, institutional rules, and/or the behaviour of others, as in Cournot-Nash equilibrium." 155

With such redefinition in the object of economics and sociology, their boundaries became redrawn accordingly: since then, whatever social reality under research, economists would look at it from the point of view of the individual (atomistic) choice conducted by a principle of "economic rationality", while sociologists would occupy themselves with the study of

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¹⁵⁵ According to Graafland (2009: 479-480), and *pace* Vernon Smith, much experimental research has shown that reciprocal behaviour represents an important dimension of what is usually labelled 'self-interest'.

social structures and the value-laden processes of social integration. It was only a question of time to see economists such as Gary Becker applying the model of "economic rationality" to the study of the family and the sociologist Mark Granovetter to the study of market networks. The fact is that under the label of Rational Choice Theory (RCT) "economic rationality" has been successfully exported to other sub-disciplines such as sociology or political science. Hence, in the last decades the identity of economics became ever more defined by the systematic use of RCT, and the mathematical formalizations that it fitted so well, rather than by a particular domain of social reality, the 'economy'.

Building on a multi-level ontology, in the present thesis (section 3.3) I have argued that society and its institutions constitute *an emergent, new kind of reality*, which is the obvious object of social science. Thus, my stance calls for a single science to address each emergent level of reality, which in the case of the social science embraces a plurality of sub-disciplines, or fields of study, according to the variety of forms and degrees of complexity and organisation that social reality presents itself. Within this framework, a question arises: if economics should take the macro-institution 'economy' as its object of study, is there still a place for an "economic rationality"?

The formulation of a 'rational' link between ends and means or, in other words, the *efficiency* in the allocation of resources, has been inscribed in the introductory books of economics as its basic principle.¹⁵⁶ The concept of efficiency underpins 'welfare economics' as it has been promoted by economists Pigou and Pareto, who recurred to the principles of utilitarianism to measure welfare (van Staveren, 2009b). Mainstream economics is still strongly attached to the efficiency-based concept of "Pareto optimality", that is, "if no one's income goes down, and someone's income goes up, society must be better off" (Ackerman and Heinzerling, 2004: 33).¹⁵⁷ With time, welfare economics gained an aura of theoretical respectability and provided a

if everyone else is made better off by it" (Ackerman and Heinzerling, 2004: 34).

¹⁵⁶ In their widely diffused and most influential textbook, Samuelson and Nordhaus (2005: 4) note that behind their definition of economics are two key ideas that tell the student "to think as an economist": "that goods are scarce and that society must use its resources efficiently. Indeed, economics is an important subject because of the fact of scarcity and

the desire for efficiency."

157 In brief: "A decision that makes Bill Gates worse off is, in Pareto's world, no good, even

powerful argument *against* redistribution policies, even if in its own terms it has a serious weakness. Irene van Staveren (2009b: 108) explains this point:

This can be explained with the help of the principle of diminishing marginal returns ... it may well be that when some resources are shifted from those with low marginal utilities (generally the rich) to those with high marginal utilities (generally the poor), total utility would increase because of a more efficient resource use. The poor would benefit more from such redistribution than the rich would lose. But the definition of Pareto efficiency does not allow such redistribution.

Therefore, and perhaps to the surprise of many economists, policy recommendations inspired by Pareto-based welfare theory ultimately lead to inefficient outcomes and possibly waste.

For a long time critiques have been concentrated on the viability of the "maximisation" of an outcome, the "substantive rationality" in the words of Herbert Simon, to which he opposed the cognitive psychology view of "procedural rationality" (Simon, 1987). Problems with the transitivity of preferences have been put forward, both at the theoretical and empirical level. I will not recapitulate them here and will only refer the reader to the meticulous analysis of Herbert Simon in a essay of 1959 where he lists in detail five problem areas that justify his preferred approach to "decisionmaking economics" (Simon, 1959). To the difficulties plaguing the traditional preferences-based formulation, Simon adds the computational difficulties of human cognition when "alternatives are not given but sought; and a description that takes into account the arduous task of determining what consequences will follow on each alternative" (Ibid. 272). Herbert Simon's expectations that "the digital computer would change the situation radically" (Ibid. 280) have not been confirmed. It is not that the human mind is exceedingly more complex than the best computational devices we can produce. Indeed, the crux of the problem lies in the nature of human cognition, which is of a kind that cannot be reduced to computational capabilities (Damasio, 1999; Latsch, 2003).

Firstly, it is necessary to acknowledge that Robbins formulation of economic rationality presupposes a radical individualism taking account that the interdependencies of individuals' preferences and choices are omitted.¹⁵⁸ Even if we account for the social context to improve the concept of 'rational'

¹⁵⁸ Besides the already mentioned references in Chapter 2, see also the critiques of Rational Choice Theory by (Cruickshank, 2003), (Archer, 2000c) and (Sen, 1977).

choice, the fact is that such context would only count as a parameter in the choice.

In reality, human nature is much more complex because human beings are individuals who can only live in permanent interaction, thereby making sociocultural environments (comprising different local cultures and institutional norms) *endogenous to their decisions*. Both persons and sociocultural realities are part of the same *emergent*, *dynamic processes*. Their "continuity over time means that actions are part of a learning process in which today's actions are affected not only by present needs and desires, but also by the results of earlier actions and what the individual has learned from them. As a result, the individual of today is a different person from the individual yesterday, and will be a still different person tomorrow. ... Individual choices are part of a process by which people [interactively] create themselves" (Fusfeld, 1989: 361-362).

This dynamic social interdependence led the sociologist Jens Beckert (1996: 820) to propose a redefinition of disciplinary boundaries:

Economics deals with the problem by focusing on the transformation of situations of uncertainty into situations of risk. Sociology assumes that actors cannot base their decisions on a preference order that allows for utility optimization, but that intentionally rational actors live in a socially structured world that helps them act meaningfully despite the uncertainty of the situation.

Hence, for sociological research, organisations and institutional norms are seen as structural entities *out there to 'help'* individuals to live in society. How they are created is an issue that Beckert (1996) does not address. In my view, notwithstanding the relevance of the above mentioned critical remark about RCT, it is time to go deeper in the critique of the concept of human rationality as it is traditionally used in most disciplines and streams of social science. We need to recall the contribution of Classical Pragmatism to which I recurred previously (subsection 2.5.3). On this point John Dewey's work is of most relevance as, similarly to Parsons, he insisted on the importance of values. However, Dewey's understanding of human situations did not require "the actor as an automaton acting solely on the basis of norms [usual critique of sociological models], or that we reject the "rational" means-ends schema [the basic economics model]" (Whitford, 2002: 337). The crucial point is that Dewey (as a disciple of Peirce) builds on *process metaphysics*, which means that human situations should be seen as part of a dynamic chain: "and end,

or effect, soon becomes a means, or cause, for what follows. Human activity is continuous, and "nothing happens which is final in the sense that it is not part of any ongoing stream of events" (Ibid. 337). As Beckert (2003: 778-779) recalls, "this is most clearly expressed in Dewey's notion of "ends-in-view", according to which ends are formed and revised in the action process itself and become more precise with the better understanding of the problem and the means for its solution". This leads me to the last, but not least, dimension of my discussion of human rationality.

The Pragmatist emphasis on the *interdependence and dynamic constitution* of human ends and means asks a serious question about the nature of human motivations. If means and ends are interdependent, how can we justify an understanding of rationality that reserves its judgements to the efficiency of means while *leaving the ends unevaluated*? How can we justify an understanding of rationality that ignores the legitimacy of the ends? Rescher (2004: 50; emphasis mine) answers clearly and convincingly these questions:

For a "rationality" that excludes the critique of harmful affections and desires is no rationality at all. On any plausible view of the matter, reason cannot simply beg off from considering the validity of ends. *Our motivating "passions" can surely themselves be rational or otherwise*: those that impel us towards things that are bad for us or away from things that are good for us go against reason, those that impel us away from things that are bad for us and towards things that are good for us are altogether rational. *There is certainly such a thing as evaluative, appraisal-oriented reasoning*.

In this thesis, opposing the Hume-inspired conventional economics that separates "reason" from "ends", I adopt the Classic Pragmatist approach for which *human rationality implies dynamically interrelated means and ends* (Haack, 2004). Again, Rescher (Rescher, 2004: 50-51) presents a perfect formulation:

The rationality of means is a matter of factual information alone – of what sorts of moves and measures lead efficiently to objectives. But the rationality of ends is a matter not of *information* but of *legitimation*. ... the rationality of ends inheres in the simple fact that we humans have various valid *needs* ... without such varied goods we cannot thrive as fulfilled human beings. The person who does not give these manifold desiderata their due, who may even set out to frustrate their realization, is clearly not being rational.

In this sense, it is clear that "the rationality of ends is an indispensable component of rationality ... Rationally valued ends must be evaluatively

appropriate ones: if we adopt inappropriate ends we are not being rational, no matter how efficiently and effectively we pursue them" (Ibid. 52, emphasis mine).

Both Parsons and Schumpeter did not adhere to what is now labelled RCT; they had a rich understanding of human motivations where *institutional* normativity mixed up with personal liberty and judgment. Nevertheless, both authors saw economic rationality as "an instrumental form, as a set of procedures for effectively meeting ends that are given" (O'Neill, 2007a: 29). And of course they have not extended the concept of 'rationality' in order to incorporate the Original Institutionalist view of the interdependence of means-ends, and the valuation of both means and ends (Samuels, 1997).

Returning to the opening question of this section ("What about economic rationality?"), I should recognise that the above-presented digression leads me to accept an encompassing understanding of economic rationality, one in which *persons always intertwine concerns about efficiency, effectiveness, and values both about ends and means*, in contexts where the institutional norms and the structural powers of the economy (and other institutions) are always at work and *in a certain way constitute the human beings involved* (Bowles, 1998).¹⁵⁹

Thus, contrary to the conventional separation of *positive* from *normative* economics, one that we usually find in introductory textbooks of economics, I adopt an *economic rationality that is all through evaluative*. On this I follow the pragmatism of Rescher (2004: 51):

Evaluation thus lies at the very heart and core of rationality. ... The rationality of our actions hinges critically both on the appropriateness of our ends *and* on the suitability of the means by which we pursue their cultivation. Both of these components — the *cogently cognitive* ('intelligent pursuit') and the normatively purposive ('appropriate ends') — are alike essential to full-fledged rationality.

hout the power of money, and the conventional economic rationality imposed by the market, Schumpeter (1987: 123-124) stated: "this type of logic or attitude or method then starts upon its conqueror's career subjugating – rationalizing – man's tools and philosophies, his medical practice, his picture of the cosmos, his outlook on life, everything in fact including his concepts of beauty and justice and his spiritual ambitions."

4.3 Markets as meso-institutions

4.3.1 Beyond 'instituted economic processes'

Having settled that markets are a part of the macro-institution 'economy', in this section I make a step further in my thesis. In the present section I argue that markets are *meso-institutions*. Here the term 'meso' is used in the sense that markets are 'sub-systems of the economy', thus above possible institutions *within* large corporations (micro-level) and below the economy *within* society (macro-level). In fact, the different markets are interdependent among themselves through inputs-outputs, prices, technologies, distribution channels, etc., thus forming a network, the 'market system' of that economy. However, *my analytical focus will be the individual market* viewed in relation to the rest of the economy and society.

Since the beginning of this chapter I attempted to connect my view of the economy to the *substantive* meaning argued by Karl Polanyi (1957: 243), which is based on the idea of *"man's dependence for his living upon the nature and his fellows"*. In this same work, Polanyi says that "The fount of the substantive concept is the empirical economy" (p. 248), the concrete reality, thereby taking distance from economics' 'formalist' understanding to which he opposed. And finally Polanyi states: "The economy, then, is an instituted process."¹⁶¹

Although Karl Polanyi remained at the margins of economics for decades, recently there have been a resurgence of interest in his work marked by conferences, papers and books, sometimes much in relation to his ill-defined "embeddedness" concept (Beckert, 2006), other times associated to his views of the dynamics of capitalism in terms of a "double movement" (Blyth, 2002). The Great Recession we have been living since 2008 shows some of the critical aspects to which Polanyi pointed in relation to the Great Depression, specifically a huge financial crisis rooted in great disequilibria in the international trade and the erosion of the system of international payments, then the Gold Standard, now the hegemony of the dollar as the international

¹⁶⁰ As I have acknowledged in subsection 3.3.4, 'networks' are 'systems' bearing low levels of *organisation* and *complexity*.

¹⁶¹ I note that the anthropological studies conducted by Gregory (2009) in middle India districts identified local, 'non-instituted' economic processes, which may be seen as interfaces between the 'family' and the 'economy' institutions.

standard. As Harvey (2007b: 163) has nicely put it, "the fact that all of these are crisis within capitalist economies and societies, rather than between capitalist and non-capitalist alternatives, are amongst some of the principal stimuli behind the rush for Polanyian conceptual framing."

The importance of the late work of Karl Polanyi resides in his unequivocal comparative historical method. Going beyond Karl Marx, Polanyi admitted "the possibility of a variety of differently instituted capitalist economic causalities, as well as the shifting place of economic processes in different societies" (Harvey, 2007b: 165). Polanyi's statement "The economy, then, is an instituted process" gives a formulation that has been read in different ways. In this thesis I make my own hermeneutics of Polanyi's Institutionalist approach to the economy.

I note that Polanyi makes a crucial distinction that is seldom acknowledged: on the one hand, there is the "institutional aspect of the economy" (p. 249; emphasis mine), and on the other there is "what occurs on the process level between man and soil ... or ... in the conveyor belt in the constructing of an automobile" (p. 249; emphasis mine). These are two levels of the same reality as he took care to clarify: "The instituting of the economic process vests that process with unity and stability; it produces a structure with a definite function in society; ... Unity and stability, structure and function, history and policy spell out operationally the content of our assertion that the human economy is an instituted process" (p. 249-250; emphasis mine).

This passage gives us an explicit formulation of Polanyi's understanding of the economy as an institution "with a definite function in society", that of provisioning society with the necessary goods and services. It should be expected to be so after my previous discussion of the systemic nature of the economy, which connects with Parsons' systemic view. However, what seems of most relevance is Polanyi's insistence in the term "process". Harvey has correctly highlighted this point recognizing that "a process analysis is one of dynamics." Polanyi offers here an interesting 'intellectual window' to explore the understanding of the economy as a dynamic, emergent system, one whose systemness can only be maintained by continuous interactive relations with its environment (societal and ecological), which was his concern both at the theoretical and political level. And although Harvey (2002b: 80) acknowledges that such dynamical process occur at different scales, "running

through from micro to macro", the fact is that the self-organising systemic perspective has been left aside. 162 This leaves opened a path that I deem useful to explore at a high-level of abstraction in the remainder of this section.

Indeed, when Polanyi refers to "economic processes" his analysis is focused on the interactional level of the economy; his concepts "are often employed to denote personal interactions" (Polanyi, 1957: 251). However, he immediately reminds that the "integrative effect" of personal interactions "was conditioned by the presence of definite institutional arrangements", which would not produce such structures if they were "mere aggregates" (p. 251). This statement means that Polanyi makes a distinction between the 'epiphenomenal' nature of aggregates and the 'emergent' nature of a market's "institutional arrangements", which then have downward causal powers. Polanyi goes on to state that what makes those arrangements more than "mere aggregates" are "the vital elements of organization and validation [norms]". Indeed, these are the components of institutions that make up their systemness as I have argued in this thesis (see Fig. 9, subsection 3.3.3). 163

Despite his non-systemic reading of Polanyi, Harvey's (2007b: 170-174) expansion of Polanyi's economic processes (locational, appropriational) into *four types* of "transformation processes", which involve quality, appropriation, place/time and use, is an important contribution to the understanding of markets. They bring to the fore the frequently forgotten interconnections of production and consumption with distribution and exchanges (Fig. 11). Within my framework, they constitute the *first emergent level* of a market.

¹⁶² See also (Harvey, 2007b: 178-179) where the concept of "complex causality" in instituted economic processes is explained, and a reference to "immanent and emergent causalities" without recurring to the framework of self-organising systems.

¹⁶³ An evidence of Polanyi's view of a macro-micro interdependence of levels is the following passage: "In the absence of any indication of societal conditions [the structural level] ... there would be little, if anything, to sustain the interdependence of the movements and their recurrence on which the unity and the stability of the process depends" (Polanyi, 1957: 249).

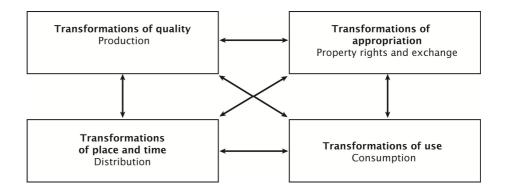


Fig. 11 - Transformation processes (source: Harvey, 2007b: 171)

The problematic aspect of this representation resides in the fact that, in a two-dimensional form, it 'places' at the same level (ontological, analytical) the four economic processes, their geographical and biological environment, the personal interactions that give rise to them, and the relations to other institutions of society and culture. The figure may convey a sense of a 'flatness' that in my view is deeply inadequate. As we have seen before, Polanyi places the economic processes at the interactional level of the 'economy' only as a first analytical moment. The organizations that put these economic processes to work, the norms that fix how to do it, and the values that state what is good or bad conduct are absent in the picture. And yet, without them, these processes are not really instituted, and thus will not be patterned, will not endure, because they require "much more than mere routinisation or habituation"; they are also subject to "de-instituting counterforces" (Harvey, 2007b: 177). Economic organisations (e.g. firms) and the norms of the market should be in the figure, although at a level above the four processes, taking account that they belong to the higher structural level of the market; they have higher levels of self-organising complexity. Therefore, despite sharing the Polanyian approach that inspired (Harvey et al., 2007), I will make a step forward and introduce in the next section some modifications to the model, and symbolise them in figures, in order to convey an emergentist understanding of markets consistent with my concept of institution.

4.3.2 Emergentist understanding of markets

4.3.2.1 Market, markets, or both?

In this section I present the conceptual structure of my Institutionalist understanding of markets. A discussion of other views is postponed to the next section wherein I will explore the reconstructions here argued and, hopefully, the contributions they may bring for a deeper understanding of such an under-researched reality, albeit central, of modern societies (Hodgson, 2008).

It is not uncommon to find authors, mainly of the post-modernist streams, whose approach to markets could be represented by a statement like this one (Bromley, 1997: 1391):

There is no such thing as the "Market". Rather, there are infinitely many ways of constructing domains of exchange – each one reflecting prior collective notions and expressions of who counts, and what is valuable and useful.

This leads me directly to the debated issue of 'essentialism' in social science. As Sayer (1995: 125; emphasis mine) stated in a discussion about markets, "the main objections to markets is that they tend to override non-market considerations so that social interaction is dominated by the *essential requirements* of the cash nexus." Hence, Sayer could be subjected to the critique that he admits markets have *essential, transcendental, ahistorical properties* that make them what they are. However, immediately below, Sayer rejects such a possible critique and counterattacks: "if things have no essences, such that there is nothing to abstract, then we have to assume anything can happen to anything, and thus that there is nothing that we can expect to achieve through our actions" (Ibid. 125). On this crucial point I am inclined to follow Sayer (1997), and also O'Neill (2001); both reject the critique of having fallen into essentialism, although they recognise some dangers in the incautious use of essentialist expressions.

The rejection by both Sayer and O'Neill of the post-modernist critique (imputation of transcendental, ahistorical properties to 'the market'), is consistent with my metaphysical understanding that reality is ultimately a process (Nature) that presents itself in different levels of emergent organisation and complexity (multi-level ontology). Markets belong to social reality and, as processes, they are continuously changing, although each one

at its pace. Nevertheless, markets are not simply permanent social fluxes; they are *complex organisations of specifically economic processes*. They frequently display a very organised, slow changing process, so much so that a few economists are even interested in making typologies according to the more salient aspects of their exchange stage (Jackson, 2007; Rosenbaum, 2000). In brief, it makes sense to speak about the 'market', the set of generative properties that make them markets and not (for instance) firms, and *at the same time* to speak about the 'markets' with all the diverse forms of organisation and norms that we find in the economy.

At this juncture I need to state that I fully agree with Hodgson's (2001: 40) proposition that "social sciences must thus combine general principles with theorising that is aimed at specific domains." My philosophical assumptions, and the ontology of institutions presented in the previous chapter, constitute the "general principles" upon which a detailed theorising of markets will follow. Accordingly, in this section I discuss what should be understood as 'the structures' of the market, that is, the organisation of the relevant sociocultural processes that make markets what they are: a central mechanism of coordination of the social division of labour for the provisioning of contemporary societies.

4.3.2.2 Problematic definitions of markets

It is important to bear in mind that the study of the market is not a popular subject in economics. Hodgson (2001: 251) recalls that "economists have had little to say about the nature of markets, other than classifying them by their degrees of competition and the number of buyers and sellers they contain." Already in *Economics and Institutions*, Hodgson (1988: 173) had stated that "for too long 'the market' has been taken for granted."

Such lack of interest in the study of markets has been instituted in the academia with the hegemony of neoclassical economics, mainly after the general equilibrium Arrow-Debreu model has been considered 'proved'. Ackerman and Nadal (2004: 1-2) summarise:

the model built by Arrow and Debreu shows that there is always a market equilibrium at which supply equals demand for every commodity. It is a "general" or economy-wide equilibrium since it involves the interactions of all prices with the supply and demand for all commodities.

However, Loasby (1999: 108; emphasis mine) insightfully notes that "in the Arrow-Debreu system all markets *open simultaneously, and once only*; when a complete set of equilibrium contracts is in place, they all close – forever." Therefore, "there are no active markets in standard market theory; and since markets have cleared, there is no need to explain how they clear." In this sense, neoclassical economics became a contradictory strand in economics because it is largely built upon the flawed model of Arrow-Debreu and, *at the same time*, originated an important literature about market failures that takes as reference that same model (Stiglitz, 1989).¹⁶⁴ This should not surprise because, as Loasby recalls (Ibid. 109), in neoclassical economics "the costs of using markets and the costs of rationality never appear."

After decades of marginalisation of the Original Institutionalism, the work of Hodgson (1988; 2001) gave an important contribution to the revival of the study of markets in economics. He has advanced a definition of markets in the following terms:¹⁶⁵

We shall here define the market as a set of social institutions in which a large number of commodity exchanges of a specific type regularly take place, and to some extent are facilitated and structured by those institutions. Exchange, as defined above, involves contractual agreement and the exchange of property rights, and the market consists in part of mechanisms to structure, organize, and legitimate these activities. Markets, in short, are organized and institutionalized exchange. Stress is placed on those market institutions which help to both regulate and establish a consensus over prices and, more generally, to communicate information regarding products, prices, quantities, potential buyers and potential sellers (Hodgson, 1988: 174).

In the first line of this quote we read that the market is a set of social institutions *in which* exchanges are made. This seems to be a formulation of the type 'market as exchanges *cum* institutions', which is confirmed by what follows: those institutions "facilitate and structure" the exchanges. A few lines below, it is also stated that markets "are organized and institutionalized exchange", which is a formulation that maintains the same line of reasoning: some entities ('institutions') structure/organise the exchanges; they "institutionalise" exchanges. However, a few pages later in the same work, Hodgson states that "the market is regarded as *an institution* in its own right"

¹⁶⁵ Hodgson (2001: Chap. 17) provides an extensive critique of how in the last decades mainstream economics ignored or wrongly understood markets.

¹⁶⁴ For a critique of the concept of market 'externalities', see (Vatn and Bromley, 1997).

(Ibid, 178; emphasis mine). Here the market is a unit, an 'institution' in the singular.

In a later work, when discussing markets Hodgson states (2001: 256; emphasis mine):

A market is an institution in which a significant number of commodities of a particular type are regularly exchanged, and in which market rules and structures pattern these exchange negotiations and transactions.

In this formulation the "market is an institution" (in the singular), which seems to comprise *both* "rules and structures" *and* exchanges. Interestingly, here "rules and structures" are not labelled 'institutions'.

However, in this same work Hodgson (2001: 295) gives us a definition of institution that makes us think twice: "Essentially, institutions are durable systems of established and embedded social rules and conventions that structure social interactions." This formulation reminds us of the firstly quoted definition of 1988; the "market as a set of social institutions" that organise exchanges, where the term 'institutions' stands for rules, structures and conventions.

Much recently, Hodgson (2008: 263) addresses markets in these terms:

In the narrower sense, markets are organized recurrent exchange. Where they exist, markets help to structure, organize and legitimize numerous exchange transactions.

Here the ambiguity is augmented: the statement begins with the idea that (rather than rules, structures and conventions) *markets are recurrent exchanges*, while in the rest of the paragraph markets "help to structure, organize and legitimize", in other words, *markets 'institutionalise' exchanges*.

So, for Hodgson, what are markets? Are they 'exchanges' that need 'institutions' or are they 'rules and structures' that 'institutionalise' the exchanges? Or, could markets be seen as a multi-level, self-organising complex system containing *both* the 'rules' *and* the 'exchanges'? In fact, a few lines below the same page, Hodgson (2008; emphasis mine) tells us that "the market is a social institution, governed by sets of rules restricting some and legitimizing other behaviours".

In my view, these nuances in Hodgson's definitions of the market raise serious doubts in the reader, and lead me to conclude that, underlying his formulations, there is a conceptual tension that remains unresolved. They are ramifications of Hodgson's (2006b) problematic ontology of these rules, structures and conventions that I have discussed in Chapter 3 (see 3.3.4).¹⁶⁶

With the above presented review of Hodgson's definitions of markets I want to emphasise the point of departure of this thesis. The review confirms that ambiguities about how to understand markets continue to plague contemporary Institutional economics, and therefore renders perfectly legitimate my own research on this central subject. In the following I build on the concept of institution argued in the previous chapter (3.3.4) in order to present my own understanding of markets as meso-institutions.

4.3.2.3 Markets: multi-level socio-cultural systems

Markets and the broader economy are part of societies, and all of them have emerged upon the biosphere, which is why they are now at peril for not respecting the sustainability conditions of the latter (Özveren, 2000). This is a principle inherent in the Naturalist Institutionalism here argued, which inspires Fig. 12.

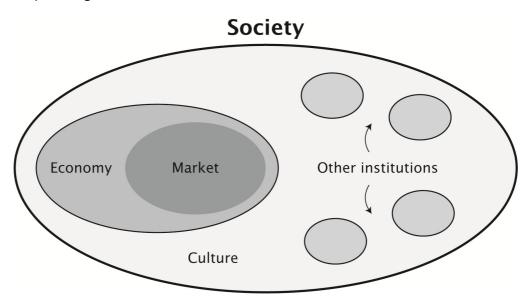


Fig. 12 - Society as a differentiated sociocultural system

¹⁶⁶ I note Hodgson's restrictive understanding of markets, which he limits to *recurrent* exchanges, thereby excluding the production, distribution, and use of what is exchanged.

In my conceptual framework it is assumed that the economy, and particularly its markets, is supposed to work for the wellbeing of society, which is the principle of "instrumental valuation" much cherished by Veblen's followers (Samuels, 1997). While acknowledging this, I recognise that the interactions of markets with the rest of the economy, the overall society and the world have been omitted in Fig. 12. However, they will be extensively addressed in Chapter 5.

The emergentist view of the market here proposed is in line with the ideas argued in the section 3.3 about the understanding of institutions, which assumed that sociocultural systems are made of different layers, the bottom-layer being made of persons' interactions and communications. The crucial point we need to understand is that a market, and the structural layers that emerge and constitute it, are in fact *organised sociocultural processes*. As Sayer (2002: 55; emphasis mine) puts it, "by persuading others to buy their products and setting up the means of regularised exchange for them to do so, they [the firms] create *something which goes beyond their control*." This is a simple but direct formulation that accounts for the emergent nature of a market.

In this understanding of emergence I am not referring exclusively to what Aspers (2009: 12) names "spontaneous market making". The meaning of emergence is wide enough to also include the intentional, "organized making" of markets. In this latter case we have "actors interacting as "political" players, negotiating about the construction of a market" (Ibid. 19), and finally arriving at an outcome that is not exactly what each one had in mind due to the (non-controllable) events and counter-reactions occurring over the political process. In this sense markets are still an emergent organisation of a particular kind of provisioning processes.

As other institutions, the market is a multi-level system.¹⁶⁷ The upper level is made of two kinds of structures, the social composed of *organisations* and the cultural composed of *norms* (Fig. 13). The intermediate level is constituted by more local, less complex subsystems (networks of social relations and meanings), while at the bottom-level occur the interactions and communications between the agents, namely the "transactions" (exchanges)

¹⁶⁷ My approach to markets is different from the one proposed by the sociologist Neil Fligstein for whom, rather than (sociocultural) 'systems', markets are 'fields'.

that consummate the "legal transfer of ownership", to recall John Commons words (Kaufman, 2003). In order to overcome the much ingrained dichotomy between (rigid) structures and (fluid) processes, I emphasise that the overall scheme of the market is based on the metaphysical assumption that *reality is ultimately a process*. This means that I am discussing a set of 'organised flows' that are connected, and co-evolve, with other institutions and the whole society. In the following I attempt to give more details about the multilevel scheme represented in Fig. 13.¹⁶⁸

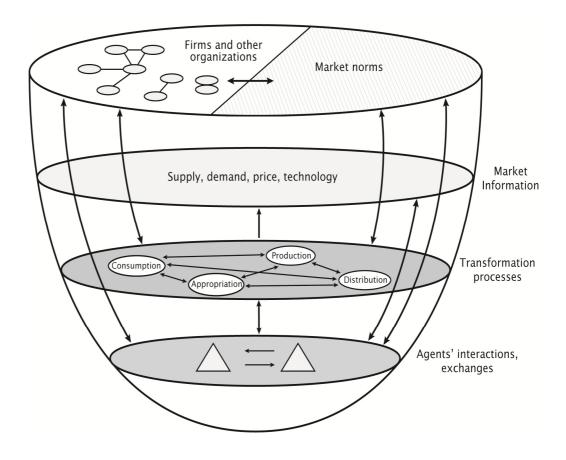


Fig. 13 - The market as a meso-institution

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¹⁶⁸ My model of the market received inspiration from different and complementary sources. See for instance (Fourie, 1991: 46).

It is *at the bottom level* that institutions pulse. This level is made of interactions and communications between 'persons'—the triangles whose vertices account for body-mind-openness to the world—not only in making negotiations, contractual agreements, and market exchanges but also making prospective contacts for future deals and transmitting information of different kind (prices, business news, reputation of other agents, etc.). Moreover, we should not forget that business agents are intensely engaged in contacts with state agents to lobby, obtain public outsourcing, negotiate state support to the industry, even engaging in the creation of new markets.

All these interactions between persons, some of which acting on behalf of organisations belonging to other institutions, are the 'raw material' of a market. The decisions taken by its organisations—firms, regulatory agencies, trade associations, industry training centres—namely about when, how and at what price to produce and to sell, are emergent outcomes of interactions and communications between persons of different social belonging. Of course, this includes state agents that negotiate with firms. These negotiations occur between individuals that occupy particular roles in their organisations (private and public) and thus act as representatives of the interests and projects of the collective entity to which they belong. Hence, we need in Fig. 12 arrows that link bottom and top levels.

At the mid level the model presents a plurality of inter-connected networks that arise from the bottom-level and make up the processes of "economic transformation" as Harvey (2007b: 171) proposed. According to my ontology, the transformations of *quality* (production), of *place and time* (distribution), of *appropriation* (exchanges of products and property rights) and of *use* (consumption) are better seen as organised processes, which emerge from bottom level interactions and communications. Those processes operate under the complex structuring of two levels, one below that puts to work the sequence of transformations according to a specific order (human interactivity and communication), and the higher top level that empowers, organises, and legitimates the participation of each organisation and individual in those processes (organisations and norms).

See Hammond and Sanders (2002: 11; emphasis mine) who state: "the complexity

paradigm in communication sees the communicative act as a source of both order and disorder present in all systems."

Using Harvey's words, I recall that the transformational processes "are each distinct one from the other, and that together, however differently configured in relation to one another, they form the basis for economic reproduction and/or growth. ... the mutual dependence of the four economic processes forms the basis of economic specificity" (Harvey, 2007b: 170). On this, Harvey is right in insisting that an Institutionalist view of markets should work at a level of abstraction that enables to highlight its *specific nature and function for society*.

Taking on board Harvey's (2007b: 171, 174) "transformational processes", I am adopting an *inclusive understanding* of markets by which, along exchanges, the processes of production, distribution and consumption become an intrinsic part of the market. This perspective is supported by Sayer (1995: 99) who agrees that *the analysis should go beyond market exchanges*:

For a market or commodity-producing economy it is probably unwise to try to draw a boundary between the market, or the sphere of exchange, and production and consumption, since the development of markets may only be intelligible in the light of developments in production and vice versa.

As I have said, the scheme should be understood as a provisional model that needs to be further specified. An illustration of the direction to take in the exploration of the model is given by (Harvey and Randles, 2002: 16-20) who concentrate their analysis on the *appropriation* process (Fig. 14).

Besides the above-mentioned interdependence between the different transformation processes, it is also necessary to recall that each of those processes bears relations with other markets, and with non-market and non-economic processes. The connection to other markets is represented in the *buyer* side of Fig. 14. The horizontal doted line represents a link to firms buying intermediate goods/services to be incorporated in the transformation process of another market. There are also connections to infrastructures and non-market public services (the circle) which are financed by state through taxation, and connections to other institutions such as the family (the square); adults' consumption of final goods/services and children's spending pocket money. This buyer side of the market puts in evidence the economic connections between markets and other important institutions of society. As Harvey and Randles (2002: 19) recall, "the general point is that no one set of economic exchanges is economically self-sustaining."

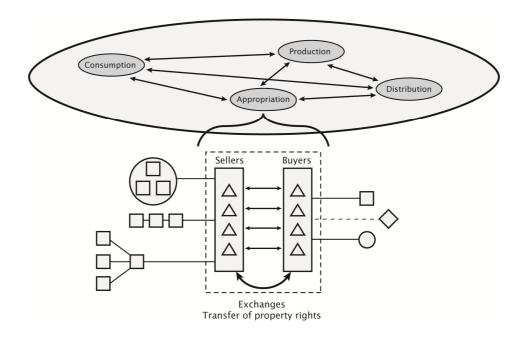


Fig. 14 - Market transformation processes (adaptation of Harvey and Randles, 2002: 19)

Harvey and Randles also highlight that market exchanges involve agents who frequently have *unequal powers*, although at the same time they are *mutually dependent*. "Thus, manufacturers may exercise power over retailers by virtue of their capacity to innovate and produce, or of their brand reputation. Retailers may exercise power by virtue of their organisation of end markets and control of access to them" (Ibid. 18).

An important outcome of markets' transformation processes is the emergence of *information* relevant to the agents' decisions, namely about the supply and the demand of the good/service, the technologies used to produce and make it available for exchange, and the prices that have been asked, offered and paid in transactions. In this scheme, the words *supply*, *demand*, *price*, *technology* are linguistic representations of the commodities, money and information that take part in the transformation processes of the market. In other words, they are part of the semiotic processes that occur in communications among the agents of the market, and in the interpretation that each of them makes of these communications (Shackle, 1972). Hence, the need for managers to meet frequently and to participate in different sorts of networks aiming to obtain relevant information, for instance about the

reputation of business partners, or even engaging in a trust-based network where knowledge is shared aiming to solve a technological problem. Markets are not of a piece; they are made of, and emerge upon, multiple kinds of interdependent networks (Smith-Doerr and Powell, 2005).

In brief, the market is a sub-system of the institution 'economy'. More specifically, it is a (sociocultural) self-organising, complex, and open system endowed with structural levels that have emerged from persons' interactions-communications, many of them acting as members of organisations, in the transformation processes of production, distribution, appropriation and consumption, using matter-energy and symbolic tools in order to maintain and enhance the provisioning of society.

This inclusive understanding of the market sharply contrasts with Hodgson's restrictive definition, which only retains the 'appropriation' processes (market exchanges), and even leaves out what Hodgson (1988: 177) qualifies as "relational contracting":

The market includes a generalized mechanism to establish and publicize prices, and to promote goods and services. In contrast, there are many cases when exchange is established other than through the market, by contact obtained in other spheres of activity. A common example of non-market exchange is the habitually renewed contract to supply a good or a service to a regular client. Identical or close substitutes may exist, but the buyer chooses to remain with the same supplier without 'going to the market' to consider an alternative."

I do not follow this restrictive understanding of markets, which in my view is inspired by the traditional (but erroneous) idea that 'cooperation' excludes 'competition' and thus, when cooperation is involved in transactions these occur out of the market. In Chapter 5 I will present an understanding of markets' motion that is consistent with the findings of management literature, namely that firms frequently choose to cooperate in order to better compete (Bengtsson and Powell, 2004).

Pace most of the New-Austrian school literature, beyond prices, firms need information about a variety of relevant issues. They need information about material and immaterial inputs (quantities, qualities, schedules of delivery, procedures), state policies and the business cycle. Managers meet frequently to assess the uncertainty they are currently facing and the cooperation they could get from other firms. In consequence, the transformation process of "production" is a source of network building that channels information and

opens up opportunities for inter-firm cooperation. Frequently, these networks have a spatial concentration; they are a form of organisation of the 'transformation processes' of markets usually named (regional) 'clusters', or "industrial districts" in Marshall's terms. As Maskell and Lorenzen (2004: 995) argue, "the resulting freedom of choice of partners facilitates resource efficiency under industry uncertainty and is crucial for the competitiveness and survival of specially small firms faced with volatile markets and calls for perpetual variation." Moreover, the concentration "enables the building of a set of institutions [norms, values, industry recipes] that are helpful in conducting certain kinds of economic activity" (Ibid, 1002).

Further, my understanding of the market acknowledges that 'supply' and 'demand' are interdependent. Market suppliers not only scrutinise the demographic and cultural trends of society in order to adjust their production but they also attempt to mould their potential demand,

and so a 'learning' dialogue shapes the patterns of consumption that develop in the system. These patterns emerge, and chance details of the process of emergence alter what is finally 'revealed'. Supply affects demand, and *vice-versa* (Allen, 1994: 595).

In the model pictured in Fig.13 the 'price' is an abstraction. From the perspective of my Naturalist Institutionalism, markets are organised sociocultural *processes*, which by their nature cannot be in equilibrium. Therefore, there is not a 'clearing price' for the market; there are different prices at different places and in different moments, and there is no *real* supply and demand schedules that determine such price. Prices are *information* that emerge from the concrete interdependencies that surround the appropriation process of a good or service.

The determination of prices in markets is a rather complex process that varies with their organisation. They emerge from a plurality of interacting processes that are specific to each market. In markets with large repercussions in the whole economy there is a lot of "discretionary acts of identifiable persons" (Tool, 1995: 51). In the markets of final goods/services the producers are typically 'price-makers'; prices are determined by a markup rule and publicised. In the financial markets the prices depend on "the various rules and procedures that govern market trading, the activities of bodies such as regulators, the banking system, and the monetary authorities,

and also such things as the operation of physical equipment, computer programs, communications media, and so on" (Bibow *et al.*, 2005: 525).

An important aspect to retain is that the information about supply, demand or prices is *per se* 'public knowledge'; it belongs to the structural level of the market and is used in the decision processes of individuals and organisations, be they consumers, small firms, multinational corporations, innovation networks, trade associations, unions, etc.

As for 'technology', it should be understood in light of Peirce's semiotic presented in the previous chapter. If we review the triangle of Fig. 7 (see 3.3.2.3), we can understand the technologies adopted in the different processes of transformation going on in the market as sign processes. Take for instance the laptop where I am writing now. To state that this machine is the technology most used to write in these days is a one-sided statement. This only refers to its use, which means a body interaction with this particular material that requires some practice; some knowledge that can only be acquired in the process of its use. But there is more to it because the laptop had to be made and that process required a lot of knowledge about computation, about the materials that could be used, and (not least) about their mutual compatibility, which certainly took a long time of adjustments until it could run effectively. The process of making the laptop is not adequately accounted by the commonsense idea that engineers make the design and the specialised workers transform the materials according to that design.

In fact, for a technology to emerge, a learning process that requires interaction between human beings and materials-energy it is needed (Ingold, 2010), both from the side of the producers and the side of the users. In the technology of the laptop we have a process that relates the material of the machine ('representamen') to the knowledge/skills needed to its manufacturing ('object'), and to the knowledge/skills needed to use it ('interpretant'). Of course, this is the view proposed by Veblen who "clearly believed there was a relationship of complete interdependence in the process of technological development" (Lower, 1987: 1155). The same with another Classical Pragmatist, John Dewey, who "shattered the traditional notion of separate 'realms' of knowledge and activity, demonstrating the unity of

practical and scientific knowledge as an interaction between the knower and the known" (Ibid, 1156).

Making this Pragmatist connection, I want to argue that in the transformation processes of markets – those of production, logistics, exchanges and use of goods/services – technologies are better understood as Peircean semiotic processes involving interactions between materials-energy, public knowledge, and personal knowledge-skills of human beings. With Metcalfe (2010: 153), I suggest that "a deeper understanding of technology leads to a deeper understanding of the main currents of technological advance and to the reasons why the development of technology and its application are so uneven over time and place."

At the top of the structural level of the market, at its higher level of selforganising complexity, there are organisations and norms. The latter support and legitimise the behaviours of markets' agents and, with time, even changes important aspects of their personality. Among the market norms, we find general laws and customs addressing property rights, regulations of contracts, informal rights and obligations, quality standards, rules about competition, etc. A large part of this group of norms applies to the whole market system, and even to society at large, sometimes requiring specific modifications to account for the particulars of a market. There are also specific norms for the producers of the good/service, and for its distributors and retailers when they are specific industries connected to that market. Here I think of agreements about wages, time schedules, holidays, training, and even general ideas and assumptions about 'the right way' to be in the business, the so-called 'industry recipes' (Spender, 1989). Notwithstanding the methodological individualism of Loasby (2000: 302), my understanding of market norms is close to his market 'rules' and 'conventions': "each business draws on the institutions [culture] of society within which it operates, and then develops, through a mixture of deliberate decisions and the consequences of day-to-day interactions, rules and conventions [norms] which serve to co-ordinate its activities and to align them with the activities of its suppliers and customers."170

¹⁷⁰ For Loasby, and for a number of heterodox economists inspired by an early work of Douglass North, the system of norms that integrates an institution is an "institutional arrangement" (Loasby, 1999: 115).

As for organisations, the scheme should be read in terms of networks and clusters (the left side of the exchanges box in Fig. 14), and certainly not in terms of a population of firms. This latter point of view is not even present in the seminal work of Marshall (1921), who told us "to treat firms and industries as interdependent ... Marshall has each firm identified in part through its unique set of relations with other entities, including other firms as well as organisations such as universities and industrial journalism. ... Marshall's firms are both partly constitutive of one another and also of the industry" (Bloch and Finch, 2010).¹⁷¹

At this juncture it is important to recall that markets are not 'things' nor interacting mechanical 'forces'. As any complex self-organising system, markets are 'organised *processes*' involving interactions and communications between persons playing social roles defined by specific rights, duties and access to resources, who deal with materials and information, both involved in semiotic processes. Therefore, in social science and at least in what concerns markets, it makes no sense to talk about 'equilibrium' (Metcalfe, 2004).

Therefore, being such a kind of system, the causal relations at work in markets run up, downwards, horizontally and system-wide. Further, the articulations between markets with the rest of society, and with the rest of the world through different types of international networks (Perrow, 2009), are only possible because they are supported by time and space multi-scale communications, themselves created by the powerful symbolic system of human language. In this sense, it is only to expect that the borders of markets, systems of markets, and the overall economy, are *fuzzy*. On this central aspect, the figures above presented have a shortcoming as they present sharp boundaries, instead of the blurred character typical of boundaries in sociocultural systems.

This conceptual framework for the understanding of markets highlights the fact that 'transformation processes' are not natural givens. Because they have a history, they appear differently organised; in and through time, they have

¹⁷¹ At this stage, the use of the term 'industry' relates to the focus of the analysis on 'production', a segment of the network of 'transformation processes'. For a discussion of the conditions under which the relations among producers may give rise to "an identifiable and invariant network of relations, defining its identity and internal coherence", see (Foray and Garrouste, 1991: 59-61).

emerged from human interactions-communications at the cross-roads with causal processes emanating from the bio-physical and the societal environment. Having identified different levels of emergence and the distinct ontological nature of the processes involved (networks, organisations, norms, information, communications, material reality, persons), the conceptual framework puts in evidence *different sources of causal powers*, each with its own strength and timing.

Building on the foregoing, *I define the market as a meso-institution*, that is, as sub-system of the macro-institution economy. More precisely, it is a *sociocultural self-organising, complex, and open system endowed with structural levels that have emerged from persons' interactions-communications, many of them acting as members of organisations, in the transformation processes of production, distribution, appropriation and consumption, using matter-energy and symbolic tools in order to maintain and enhance the provisioning of society.* This is done under the help, orientation and legitimation of *market norms* (rules, laws, theories, values, etc.) originated within the market activity itself and from outside by state legislation. The large majority of the organisations of modern markets are capitalist firms. They operate under conditions of more or less intense competition for the opportunity to exchange goods or services with profit, although other forms of organisation such as cooperatives have some importance.

In modern societies, markets have become an indispensable form of coordination of the extensive social division of labour that today underlies the huge variety of goods and services produced by a "restless capitalism" (Metcalfe, 2004: 174).

4.3.2.4 Fictitious markets and marketness

The inclusive understanding of the market adopted in this thesis has the particular advantage of helping to see more clearly why Karl Polanyi considered *nature*, *labour* and *money* "fictitious commodities". In fact, it is evident that none of them comes from a productive process in view of future exchange with profit and subsequent use by a buyer.

Nature is presently a global concern taking account of the climate changes now widely acknowledged, and the magnitude of the implications of such

changes for human societies, which are interdependent and co-evolve with bio-physical ecological systems (Gual and Norgaard, 2010). The neoclassical solution to these problems is the extension of markets to environment goods and the imputation of prices to environment damages. In other words, for neoclassical economics, the solution to environment problems resides in the extension of markets to these domains. The fact that nature is not a commodity (we inherited it from past generations) causes numerous obstacles to the neoclassical project, in particular those related to the limits of monetary valuation (Ackerman and Heinzerling, 2004), or the fact that "certain kinds of social relations and evaluative commitments are constituted by particular kinds of shared understandings which are such that they are incompatible with market relations" (O'Neill, 2007a). As O'Neill states, neoclassical economists are not able to see that "the solution is the problem". For the sake of brevity, and also because the market solution to Nature's global crisis is now regarded as ineffective by a growing number of ecological systems scientists, in the rest of the chapter I will comment more extensively the cases of labour and money.172

First, let us recall that, with capitalism, labour and credit-money have been subjected to exchange contracts *as if* they were commodities.¹⁷³ However, if 'spot exchanges' are taken as the standard of markets' operations, as neoclassical economics does, we should bear in mind that "in the spot market the transaction is negotiated and settled during a single meeting or interaction. ... There goods are inspected, prices negotiated, and cash tendered and accepted – all in the course of single meeting" (Prasch, 2008: 55). The problem is that with 'labour' and 'credit-money' *nothing is similar* to the standard market.

In *labour* we have an important case of asymmetric power in association with mutual dependency, which is manifest in the class division between employers, the owners of the firm's material means of production, and employees, the sellers of their work, which is the class division that

¹⁷² For a discussion of Karl Polanyi and William Kapp analysis of the environment, see Özveren (2007).

 173 Credit-money represents the bulk of a modern economy's monetary mass and is provided by a deposit made by commercial banks at the conclusion of an approved demand of credit.

constitutes capitalism since nineteenth century.¹⁷⁴ Usually, economists refer to these relations under the conceptual framework of "labour markets". In line with Polanyi's thinking, I do not share such approach and elaborate on this in the following paragraphs.

Notwithstanding the role of family and education as non-economic institutions that raise and prepare children to later assume the social conditions of both consumers and producers, there are at least two crucial aspects to consider in the analysis of the so-called 'labour market': first, the contracted labour cannot be completely specified ex ante because it is to be extended in time and, most importantly, because it is necessarily executed by the person as a whole. For this reason—a person is not a commodity—the person has a bearing on the decisions that are taken about the work because it involves life, sometimes even the survival. Second, the person has the capacity to reflect on her/his situation, which means that "perceived fairness and quality of treatment on the job can rival monetary compensation in eliciting employee loyalty and effort" (Prasch, 2008: 98). Taking the perspective put forward by Bowles, and unlike true commodities, "labor market is a prototype of an exchange that is both *contested* and *constitutive*. The political relationship between boss and worker is instrumental to the enforcement of the employer's claim - that the worker work hard and well and the structure of work life has significant influences on human development. ... How work is allocated and organized has a well-documented bearing on the development of our capacities, norms, and preferences" (Bowles, 1991: 15). In brief: (1) the person that works does not come from a process of economic production; (2) there is no transaction of labour in the form of an ex-ante specified exchange; (3) the labour contract does not recognise that the person as a whole cannot be disconnected from the work she/he produces; (4) the agents who make the labour contract have highly asymmetric powers. On the overall, these reasons are serious enough to lead me to state that what is conventionally labelled "labour market" cannot be framed within the concept of market argued in this thesis. Under a critical realist approach, the so-called 'labour market' is currently the subject of a research programme that is still making its first steps (Fleetwood, 2006).

¹⁷⁴ For a discussion about the need to make the analytical distinction between the social division of labour and the class division based on the ownership of capital, see (Sayer, 1995).

Credit-money is a particular kind of asset that also raises problems regarding its conventional treatment as the product of financial markets.¹⁷⁵ Here, "the crucial point is that the value of assets, by contrast with commodities, is determined by market participants' collective assessment of the likelihood of future events. Such understandings are called "expectations" and they are a, if not the, critical element in the market for assets" (Prasch, 2008: 65). Because money assets are not an end in themselves, the serious issue about them is the evolution of their value, which is subject to uncertainties of different types including the uncertainty of human behaviour acting in crowds (Bibow et al., 2005). Due to positive feedback mechanisms speculative bubbles are inevitably formed, and are hugely aggravated by credit-provided "leverage" of the money engaged in the speculative process. Prasch (2008: 66) correctly places these operations within the broader societal context, highlighting its destabilizing effects and "raising the question as to how effective these markets are at their socially-sanctioned tasks." More explicitly, Lawson (2009: 775) asks the crucial question: "Should the credit institutions of capitalism facilitate social and economic development or be mainly concerned, as at present, with advancing funds to those concerned merely with making more money?" The Great Recession we are living today is only the most recent episode of capitalism's financial instability, and a most revealing one because an extensive regulatory control of financial systems was already in place and, nevertheless, did not prevented the gestation of a collapse. Therefore, as Karl Polanyi (1944: Chap. 16) long ago argued, and a few years ago Ingham (2001) insisted, the particular nature of money, and the importance of its articulation to the transformation process of production, involves a crucial political dimension that does not fit the conceptual framework of the market here argued. 176 The current political atmosphere in the USA and Europe seems favourable to those who argue, and make activism for, the introduction of more legislation that should restrict market-like operations using the "fictitious commodity" of creditmoney.

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¹⁷⁵ For in depth discussions about the nature of money see (Ingham, 2004) and (Schmitz, 2002). For a note on the much neglected *semiotic nature of money*, see (Dyer, 1989). For a post-Polanyi view of the present financial crisis and the opportunity it opens for the emergence of world-level norms, see (Hart, 2009).

¹⁷⁶ About the reform of the legislation of financial trade in the USA, see (Elliott, 2010).

In fact, both in the so-called 'labour market' and in the 'credit-money market', the contracts that sustain the exchanges of these "fictitious commodities" are permeated by great uncertainty and asymmetric information. Further, to bear the nature of a market contract, they would require a long-term understanding of the self-interest of those involved, a condition that is seldom present. Reality has shown that in such 'fictitious' market exchanges even a strong control of the state can hardly produce an outcome acceptable to the overall society, which makes them contestable, and actually strongly contested, 'institutions' (Bowles and Gintis, 1990). In my view, the 'market' is not the adequate concept to deal with the market-like exchanges that involve nature, labour and money in modern capitalist societies.

Beyond the three Polanyian fictitious commodities, there is a huge variety of situations involving imbalances in *power* of negotiation and asymmetric access to *information* that make the appropriation process (exchanges) much different from the standard spot-market model. Such heterogeneity of cases led Rosenbaum (2000) to admit a "marketness" scale in order to rank all possible situations.¹⁷⁷ In my view, this is an analytical effort of dubious usefulness and, from the point of view of the actors involved, an issue always subject to contestation at the policy level.

In my view, it seems more useful to both extend the concept of market beyond 'exchanges', in order to account for other interconnected 'transformation processes', and to acknowledge that markets are variously shaped in a interactional process involving firms, the state, other institutions, and social movements in society at large (see Chapter 5). This stance is supported by the argument put forward by Bowles (1991: 13) who states that "markets are political because contracts are [generally] incomplete. And where contracts are incomplete, what actually gets transacted cannot be enforced by a court of law; rather, the *de facto* terms of the exchange are fought out between the exchanging parties. This is the reason why markets are political." Bowles' statement is a well argued recognition that *power and moral dimensions are always present*, with more or less visibility, in the

¹⁷⁷ I also disagree with Block (1991) about his understanding of markets restricted to 'exchanges', and his idea that the "price mechanism" provides a "marketness" scale that could account for the variety of concrete markets, "with spot markets at the high end of scale and transactions organized through organizational hierarchies at the low end" (Ibid, 89).

varied shaping and working of markets, a topic that I expand in the next section.

4.4 Comments on other views of markets

Neoclassical economics is not directly addressed in this thesis. I fully agree with Hodgson (1999: 36-37) that "Neoclassical theory is Market-Blind", by which he means that "when attempts are made to discuss exchanges and markets in neoclassical economics then the main element of the narrative is the increases of utility received by the individuals involved, not the transfer of property rights within a framework of legal institutions."

In Walrasian economics, markets equate to momentary physical exchanges of goods. Not only money is absent but also time and change are not considered. Despite much talk about markets, in neoclassical thinking all about markets boils down to a simple mechanics by which a fictitious omniscient auctioneer makes the right allocations in a manner that "the economy 'gropes' towards an equilibrium position in all markets and towards the determination of a complete final vector of prices" (Ibid., 39). Such kind of modelling corresponds to the optimizing dual of a centrally planned economy. The problem is that this means the absence of interacting agents endowed with specific and uneven competencies and knowledge, attempting to collect relevant information about prices, quantities and qualities of particular commodities, and looking for an opportunity to make an exchange against money and make a profit.

Against the richness of reality, the vagueness of the concept of market in neoclassical economics is well pictured by this formulation: "It is believed that when people gather together in the name of self-interest, then, a market somehow always emerges in their midst" (Hodgson, 2001: 249). Therefore, in the present section I limit my discussion to important differences between my view of markets and those of a few contemporary outstanding heterodox economists.

4.4.1 Markets: layers or systems?

I begin with a discussion of Hodgson's work, as he is a leading contributor to contemporary updating of Original Institutionalism. I have already compared

my views with Hodgson's understanding of institutions in Chapter 3. In the present chapter (see 4.3.2.2) I have identified a conceptual tension in his definition of markets, and in the following paragraphs I return to his definitions to make more explicit the differences between our views about "markets as institutions".

A first note is that Hodgson's formulations do not acknowledge that economic life is *relational*; that 'internal and necessary' social relations (using critical realism vocabulary) are invariants of bonds and networks of bonds that 'tie' the persons related. Beginning with this base-level, I argue that these social networks give rise to self-organising systems such as firms and other kinds of organisations; and, that there are networks of organisations and meanings, which on the overall make up highly complex sociocultural systems. In Hodgson's formulations we do not find such emergentist understanding.

According to (one of) Hodgson's (2001: 256) formulations, "the market is an institution" in the sense that economic exchanges need "an enforceable set of rules of law", "a system of established property rights, complemented with "laws, and procedures to deal with disputes". For Hodgson, "the key point here is to notice that *all these frameworks are, in an established sense of the word, institutions*" (lbid, 256; emphasis mine). Therefore, when particular laws and rules of society are applied to the exchanges of commodities, *then* we have a market. "Markets, in short, are organised and institutionalised exchange" (lbid, 257). In this latter statement it is implicit a unidirectional top-down causality. Laws, rules and conventions, which (at least in this formulation) Hodgson takes as 'institutions', are linked to agents' exchanges by defining restrictions on some behaviours, and helping or legitimating others. However, *bottom-up and system-wide relational processes are not suggested by the definition*.

In fact, contrasting with my framework, Hodgson does not refer to selforganising complex systems. This should be expected because in his formulation market "laws and rules" are *not part of* a wider whole of interrelated market processes; they are seen somewhat surrounding, or perhaps forming *layers above market exchanges* but without a definite ontology. Are these layers social or cultural realities? Hodgson does refer to culture as an important reason for the diversity of real markets. However, the relations between culture and the entities (laws and rules) that make some kind of exchanges to have a market nature, to become "institutionalised", are not discussed in a section explicitly addressing markets (Hodgson, 2001: 253-257). Here I note that, consistently with my understanding of institutions in Chapter 3, the legal and non-legal norms of the market are (ontologically speaking) of a cultural nature. It is evident that culture is present at the interactive level of markets, for instance in the way agents bargain. However, it is necessary to recognise that this only happens because culture is at the same time present in the (objectively emergent) values, norms, and recipes that are accepted and practiced by the agents of that market. What in my framework I label the 'norms' of an institution is a mix of cultural entities (legal and non-legal), some of them picked up from the cultural tissue of society and integrated into the norms of a particular institution in order to serve a particular function for society, in this case the market with its provisioning function. Of course, some norms are common to the majority of markets, namely the legal ones (e.g. property rights law, labour laws) while others are particular to each market and have emerged within it (e.g. biding rules in the fresh fish market).

I also want to emphasise that moral values are part of the set of institutional norms of markets, whatever the implications they might bear on market efficiency, as economic rationality cannot dispense with the rationality of its ends.¹⁷⁸ Thus, in line with Durkheim in *The Division of Labour*, I reject that markets are morally neutral. Beckert (2005: 5) reminds us that "the moral code stops actors from exploiting their exchange partners through opportunistic behaviour". In a similar vein O'Neil (2007b: 263) states:

in the case of economic relations and roles such as those of employer and employee, traders, accountants, bankers and individuals have to have some idea of how they should behave towards each other, and what would constitute improper or unreasonable behaviour, for the roles to be successfully enacted.

My contribution here is to recall that moral values are cultural entities, which have emerged in time within a definite community; they are *neither* subjective preferences of some individuals *nor* 'rules' in the minds of the market agents. Every market has moral components to its system of norms,

¹⁷⁸ On this point see (Fourcade and Healy, 2007: 300).

which means that *every market is a moral market* (Keat, 2004). In this sense, it is inadequate to state that markets are "morally embedded", thereby admitting (at least implicitly) that moral values are 'external' to the markets. Values may have their origin in the broader cultural system of society, but the important aspect to retain is that they are *appropriated and integrated* in the structural level of the market as components of its system of norms.

At the same time, we need to bear in mind that some norms of the market emerge from interactions involving agents and networks endowed with asymmetric powers. Such power dimension supports a strong connection between market norms and market organisations (see *top of the scheme*), the latter being the domain of hierarchies, resources, interests and powers, while the former being the ideational domain of markets, that of worldviews, business models, managerial fads, professional and moral rules, etc. Most importantly, the interests that actors pursue and invoke for their decisions and strive for power can only be seen 'through the lens' of the norms pertaining to their market. Recalling the work of another sociologist in international politics, Blyth (2003: 700) highlights this point:

The core insight here is that all notions of interest rest upon assumptions about motivation that cannot simply be "read off" the structural [social] context. As Wendt puts it, "only a small part of what constitutes interests is actually material. ... The rest is ideational." As such, we have to pay attention, once again, to "how preferences are constituted."

Contrasting with Hodgson's discussion of markets, I think it is important to make this distinction between the 'social' and the 'ideational' domains, and acknowledge how they interrelate. My understanding of markets (and the broader economy) has thus a *systemic*, *socio-cultural nature*, that contrasts with the idea of markets as "exchanges conditioned/enabled by institutions", where the latter are understood in most of Institutional economics literature as 'rules', perhaps analogous to computers' software.

However, something is moving in the intellectual panorama and I am glad to read a recent statement by two sociologists who reject a trivialised view of institutions: "This view of institutions, we argue, tends to take the edge out of the concept of institution, which in our opinion *should be restricted* to those areas of society where interests come into play in an important and direct manner — such as politics, the economy and the family" (Nee and Swedberg, 2005: 797; emphasis mine). Ultimately, this statement gives some support to my restrictive use of the concept of Institution (a sub-system of

society) and legitimises my choice of the term 'norms' for the ideational elements of those sub-systems.

4.4.2 The well behaved institutionalism

Since the 1970's there appeared new streams of research, in economics and other disciplines, aiming to complement some deficiencies of neoclassical economics, namely on what concerns the firm, systematically treated as a technical tool, a production function. A distinguishing focus of analysis, common to these streams, is the role of institutions in the economy. This point has been summarised in a paper by Oliver Williamson (2000: 595; emphasis mine), the leading figure of New Institutionalism, where he quotes another author:

the new institutional economics (NIE) turned on two propositions. First, "institutions do matter"; and second, the determinants of institutions are susceptible to analysis by tools of economic theory" (Matthews 1986, p. 903). The second of these is what distinguishes the NIE, it being the case that institutional economists of all kinds—old and new—are unanimous in the view that institutions matter.

In the next page, emphasising the dynamics of NIE, Williamson states: "Even as institutional economics *is being incorporated within orthodoxy*, new opportunities and challenges await" (Ibid, 596; emphasis mine).

In this section I am not concerned with the predominant research theme explored by NIE, that of the origin and nature of the firm. Although keeping it present because firms are the most central actors of markets, the focus of this thesis is on *markets* as such. It is in this perspective that NIE is scrutinised below. Therefore, I will not rephrase well known critiques to Transaction Cost Economics (TCE) in relation to the so-called "make or buy" problem and NIE's methodological individualism, as all have been subject of detailed analysis in a large number of publications, some of which by Hodgson (1988; 1993b; 1999; 2001; 2004d) and with whom I generally agree.¹⁷⁹ Here, I want to focus on a few aspects that, in my view, have not been enough emphasised.

An Institutionalism that aims to be accepted by the 'establishment' certainly makes a contribution that does not question the main tenets of economics orthodoxy. In order to show that NIE is a complement of economics

¹⁷⁹ See also (Ankarloo and Palermo, 2004), (Granovetter, 1985) and (Vira, 1997).

mainstream thinking, Williamson recurs to a scheme of levels entitled "Economics of Institutions" (Ibid, 597). This is a large universe of 'institutions' insofar it includes: (level 1) informal norms, customs, traditions, religion; (level 2) formal rules of the game including property, polity, judiciary, bureaucracy; (level 3) play of the game, especially contract; (level 4) prices and quantities, including labour incentives. Williamson sees "level 4" the field of neoclassical economics, and recognises that "level 1 institutions" change very slowly but "have a lasting grip on the way a society conducts itself" (Ibid, 597). Therefore, NIE is mainly interested in levels 2 and 3, the former labelled "institutional environment" ("the rules of the game") and the latter labelled "governance" ("the play of the game"). Even the "institutional environment" moves slowly, although sometimes opening a window of more radical reform in higher-order legal institutions such as the constitution or the property rights legislation. This is why most of the research of NIE concentrates on "the institutions of governance", that is, "the governance of contractual relations" (Ibid, 599).

From this summary we can see that, according to NIE, 'institutions' actually are cultural objects that "impose constrains on the level immediately below" and, despite signalling the existence of upward feedbacks, Williamson explicitly *neglects them* (Ibid. 596). Thus, NIE does not discuss the connections between these cultural entities distributed by levels of permanence. Further, *the economy is presented as an organisation of contracts between individuals*. The main concern of NIE is to achieve "economizing" in transaction costs, which are used as a tool to assess alternative modes of governance (e.g. markets *versus* firms), and to align "transactions" and "governance structures". Therefore, mainstream methodological individualism is respected.¹⁸⁰

An interesting inconsistency appears in the layered scheme proposed (Williamson, 2000: Fig. 1, 597). While in the analysis of governance forms, at "level 3", Williamson admits that human beings behave according to rules that are provided by 'institutions', and to his support invokes Herbert Simon's "procedural rationality", at "level 4" (the bottom level where

¹⁸⁰ What is seldom acknowledged is that the NIE project to apply 'economising' analysis to the so-called 'institutions' "is devoid of any analytical significance, since institutions structure human interaction by taking the form of constraints within which individuals pursue their interests. The notion of efficiency relative to constraints is meaningless since the object of analysis is the set of constraints itself" (Vira, 1997: 763).

adjustments are continuous) human beings behave according to neoclassical thinking; they maximize their utility function and thereby make neoclassical economics "optimality apparatus" adequate for analysis. Clearly, this is a defining cleavage, one in which Williamson prefers to pay the price of a theoretical inconsistency in order to preserve a bridge to economics mainstream.

"Among the key good ideas" that NIE adopts, and makes it different from the neoclassical school (Williamson, 2000: 600), is that humans have cognitive limits, which makes contracts "unavoidably incomplete". Another "good idea" is that humans are opportunists, that is, "they will not disclose true conditions upon request or self-fulfill all promises" (Ibid. 601), which leads to the importance of an adequate structure of incentives to the agents in a given form of governance. In the anthropology adopted by NIE, human beings are seen as units of economic agency without a relational background; they lack a biography. Therefore, inequalities of capabilities and skills early acquired (or failed) within the sociocultural environment of the family, the belonging to a given social class, and the different opportunities in the access to education and jobs are completely ignored. A more informed, interdisciplinary understanding of human beings, one that acknowledges the interactively-constructed, relational and institutionalised up-bringing of human beings could prevent Williamson to adopt the wrong idea that human beings are basically opportunistic. This assumption, which he shares with public choice theory, is simply an ideological preconception.

In reality, Williamson is not even consistent in his biased view of human nature. As insightfully pointed out by Moschandreas (1997: 49), in Williamson's analysis *top managers are an exception*. He does not admit the idea of "control mechanisms within a hierarchy intended to mitigate managerial or employer opportunism against subordinates." Not surprisingly, this is consistent with mainstream economics' lack of acknowledgement of asymmetric power in contracts, in firms and in markets; a failure that has been widely exposed in the Western financial crash of 2008.

NIE takes *efficiency* as *the* criterion for decision-making about governance structures. As Williamson stated "whether a set of transactions ought to be

¹⁸¹ For a similar contradiction about the behaviour of managers in M-form firms, see (Pessali and Fernández, 1999: 269-270).

executed across markets or within a firm depends on the relative efficiency of each mode" (Williamson, 1975: 8). Despite the opposition of Douglass North, another leading author of NIE, Williamson attempts to connect with a simplistic evolutionary explanation of firms' survival on the basis of efficiency. Vromen (1995: 62) summarises: "in Williamson's view, selection sees to it that firms with less efficient organization forms give way to firms with more efficient forms." Also Knudsen (1993: 283; emphasis mine) notes: "Williamson does not explain 'observed' governance structures as the result of a rational plan, intention or design, but as the final result *emerging from some unspecified evolutionary process.*" In this explanation the ambiguity is manifest. There are passages where Williamson refers to a vague selection process while the bulk of his work is oriented to the study of governance structures in *comparative statics terms* (see Hodgson, 1993b: 85-86).

Such *direct connection* between efficient forms of governance and the outcome of a competitive processes in markets, presented as the 'selection' stage of a Darwinist scheme, has been extensively discussed and rejected by Hodgson (1988: 76-78; 1999: Chapter 8). On this point Knudsen (1993: 294; emphasis mine) recalls that, long ago, "Sidney Winter (1964, 1975) has shown that economic environments change too quickly to eliminate all inefficient firms – or firms with inadequate routines. *Both efficient and inefficient firms can therefore be found living side by side.*"

From my point of view, a *direct* causal linkage between firms' level of efficiency and some kind of market selection is problematic. Firms are autonomous systems, which means that at least some of them have enough power to change the environment to their interests (laws, informal rules, prices for inputs), and therefore influence to their benefit the competitive process, which impinges on other firms of the market and produce differential effects on their management. Firms have different capabilities, different cost-structures, and different market strategies where costs and price play different roles. Such variety in the characteristics of firms is a contingent outcome of a co-evolutionary process where firms are proactive in making choices about technologies, market positioning, governance or lobbying. In brief, Williamson has a naïve understanding of competition, one

¹⁸² North "argues vehemently against the view 'that institutions are created only to reduce transaction costs and increase economic efficiency'" (quoted in Richter, 2005: 173).

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of a rival struggle for profitable exchanges that exclusively builds on efficiency. In fact, the latter is determined by a system-wide set of intertwined causalities, and only partially and remotely by the "rules of the game".

NIE not only makes an inappropriate analogy with biological evolution but also fails to see what is specifically social in the dynamics of markets, namely the differential powers of agents and the emergent market structures (networks, organisations, norms) that have causal effects on their own right. In fact, the methodological individualism adopted by Williamson and his followers impedes an adequate understanding of the process of markets' change, which involves mechanisms of different nature operating within and beyond a given society.

In different moments of his work Williamson (2000: 595) argues that we should confront economic theories with reality: "That is accomplished by asking each would-be theory to advance refutable implications to which the data are applied." He argues for an operationalization of NIE theories and quotes Georgescu-Roegen in arguing that "prediction is nevertheless "the touching stone of scientific knowledge" (Ibid. 604). Although Williamson recognises the complexity of human beings and the evolutionary origins of human mind, he does not follow the path of realism. He wants to be with the mainstream, perhaps in its outer ring, and that might be the reason why he sticks to the deductivist method. In fact, scientific work about social realities must take account that empirical phenomena derive from processes of joint causalities, which include those cultural entities that NIE labels institutions. However, "action and the choice of governance structure, on Williamson's account, occur separately from, or within the walls of, an institutional environment, which, in turn, simply acts as a fixed surrounding context. There is no analysis of the interplay between structure and agency, and hence the intrinsically dynamic nature of social processes appears to be ignored. ... this treatment of institutions can best be viewed as corresponding to the implicit recognition that the extrinsic condition for closure [the standard practice of laboratorial sciences] is not being satisfied" (Pratten, 1997: 792). It is clear that Williamson is not aware of the methodological problems that his individualistic treatment of markets and firms imply, most probably because he does not see markets and firms as

social systems. And yet, both are self-organising, complex and open realities that are not amenable to the prediction tests that Williamson sees as the legitimate means of scientific validation.

Finally, the exercise of power is a crucial dimension of social life that Williamson ignores. According to my understanding, institutions are sociocultural sub-systems of society. The *norms* of that institution are of a cultural nature, while its *organisations or networks* have a social nature and sustain the institution's *function*. As already explained in Chapter 3, these social systems constrain/support the actions of individuals and, which is relevant for this discussion, most of the time they comprise a distribution of *asymmetric decision-making sets*.

In firms, this is a condition of its functioning, which makes them a hierarchical structure reproduced by specific mechanisms of authority (Ankarloo and Palermo, 2004). It is important to acknowledge that, besides the integrative role of institutional norms, the social functioning of markets is also dependent on different kinds of power (power to act, associated to a 'decision-making set' attributed to an individual, frequently related to his wealth; power over somebody, where the 'decision-making set' attributed to a given individual conditions another individual's goals or 'decision-making set'; constraining structures; systems of power). Relevant to the present discussion is the fact that a "power over somebody" takes different forms, whether in the domain of the firm ("authority") in organising human work, or in the domain of exchanges (processes of appropriation) in the so-called imperfect markets where it is labelled 'market power'. Thus, in its neglect of power NIE certainly belongs to the economics orthodoxy.

4.4.3 Markets, knowledge and algorithms

In this subsection I approach two views of markets that, exploring different paths, share important assumptions to which I oppose in this thesis. A brief discussion could help to make my understanding clearer.

To discuss the *first approach* I begin with a paper by Potts (2001) entitled "Knowledge and markets". Meanwhile, these ideas have been developed in other papers such as (Dopfer and Potts, 2004b), (Dopfer *et al.*, 2004), and

¹⁸³ See (Schutz, 1995) for an analysis of power in markets with an emphasis on the idea that people do *not* meet as equals in exchanges.

more recently in the book "The General Theory of Economic Evolution" (Dopfer and Potts, 2008). Because, in my view, the authors build on problematic assumptions about human beings, knowledge, and social reality, my comments will concentrate on epistemic and ontological issues.

Potts (2001) is able to present an assertive position about knowledge only recurring to Hayek's ideas, which have been formulated for the first time before the thirties of last century. Additionally, Potts invokes the respected philosopher Karl Popper. This raises serious worries because if we want to discuss knowledge today we cannot ignore the advances in the cognitive and neurosciences of the last decades (see for instance Freeman, 1999). Further, an invocation of Popper as an authority, almost as if philosophical reasoning about knowledge stopped there, is scholarly rudimentary. This is not a lateral issue because the understanding of knowledge proposed by Potts is no less than the *foundational concept* of a new 'general theory' of economic evolution (Dopfer and Potts, 2008).¹⁸⁴

Dopfer and Potts' (2004a) propose of an ontology for economics, which admits three levels: the macro and the micro levels are linked to a meso level "made up of knowledge in the form of meso rules" (Ibid, 8). The authors define a (general) *rule* as systems of *associations of an informational kind* between empirical entities, features common to the "actualisations" of the rule in the individuals. More specifically (Ibid, 10),

when we conceive of an economy as an ensemble of these rules, we are doing macroeconomic analysis. When we focus on the carriers of these rules and the processes of adoption and adaptation, we are doing microeconomic analysis. And when we focus upon the evolution of a rule ... then we are principally doing mesoeconomic analysis.

Such understanding of the human being as "carrier of rules", or a "*rule-making* and *rule-using* animal" (Dopfer, 2004) is based on the well-known analogy between brains and computers, common to both symbolic (Herbert Simon) and connectionist models (John Holland) proposed in Artificial Intelligence literature, which have been strongly criticised in the last decade (Bickhard and

Potts distinguishes *knowledge* and *information* but his reasoning about the issue is so disconnected from the literature about the subject (actually no references are provided) that I prefer not to comment it. A detailed elaboration may be found in (Bateira, 2006).

Terveen, 1995; Lakoff and Johnson, 1999). This algorithmic view is consistent with the authors' highly problematic geneticist reductionism: 185

economic agents are made of biological rules, which govern not only an organism's physical development, but also affect social behaviour and preferences (Dopfer and Potts, 2004b: 199)

A reductionist stance about the human nature is also evident in Dopfer's admission of an *epiphenomenal status for the mind*, both implicit in his extended discussion of brain structures and functions (Dopfer, 2004: 183-185) and explicit in the identification of 'emergence' with the dubious term 'supervenience': "economic rules supervene on economic agents just as social agency supervenes on biological agency" (Dopfer and Potts, 2004b: 211). 186 Further, in a clear case of epistemic fallacy, 187 an ontological discussion about social realities such as markets is converted into an epistemological issue: "what in epistemology is called knowledge, in ontology, computer science, mathematics and evolutionary economics is called a 'rule' (Dopfer and Potts, 2004b: 198). 188 Indeed, for Dopfer and Potts rules are pervasive; besides cognitive rules commanding human mind and behaviour, there are behavioural and blueprint rules that make up social realities such as technology, firms or markets (Dopfer, 2004: 181).

Unfortunately, the authors want to account for human behaviour, personal knowledge and social reality by recurring to a metaphor already discredited by contemporary sciences. *Pace* Dopfer and Potts, not only human nature is wrongly captured by any kind of computational view, be it symbolic or connectionist (Latsch, 2003), but also social reality is not adequately captured by their "bimodal ontology". The latter is unable to overcome an atomistic understanding of human beings and distinguish between an interactional and communicational level (micro) and the multi-level realm of social relations-

¹⁸⁵ See also the following passage: "The beauty of the neo-Darwinian model is that the entire process of biological evolution can be expressed on the basis of a single rule-type – the gene" (Dopfer, 2004: 180).

¹⁸⁶ How the person could have causal autonomy is not explained.

¹⁸⁷ About the concept of epistemic fallacy see Bhaskar (1975). For a friendly critique of critical realists' epistemological statements see Cruickshank (2004).

¹⁸⁸ See the following statement: "an economic system is made up of knowledge in the form of meso rules. Rules are the elements of knowledge in the form of a structure and a process. The rule ontology of knowledge extends across many economic concepts" (Dopfer and Potts, 2004a: 8).

¹⁸⁹ As put by Dopfer and Potts (2004a: 9-10): "a rule is both an idea and an actualization in matter-energy form. Bimodality is between the idea mode (form/information) and its physical realization (matter-energy)."

structures-systems, *plus* the cultural entities of the system of norms, *all emerging from those interactions and communications*.

Actually, the authors turn into social entities whatever they take as properties of 'rules in the minds' of individuals. They fall into an essentialism completely disconnected from the sociological research about the "generative" properties of human interactions (Sayer, 1997). According to the Interactionist epistemology that I adopt in this thesis, the proposed 'rules' cannot be taken as instructions conveying information about the appropriate behaviour of individuals. In a critique that also applies to Dopfer and Potts's research programme, Dupré (2001a) and Cartwright (2001) have convincingly argued that the machine metaphor, even if it is a cybernetic one, is not adequate to our present knowledge of both human nature and social reality. From an 'emergent person' point of view (see 2.5.2), and a multi-level ontology of the social realm, Dopfer and Potts's ontology (2004a: 10) is clearly undermined by a strong interdisciplinary convergence of views.

I am conscious that the analysis in terms of "micro-meso-macro" levels could be invoked to argue that the idea of *emergent levels* have been integrated. However, the argument lacks credibility because the concept of emergence is absent in crucial passages of (Dopfer *et al.*, 2004). ¹⁹² For instance, it is stated (Ibid, 267, 271):

The essential point to grasp here is that macro is not a behavioural aggregation of micro, but, rather, it offers a systems perspective on meso viewed as a whole. Similarly, micro is not the reduced essence of an economic system; it is a 'bottom up' systems perspective on meso when viewed in terms of its component parts. The economic system is built upon meso; micro and macro are two perspectives ...

Meso change is the core of evolutionary economic processes, and the generic meso dynamic is called a meso trajectory.

In these passages, as in the rest of their works, the word 'systems' is used with a vague specification of its meaning. It is not always clear if 'systems' really mean "self-organizing complex systems", and there is no discussion about the problems that the transfer of such a concept into the social realm could bring. The absence of any reference to the literature that today

¹⁹⁰ Note that "if [social] rules are determinants of actions, the causal distance is very great and the underdetermination immense" (Sigmund Koch quoted in Martin, 2005: 213).

¹⁹¹ For another example of ontological and epistemological misunderstanding in the discussion of social rules, and their relation to individuals' behaviour, see (Lazaric, 2000).

¹⁹² Runde (2009: 374) takes note of, and points to, a contradiction in the assumed "generic methodological individualism" proposed by (Dopfer and Potts, 2008).

discusses the subject is puzzling (see Byrne, 1998; Eve *et al.*, 1997). Moreover, in self-organising complex systems, the articulations between levels of reality cannot be treated as an epistemic issue, a question of "perspectives", as it is stated. It is about the ontology of emergent levels and the deep nature of sociocultural systems. In my view, Runde's (2009) review of this research-programme is still a charitable one.

The *second approach* discussed in this sub-section is a research-programme proposed by Mirowski (2007), still in its beginnings. As he put it in a previous paper, "we shall maintain that regarding markets as a species of computational device would actually foster a viable and rich evolutionary economics, one encouraging both mathematical rigor and historical relevance, yet simultaneously avoiding the more mechanistic aspects of conventional neoclassical theory" (Mirowski and Somefun, 1998: 329). Despite the importance of the research about markets provided by economic sociology in the last decades (Fligstein and Dauter, 2007), Mirowski preferred "the technical engineering literature", more precisely the "mathematics pioneered by John von Neumann, and now taught as basic computational theory" (Mirowski, 2007: 211). Building on this literature, Mirowski assumes the definition of "a market as a formal automaton", in brief a "markomata" that performs "an integrated set of algorithms" that correspond to market functions and run in a computer.

In fact, the functions addressed by Mirowski's markomata only refer to the distribution and appropriation processes. His understanding of markets *excludes production and use*, even if we know that the characteristics of the exchange process crucially depend on the nature of what has been produced and the use it will have. In doing so, Mirowski excludes from his "markomata" model a crucial source of market change, the innovation that occurs in the production and in the use processes. Actually, "markomata" excludes all innovation, for to model market operations in terms of algorithms, it must leave out crucial aspects of psycho-socio-cultural life: human emotions involved in the execution of the work, personal interpretations of the tasks to be made, creativity and responsibility to solve unexpected problems, passive resistance to fiat, power struggles, strikes, etc. These limitations in Mirowski's work are even noticed by a non-Institutionalist such as Kirman (2007: 292) who states:

Those who have espoused the institutional economics approach would argue that the social structure and history of market features are an essential part of understanding the evolution of actual markets. If it is the case that a large part of the environment is not susceptible to being represented as a calculating algorithm then we are left in difficulty.

We know that the ultimate sources of society's change are human beings, who are *intrinsically relational* rather than algorithmic machines, but Mirowski cannot integrate in his markomata truly human interactions. The crucial problem with his research programme is that *markets are sociocultural realities*; they are part of the economy and, as such, they have an institutional nature. Both firms and trade organisations (social systems) and the institutional norms (worldviews, business models, values) that make up markets bear qualitative dimensions, emerge from, and co-evolve with, the social life of human beings. These are historical processes that cannot be accounted for by algorithms.¹⁹³

Moreover, Mirowski is silent about the particular nature of the "fictitious commodities", for instance labour. As one of his critics commented, "any theory of market evolution must account for the unique nature of labour power as a commodity. Unlike others commodities (and outside of a society based upon slavery), labour power as such, is not produced and sold as a commodity by profit-making enterprises" (Juniper, 2007: 273). Therefore, having failed to recognise the emergence of a sociocultural reality irreducible to human beings' interactions and communications, in Mirowski's analytical framework "the communicative, semantic, and ethno-emancipatory dimensions of social processes are inevitably reduced to those of maintenance and improved efficiency of automated processes of encryption, transfer, and decoding of information" (Juniper, 2007: 281). 194

To conclude, I notice that the two approaches above discussed share a similar understanding of human beings. 195 Both have a *computational*

¹⁹³ Arguing for the extreme complexity of human nature, Dupré (2001b: 185; emphasis mine) states: "Complexity in this context is not just a matter of very difficult sums that we do not yet know how to solve, but the concurrence of different kinds of factors, each of which may well be complex in this same sense, that we do not know how to fit. Moreover, there is no reason to suppose it is even possible to fit them together in the systematic, even algorithmic, way that is sometimes assumed."

¹⁹⁴ As Juniper (2007: 272) acutely notices, "Mirowski falls into the trap of embracing yet another form of Laplacian reductionism, albeit through the adoption of an evolutionary cybernetics rather than a mechanistic dynamics."

¹⁹⁵ Note that an integration of both approaches could allow "*methodological individualism* to be upheld without compromising the potential application of established modelling techniques" (Potts and Morrison, 2007: 310-311; emphasis mine).

understanding of mind and knowledge that I have criticised in detail elsewhere (Bateira, 2006) and both run into problems by lack of an emergentist understanding of sociocultural systems. Therefore, it is not surprising the idea of a possible integration of these streams of research. Firstly, as a hypothesis: "So, let us suppose we can make that leap to an ontologically robust and empirically rich computational taxonomy of market forms that ultimately reduces to the diverse rules of markets rather than the preferences or rationality of agents" (Ibid. 308). Finally, while taking some distance from Mirowski's elision of human agency, comes the invitation: "Mirowski's markomata framework is eminently workable as a general analytical framework for economics" (Ibid. 312). Obviously if placed within, and adapted to, the "micro-meso-macro" General Theory of Dopfer and Potts (2008), as the bulk of the comment shows.

My final word about these two approaches, none of them Institutionalist, is to remind that *markets are open systems*; they cannot be treated as if they emerged only through market agents' exchanges in a "spontaneous" process of 'knowledge discovery' à la Hayek. States always play a role in markets' emergence and in their maintenance (Fligstein, 1996), which does not make them less spontaneous in the sense that, beyond and above the plans of entrepreneurs and bureaucrats, there always occur *unexpected effects* that make the emergent result different from the initially intended (Pierson, 2000). However, both approaches *neither* acknowledge the importance of the power always present in state-market interactions, *nor* the less visible but no less important connection between power and knowledge (Juniper, 2007). These two points make a major difference to my thesis in respect not only to the emergence and nature of markets *per se*, but also to the motion of the market system and the overall economy, as it will be discussed in the next chapter.

Chapter 5

Markets and economic evolution

5.1 Introduction

Thorstein Veblen, the founder of Original Institutionalism, has not discussed firms and markets in detail; his concept of 'institutions' was enough vague to incorporate both. His understanding of economic evolution, strongly inspired by the work of Darwin, emphasised the non-teleological nature of sociocultural motion against the neoclassical idea of a tendency to equilibrium. In some sense this emphasis lead him to overlook the power of human agency to change organisations and society. He acknowledges it, but his analytical focus was the long term. He paid more attention to the destabilising effects of technological change, and to the habits moulded by 'institutions', and the correspondent process of overall selective adaptation translated into economic change.

Differently from Veblen, John Commons emphasised "the human will in action" and saw social processes as results "intended or unintended, of purposeful action of individuals and collective actors" (Bazzoli, 2000: 67). While Veblen's close connection with Darwin's thinking has inspired the adoption of a 'population model' of sociocultural evolution, Commons focus on human action and the exercise of power led him to avoid the process of 'natural' selection associated with such model. His evolutionary process was one of 'artificial' selection. This divide in the first generation of Institutionalist economists has resurfaced in the last decade following the renaissance of Original Institutionalism since the eighties of the twentieth century.

In the second section of this chapter I discuss the different stances of today's version of the above mentioned debate and argue for a Naturalist perspective about economic evolution that, in my view, overcomes and goes beyond the dispute. As I understand it, the evolutionary process at the sociocultural level

of Nature has specificities that require a shift of concepts and vocabulary; rather than 'evolution', what is at stake is the 'history' of human societies. The third section recalls the contributions of Schumpeter and the Austrian school, which are more in line with my claim about sociocultural specificity, and then I develop an Interactionist model that frames my historical understanding of markets' motion. To prepare the introduction of this model I present a multi-dimensional concept of 'time' and discuss the limitations of the 'path dependence' model so much praised in the Institutionalist and evolutionary economics literature.

5.2 What is economic evolution?

5.2.1 A debate on the good analogy

As shown in the second chapter of this thesis, Veblen and Hayek's contributions focused on the long-run dynamics of institutions. In vague terms, both took Darwin's framework as a reference in their analysis of sociocultural evolution. On the contrary, Polanyi adopted a purposeful-change perspective by focusing on political struggles for different projects addressing markets and the way they mobilised the state. It seems that this divide bears no connection with the situation of present-day Institutional economics and its main orientations.

Besides the stream of New Institutionalism that shares the core tenets of neoclassical economics, and thus belongs to the mainstream of the discipline, there is a fundamental split in economics heterodoxy on what concerns the understanding of economic evolution: (1) a strand composed by a core group that invokes the general principles of Neo-Darwinism to use a meta-theoretical scheme, and invoke an affiliation to Veblen, and by a number of economists that (more or less) diverge on the interpretation and use of that scheme, and also draw on different legacies; (2) a second strand argues for a concept of evolution mostly inspired by the physics concept of self-organising open systems, attribute to Marshall a crucial forerunning intuition, and draw inspiration mainly from the non-equilibrium economics of Schumpeter.¹⁹⁶

¹⁹⁶ Acknowledging the above-mentioned heterogeneity, Foster (2000: 312) regrets that "following the lead of Nelson and Winter (1982), many post-Schumpeterian evolutionary

Having in mind the disciplinary object of economic phenomena, the two strands reject immediate analogies with biological evolution and recognise the need to build a conceptual scheme at a sufficient level of abstraction in order to frame scientific research in different domains. Accordingly, the first strand proposes a conceptual scheme, firstly under the label of Universal Darwinism and later 'generalised Darwinism' (GD) (Aldrich et al., 2008; Hodgson and Knudsen, 2006), which is constituted by a set of general principles (variation, replication-inheritance and selection)¹⁹⁷ that, "along with essential and auxiliary explanations specific to each scientific domain, may apply to a range of possible mechanisms" (Hodgson and Knudsen, 2004: 284).

On the other hand, authors of the second stream see GD as "an abstract reduction of the Darwinian principles and, as such, still domain specific" (Witt, 2003: 12). Therefore, they argue for a more general definition: "Evolution is the self-transformation over time of a system under consideration. In this definition, the term 'transformation' means a process of change governed by regularities. The prefix in 'self-transformation' points to the endogenous sources and causes of novelty" (Ibid, 13). Obviously, the validity of such schemes is dependent on their assumptions about human nature, on the ontological stance about sociocultural systems, and on the explanation of the micro-macro linkage. From my point of view, these conceptual schemes/principles suffer from serious weaknesses and inspire theoretical choices that I think are inconsistent with a social science that takes seriously the interdisciplinary dialogue.

In the formulation proposed by Hodgson and Knudsen (2004), the scheme of GD seems problematic on various accounts. Despite the invoked higher level of abstraction, the scheme used in the analysis of firms and markets has a

economists have tended to rely upon the biological analogy of natural selection, either of Darwinian or Lamarckian type."

¹⁹⁷ The Darwinian scheme involves three processes: *variation* occurs among members of a population of organisms (or species); some variation is *replicated* and *inherited* by organisms' offspring; organisms (more or less adapted) are differentially successful in reproducing, which leads to changes in the distribution of the different 'types' of organisms in the population (*selection*).

¹⁹⁸ Hodgson and Knudsen (2004) present an application of GD that attempts to deepen the contribution of Nelson and Winter (1982). An evolutionary explanation that highlights the selection effects of market competition, and observes the structural change that it produces in the market – its evolution – is proposed by Metcalfe (1998). A more elaborated model that accounts for the interdependence between the (guided) variation among competitors, developmental processes in firms, and market selection is described in Foster and Metcalfe (2001b).

structure provided by Neo-Darwinism, which is biology's mainstream paradigm.¹⁹⁹ In fact, although Hodgson and Knudsen (2004) integrate in their framework the idea of inheritance of socially acquired characteristics, usually imputed to Lamarck, their analysis of the replication-inheritance process is analogous to the geneticist, Neo-Darwinian explanation. Accordingly, in (Hodgson and Knudsen, 2004) firms are considered social realities but, at the same time, they are treated in 'anthropomorphised' terms;²⁰⁰ firms are supposed to have "behavioural capacities" (routines) that "involve knowledge and memory" (Hodgson and Knudsen, 2004: 290) thereby at least implicitly accepting the problematic idea of 'collective knowledge'. Further, routines are treated as the organisations' analogues of genes, that is, as (social) replicators: "routines replicate from group to group and from organization to organization" (Ibid, 291).

On this point I note that the term routine has been introduced in the human and social sciences by the cybernetics-based thinking of Herbert Simon, and popularised in economics by Nelson and Winter (1982). It belongs to the dominant school in psychology usually labelled 'cognitivism'—the brain is like a computer, mind its software, and knowledge the outcome of algorithmic operations—which has been considered the 'modern dualism' version of bodymind articulation (Cilliers, 1998; Lakoff and Johnson, 1999). For this reason, in the following discussion I assume that cognitivism is a problematic option in what concerns the understanding of mind and cognition. As argued previously, only a developmental interactivist understanding of human nature (and hence of cognition) is consistent with the results of current research in different sciences. Adding to this fundamental inadequacy at the biological and psychological level, a Neo-Darwinist understanding of sociocultural evolution adds new and important problems that I will discuss in the following.

Hodgson and Knudsen (2004: 291) recognise some difficulties in the use of the GD scheme, namely in replicating routines. Rather than a matter of 'knowledge transfer', as they see the replication of routines, what occurs is a

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¹⁹⁹ Here I take Hodgson's (2004b: 53) definition of Neo-Darwinism: "A doctrine denying the possibility of the (genotypic) inheritance of acquired (phenotypic) characters by individual organisms in evolutionary processes." For theoretical and empirically supported critiques of Neo-Darwinism formulated in the eighties of last century, see Depew and Weber (1989) and (Ho, 1988).

²⁰⁰ "Just as individuals have habits; groups have routines. We regard routines as the organizational analogue of habits" (Hodgson and Knudsen, 2004: 289; emphasis mine).

much different process, one of interactive 're-construction'. It must be said that "the transfer of technologies, management procedures, corporate multidivisional structures, accounting conventions and much else" (Ibid, 291) is always a 'local' interactive process. This means that persons involved, physical infrastructure, organisational setting, and higher-level social structures *contingently determine firm specific processes*. Indeed, as Layder (1997: 82) reminds, "in speaking of [social] domains we must be careful not to think of them as static things or entities – for they are intrinsically social processes whose dynamism derives from the productive and reproductive effects of social activities."

To see this more clearly, consider the situation of a firm that recruits a competitor's manager (or adopts a strategy proposed by a consultant) that has been successful in another firm of the same industry. Anyone that has business experience knows that this is no guarantee of success for the host firm; the interactions that occur in the latter after the introduction of organisational changes will give rise to new 'routines'; I mean, new social relations, not replications of the original ones. What I want to stress is that the rules adopted within an organisation are part of a social process in ongoing reconstruction, which means that they are at the same time reproduced and transformed. Therefore, rules cannot fulfil the gene-inspired Neo-Darwinian criteria of "copying fidelity"; routines do not have essences that could be copied, although 'rules' when understood as 'public knowledge' exist. But their 'downward causation' will have different outcomes according to the social setting where they are used. Ultimately, Witt (1999) converges with my argument when he states: "Different people involved in the same routines may mean different developments. Subjective and situational factors crop up again and determine the decisions actually produced within routines." Therefore, those like Hodgson and Knudsen (2004) who have followed Nelson and Winter (1982) made a theoretical choice that rests on a problematic understanding of human nature and sociocultural reality, and thus overlook the mechanisms by which *creativity* and *emotions* are built into human interactions giving rise to social relations and their dynamics.²⁰¹ The idea of routines being copied from firm to firm is at odds with the emergentist view of sociocultural reality, which

²⁰¹ This topic is closely connected with the work of Feldman (2000) about the *intrinsic* dynamic nature of routinised behaviour, which Hodgson and Knudsen (2004) do not refer.

is a legacy of the Original Institutionalism also invoked by Hodgson and Knudsen.

Hodgson and Knudsen (2004: 294) discuss the selection of routines within firms but it is far from clear how they see different routines competing for resources within the same functional department of the firm. Typically, in the same moment there is no population of competing routines for the same task in a department of a firm, and it is imaginable only in very circumscribed domains that a successful routine in a specific department (say accounting) could be selected and applied in all departments of the firm.²⁰² In brief, the gene-inspired view of market competition as an evolutionary process that selects firms differentially adapted, and therefore selects for routines (replicators) that are passed on, is in fact an inadequate analogy.²⁰³

The difficulties extend to other aspects of the GD scheme, which takes fitness to environmental 'pressure' (a situation of scarce resources) as the core mechanism of evolution, independently of the processes that explain individuals' ontogeny and their differences, which is usually called 'blind variation'. Certainly, some evolutionary economists (but not the hard-line of the stream) have well understood that evolution (at least) in the social realm intertwines variation and selection processes through relations of feed-back and feed-forward (Foster and Metcalfe, 2001a). The fact that we are dealing with individuals guided by meaningful interactions and by projects about their environment makes creation of variety largely targeted, future-oriented and ecologically constructed (Jablonka, 2000). In fact, Hodgson and Knudsen (2004: 283) also recognise this specific character of sociocultural evolution and formulate their stance as follows: "even if there were a very different system of replication, including one that allowed the 'Lamarckian' inheritance of acquired characters, a coherent account of the evolutionary process would still require key elements of the Darwinian theory. ... such Lamarckism requires Darwinism to complete its explanations, and is not an alternative to it." More specifically, "insofar as organisms are purposeful, this capacity too

²⁰² Hodgson and Knudsen (2004: 294: emphasis mine) state that "some selection may result from internal managerial action, due to perceptions of the relative efficiency of different routines ... By internal or external mechanisms, some routines are copied more than others.'

²⁰³ The use of Neo-Darwinist 'variation' and 'inheritance' concepts in the study of institutions (sociocultural systems such as the economy, the state or science) cannot convince. These systems have a long history based on adaptive changes but they never have given rise to entities of the same nature (new interactors) conveying mutated routines (new replicators).

has evolved through natural selection. ... Hence overall, Darwinism is a more general and powerful theory than Lamarckism" (Hodgson, 2004b: 54).

However, the introduction of a Lamarckian component in the GD scheme has not cleared the omission of the mechanisms that generate variety in the population of firms, nor has it connected in a co-evolutionary way the firm to its environment (Volberda and Lewin, 2003). This is confirmed in (Aldrich *et al.*, 2008: 590, 591; emphasis mine) where we can read:

Crucially, Darwinism focuses our attention on the possible mechanisms through which variety is preserved and *created*. ... In these cases the new environment, and the (relative) isolation of a group from the majority, create *new opportunities* for variation.

After the initial suggestion that "variety is created" follows the recognition that Darwinism only sees "opportunities" for variety; the causal mechanisms that create novelty are outside the GD scheme.²⁰⁴ Foster (1997: 433) perceptively noticed this fragility when he states that GD "continues to use the selfish gene as a biological analogy. The gene has simply become 'cleverer' in adapting to experience." Neo-Darwinism, even when GD is complemented with the much problematic Evolutionary Psychology (Vromen, 2001),²⁰⁵ leads Institutional economics into serious difficulties if we want to explain market processes, even more than Neo-Darwinism already faces in the biological and psychological realms (see next sub-section).²⁰⁶

I proceed with the discussion of the second strand in evolutionary economics, the 'self-organisation' approach mostly argued by Foster (1997; 2005b). This author has argued that there is only one process common to all levels of reality, the self-organisation of non-equilibrium, thermodynamically open systems. These processes, which have been studied in physic-chemical

²⁰⁴ "Darwin (1859) was aware of this. In Chapter 4 of the *Origin of Species*, he reminded his readers that, 'the term Natural Selection implies *only the preservation* of such variations as arise and are beneficial to the being under its condition of life'" (Ho, 1988: 120; emphasis mine).

²⁰⁵ For Evolutionary Psychology (Cosmides and Tooby, 1994: 328) the mind is a manifestation (an epiphenomenon) of brain activity, which is of an algorithmic nature. Obviously, everybody accepts that the mind depends on the activity of the brain; but can we ontologically reduce the mind to neurophysiological activity? In this respect, it is striking in Vromen's (2001) discussion the absence of any reference to 'emergence' as a relevant concept to frame the understanding of both human nature and institutions.

²⁰⁶ For instance, the Darwinian "principle of heredity", which inspires the analogous "doctrine of continuity" (Hodgson, 2004b: 96), admits two types of traits: some "inherited" from parents through genes; others "acquired" from the environment. However, developmental research *rules out such dichotomy* because it redefines the nature and role of both genes and environment. See (Moore, 2003) and (Bateson, 2001) about this point.

systems and gained wide notoriety with the work of Ilya Prigogine (Prigogine and Stengers, 1979), are also present in the biological domain in the particular case of autopoietic systems studied by Maturana and Varela (1980). According to Foster (1997: 440), the Hayekian concept of 'spontaneous order' corresponds to self-organisation processes at work in social systems. About the latter, Foster puts forward that the interactions within the system, and of the system with the environment, are made of knowledge: "The deliberate acquisition of knowledge ... is the hallmark of advanced economic activity. ... Economic organizations, like their biological counterparts, export entropy in structures that embody obsolete knowledge. However, this need not involve the sorting processes which tend to come into play in biological selforganisation" (1997: 443). Therefore, the evolutionary scheme presents two core features: economic systems emerge from human interactions based on the "skilful acquisition and imaginative use of knowledge" (Ibid, 443); the evolution of economic systems is given in their irreversible, non-linear trajectory in history, which includes periods of structural change.

I find a crucial problem in Foster's evolutionary scheme based on the principle of universal self-organisation (US-O). Despite the evolutionary emergence of the human cognitive and communicational capabilities, and their centrality to sociocultural dynamics, Foster overlooks these roots and goes to state: "once we abandon biological analogy in favour of an economic self-organisation approach, as outlined, then we are no longer interested in the microscopic details of selection mechanisms" (Foster, 1997: 444). So formulated, this is as if the macro-level could emerge *only* out of self-organising processes, while its micro-units depend on *both* self-organising *and* Darwinian processes. Therefore, we are faced with a scheme that makes social systems evolve according to processes *less complex* than those that underlie the evolution of the entities that give rise to them. Foster's contribution ignores that not only humans but also other living systems, and possibly physic-chemical systems as well, *all develop according to self-organising processes that appear intertwined with selection of variant resources or paths* (Weber and Depew, 2001).

Moreover, Foster does not see that only allowing for such intertwining are we able to understand the emergence and development of human cognitive processes and human intelligence upon which human sociality and sociocultural systems emerged, as convincingly argued by Christensen and

Hooker (1999) in their critical assessment of D. T. Campbell's model of 'variation with selective retention' (VSR). In these authors' formulation, "an SDAL [self-directed anticipative learning] process has VSR aspects to it, but per se this is extremely uninformative. It is precisely the way the generation of variation (in the form of anticipative process modulators) and selection (the capture constraints—the ability of the system to recognize useful information) is modified by the interaction process that is important to its learning capacity" (Christensen and Hooker, 1999: S247; emphasis mine). In brief, developmental processes based on living systems' interactions with their environment do incorporate variation and selection processes, and it is not evident why the sociocultural realm should escape to such pattern.

Despite avoiding an explicit analogy with the physic-chemical level, Witt (2003: 13) shares with Foster (1997) the view of evolution as "the self-transformation of a system under consideration". Emergence and dissemination of novelty constitute core "domain-unspecific features of evolution" (Ibid, 13).²⁰⁷ After having presented his own formulation of the US-O scheme of evolution, Witt seems to acknowledge the above mentioned problem of the *micro-macro* disconnection in Foster's scheme: "there is no doubt that the human species is a result of evolution. Yet, the human economy is, at least in its modern forms, hardly explicable in terms of the theory of natural selection" (Witt, 2003: 3). The solution that Witt proposes— "a central ontological assumption" of his work (Ibid, 15)—is as follows: "Somewhere in the history of human kind there is, thus, a point where the power of Darwinian evolutionary theory for explaining (economic) behaviour ends. But evolutionary change continues beyond that point - only with different means and in other forms" (Ibid, 3). According to Witt (2003: 15-16) natural selection is historically antecedent to man-made, sociocultural evolution and "in this sense there is, thus, also an ontological continuity despite the fact that the mechanisms and regularities of cultural evolution differ from those of natural evolution. (Both kinds of evolution of course share the few, abstract evolutionary principles [US-O] outlined in the previous section.)"

²⁰⁷ In a critical observation about the absence in (Foster, 1997) of emergence *internal* to evolving systems, Witt acknowledges that "self-organization models are also subject to the epistemological limitation ... they still have to leave open what actually emerges" (Witt, 2003: 14).

In fact, Witt's (2003) contribution not only does not question the problematic assumptions of Foster's (1997) US-O scheme but also adds a new weakness with his particular understanding of cultural change. Witt (2003: chap. 7) accepts Neo-Darwinism outside the sociocultural domain and argues that human biological evolution stopped in a remote period of history after which human beings appear to have acquired the present bodily characteristics (which includes genes and brain architecture); since then unfolds the history of mankind also named cultural evolution.²⁰⁸ This is based on the 'doubleinheritance' view (Boyd and Richerson, 1985) of human nature, which also underlies Hodgson's (2004b: 423) discussion of habits supported by instincts. The latter are seen as 'programmes' that "have slowly evolved over millions of years" and form a biological basis for the acquisition of habits themselves also inherited from past generations.²⁰⁹ The problem with this view of human beings, understood as the outcome of two major 'information' systems (genetic, cultural), is that it has been strongly criticised by solid arguments coming from scholars of different sciences (Ingold, 2000a; Martin et al., 2003; Oyama et al., 2001a). But Witt is not alone (see Hodgson, 2004b; Vromen, 2004) in his unawareness of the 'science wars' that Evolutionary Psychology has raised among biologists and philosophers of biology (Segerstrale, 2000).²¹⁰

In the rest of this section I will argue that this 'double inheritance' dichotomy, as well as the analytical separation between human evolution and sociocultural history, is ill conceived. But, before that, three central issues in the above presented debate should be clarified: 1) the argument that we need a 'population thinking' to account for the emergence of variation;²¹¹ 2) the rejection by the proponents of GD of the critique that they are making a biological 'analogy'; 3) the ontological dichotomy ('monism *versus* dualism')

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²⁰⁸ About the evolution of human mind and preferences Witt (2003: Chapter 7) refers to the sociobiology literature and implicitly subscribes to the Evolutionary Psychology of Cosmides and Tooby (1987). For a convincing critique of Evolutionary Psychology, see (Dupré, 1987; 2001b), (Lloyd, 1999), (Panksepp and Panksepp, 2000) and (Lickliter and Berry, 1990).

²⁰⁹ Griffiths (2002: 71; emphasis mine) states: "the concept of innateness conflates a number of independent biological properties and is thus *a confusing and unhelpful notion* with which to understand behavioral or cognitive development." See also (Bateson, 2001).

²¹⁰ Vromen (2007) discusses the concept of 'consilience' of knowledge in the different sciences proposed by the biologist Edward O. Wilson. I agree with his statement that "conformity should be sought only with solidly verified knowledge in other disciplines" (Ibid, 47); precisely, this is an important cause of Evolutionary Psychology discredit among so many biologists.

²¹¹ In Hodgson's (2004b: 96) words, "the understanding of any item must also consider the population of similar entities in which that variation is present or possible."

used by Witt to classify different streams within evolutionary economics. I discuss below these items in the reverse order.

Witt (2008: 550) assumes that there are two modalities of ontology used by evolutionary economists: the monist ontology, which he sees as providing continuity between the biological domain and the economic domain, as suggested by the modern sociobiology; the dualist ontology, which he equals to the rejection of that continuity, and associates to the theories of economic evolution that seek sociocultural explanations without explicitly assuming the above mentioned continuity. The dichotomy is thus generated by the relevance of the 'principle of continuity', which is based on Evolutionary Psychology through its geneticist explanations of brain modularity and their connection to important aspects of human behaviour. Unfortunately, this is a much problematic theory and institutional economists would better ignore it (see references in footnote 72). Instead of overemphasising the biological continuity, we should acknowledge both the *relative* continuity and the very specific novelty of human beings as 'persons'; the sophisticated biological nature of persons and their distinct capabilities in multiple domains are most visible in their intelligence and linguistic capabilities. To study sociocultural evolution we need not to choose between monism and dualism. We have the alternative to acknowledge that the emergent levels of Nature are organised, and change, according to specific principles that have emerged upon evolutionary previous ones. The ecological emergence of human beings as persons is alien to the geneticist Evolutionary Psychology. In brief, I state that economic processes can only be studied according to principles of sociocultural change inspired by a multi-level emergentist ontology, something that is beyond the dichotomy provided by Witt (2008: 555).

Now I turn to Hodgson's understanding of the analogy. According to Bailer-Jones (2002), the analogy has an hybrid nature as it bears 'positive' and 'negative' analogical aspects. The 'realism' of the analogy is *relative*, it depends on the weight of the commonalities existent between the *relations* internal to one system (biological system) and the *relations* internal to a system of a different kind (sociocultural system). Therefore, the epistemic status of the analogy should be placed between the 'isomorphism' and the 'metaphor'. Note that both systems and their components are different, and yet there is an isomorphism when *the relations* that structure each system are

of the same kind. On the contrary, in the metaphor there is a large semantic distance between these *relations*, which makes the metaphor a rather vague comparison, a tool for the imagination of a researcher looking for an insight into the reality he is studying. In brief, what is under scrutiny is not the nature of the systems (e.g. biological versus sociocultural) or their components; it is the relative weight of the commonalities between the *relations* that constitute them.

Now let us look to (Aldrich *et al.*, 2008) and see how, defending GD, the critique of making the analogy between the sociocultural and the biological domain is rejected. The generalised Darwinian principles of variation, selection and inheritance are argued to apply in the sociocultural level of reality because, similarly to the biological level, it also has "complex population systems"²¹²:

In this manner, the common ontological features of all complex population systems, including in nature and human society, are established, without ignoring the huge differences of detail between them (Ibid, 353).

... the idea of generalizing Darwinism is not about analogies and does not depend on the proposition that the detailed mechanisms of social and biological evolution are similar (lbid, 591-592).

As we can see, the fundamental reason to reject the critique that GD scheme builds on the analogy between the biological and the sociocultural systems is that the *entities* of these systems are hugely different and their *evolutionary mechanisms* are also different *in detail*. Thus, we can deduce that, notwithstanding the differences in the details, the evolutionary mechanisms are formally similar. However, these differences are consistent with the above-given definition of analogy. The proponents of GD are indeed making an analogical reasoning, because what counts for the existence of the analogy is the *formal similarity between the principles* (the Darwinian principles) that organise the evolutionary process in both levels of reality, hence the idea of "a degree of ontological communality at a highly abstract level" (lbid, 592). On this point Witt (2008: 551) is right when he states that "the borrowing of these domain-specific abstractions by other disciplines means, of course, that they still rely on an analogy construction, albeit an abstract one."

²¹² This expression is problematic: 'populations' are merely sets of individuals while 'complex systems', when also self-organising, are sets of individuals interacting in accordance to relations established between themselves, and relating to the external environment, thereby acquiring emergent properties. These terms belong to different analytical approaches and thus cannot go together.

Finally, I argue that the 'population perspective' overlooks the systemic organisation of processes, which is pervasive at all levels of Nature. I see societies and institutions as complex self-organising, sociocultural systems whose structures are made of *organisations and norms*. Their emergence manifests in system-wide properties *arising from* internal and necessary social relations that make up roles/positions *and from* semiotic communications that give meaning to such social relations (Queiroz and El-Hani, 2006). As discussed in previous chapters, such emergentist understanding of sociocultural systems is not only consistent with the creativity of individuals but even needs such creativity in order to produce continuous change, even at the core of the reproduction of the self-organising processes that constitute these systems. Novelty is inherent in the metaphysics of process adopted in this thesis.

Contrastingly, a "population" of individuals is a concept that overlooks the *relations* that bond the entities related. To be fair, Hodgson and Knudsen (2006: 4) also refer to "entities that interact". However, interactions (even if repeated) are events at the *empirical level* while social relations *emerge* from these interactions, and thus belong to the *structural level*; they endure beyond the individuals that transitorily occupy the roles or positions that are bonded. Therefore, "population" thinking leaves out what is specific to sociocultural reality, and in fact carries an unacknowledged reductionism that Hodgson otherwise rejects.

The understanding here argued is supported by Fracchia and Lewontin (1999: 69, 70) who charge the analogies inspired by Neo-Darwinism of either "dissolving society into a collection of individuals" or making "the reduction of differential social power to the status of a subordinate variable, [which] precludes the possibility that social systems might have properties unique to them as organized systems ... This dissolution means, in turn, that social hierarchy and inequality are explained as just the consequence of the differential cultural fitness of individuals or of the cultural traits they bear, rather than, say, as a consequence of antagonistic and exploitative social relations." A parallel critique is also addressed to the theories of cultural evolution proposed by different authors (Dawkins, Cavalli-Sforza and Feldman, Richerson and Boyd, Durham) who are charged to "pay lip service to the complexity of culture" (Ibid, p. 71).

To conclude, sociocultural systems are not "populations" of (replicated and transmitted) "habits, customs, rules and routines, all of which may carry solutions to adaptive problems" (Hodgson and Knudsen, 2006: 5). Although these authors confidently state that "the type of *complex population system* that we are assuming is highly relevant for evolutionary discourse in the social sciences" (Ibid, p. 4, n. 6, emphasis mine), it seems to me that in light of the above presented discussion the concept of "complex population system" is not only eclectic but also absolutely inadequate for Institutional economics research.

After all, neither the proponents of the GD scheme, nor those of the US-O scheme, are aware that they are arguing for the 'right' analogy with the evolutionary principles of another level of Nature, be it the biological or physic-chemical. Both have not realised that the emergence of a sociocultural level brought with itself *new kinds of evolutionary principles*, which economics is supposed to study in the domain of the institution 'economy'. Does this mean that we should detach evolution at sociocultural level from evolution at the other levels of Nature? My answer is no. We only have to engage in a genuine interdisciplinary dialogue in order to establish the specificity of the sociocultural level of Nature and how, as a new level of reality, it has genuine causal powers over the other levels while emerging from them (see Chapter 3).

In the next sub-section I will show that besides Neo-Darwinism, there is in biology another theory with which Institutional economics could establish a more productive dialogue. Even so, I will argue that the very abstract commonalities that we can identify across different levels of Nature do not provide principles that could be productively applied in the study of sociocultural evolution.

5.2.2 Overcoming the debate

My aim in this subsection is (insofar as I am competent) to connect with the state of the art in biology and related sciences in order to dissolve the on going debate in evolutionary economics between a strand inspired by Neo-Darwinism and another inspired by physic-chemical complex self-organising systems, even if the latter is presented under the dressings of the Schumpeterian formulation of an economic system transforming itself 'from within'.

The first point that needs to be settled connects with the more fundamental discussion about human nature (see 2.5.2), and refers to the contemporary discourse on the role of genes, which are seen to drive human development and determine species-typical traits. The idea that we are born with evolved innate capacities (that just wait to be activated in a cultural setting) is based on the encoding view that the genome carries information from one context of development into another. And yet, Ingold (2000b: 382) draws on sound research when he states that "taken on its own, however, the DNA 'specifies' nothing. It is, after all, just a molecule, and a remarkably inert one at that."

This statement has the merit to remind evolutionary economists that the DNA is only "a reactant, and the particular reactions it sets in train depend upon the total organismic context in which it is situated. ... it is the cellular machinery that 'reads' the DNA, and that reading is part and parcel of the very development of the organism in its environment" (Ibid, 382). Criticising the view of the gene as a 'source of information', long ago a biologist (Oyama, 1988: 261; emphasis mine) stated that "any biologically interesting notion of information must be *interactively defined* ... and what is crucial is not permanence but *availability* [of resources, internal and external to the organism] *at the appropriate time*" (Ibid, 261; emphasis mine).

Because this is a central concept, and one mostly taken for granted by evolutionary economics researchers ('replicator' is the term mostly used in the literature), I think it is useful to quote at length a philosopher and historian of biology:

The principal historical baggage of the gene concept dates back to the view of genes as the basic units (the atoms) of life. But what is a gene? The fact of the matter is that molecular biologists employ a number of different definitions, and they need all of the variations (Keller, 2005: 3)

By contrast to the gene, we do know what DNA is – we can spell out its sequence, and we can observe the remarkable stability of that sequence over the course of generations. But the most important lesson we have learned is that virtually every biologically significant property conventionally attributed to the DNA – including its stability – is in fact a *relational property*, a consequence of the dynamic interactions between DNA and the many protein processors that converge upon it. The very meaning of any DNA sequence is *relational* – for the purpose of understanding development or disease, the patterns of genetic expression are what really matters, and these patterns are under the control of a vastly complex regulatory apparatus, and they cannot be predicted from knowledge of the sequence alone. (Ibid, 4; emphasis mine)

Such "relational" view of genes as interactively constructed processes-resources means that the Neo-Darwinian "replicator-interactor" distinction—and the associated idea that genes command the 'development' of an individual while the environment commands the 'evolution' of the population of individuals—has no consensual support among biologists.²¹³ "The replicator/interactor distinction is not driven by considerations of evolutionary theory. It is the projection into evolution of the dichotomous views of development" (Griffiths and Gray, 1994: 298).²¹⁴

What is under attack is the idea that the inheritance of the 'genetic material' (actually an interactive process) is the decisive cause of human development, culture being an additional but secondary cause that ultimately does not count in terms of biological inheritance. Opposing this view, an important stream of biologists claims that "the life cycle of an organism is developmentally constructed, not programmed or preformed. It comes into being through interactions between the organism and its surroundings as well as interactions within the organism" (Oyama et al., 2001b: 4; emphasis mine).

Building on this radical reformulation of the concept of ontogeny, we can extract important differences between what has been called a Developmental Systems Theory (DST) and mainstream Neo-Darwinism: a) human beings develop through multiple-level, joint determination of multiple causes, and thus it is wrong to give causal primacy to genes; b) what we inherit is much more than genes, it is a set of resources including physic, biological, human and socio-cultural entities; c) the environment is not a static reality to which individuals must fit, rather the organism and a number of resources in its environment entertain developmental processes that change over time. These processes, the developmental resources therein implicated, and the relevant environment for the organism make a complex unit labelled 'developmental system'.

"From a developmental systems perspective, [the relevant unit] is a process—the life cycle. ... Each life cycle is initiated by a period in which the functional structures characteristic of the lineage must be reconstructed from relatively

²¹⁴ According to Griffiths (1997: 425), "concepts of information transmission and programmed development turn out to be either pseudo-explanatory substitutes for real developmental biology, or applicable symmetrically to many different kinds of developmental resource."

²¹³ For a review of recent research and a clear explanation of why the 'gene' is not a structural unit, see (El-Hani, 2007).

simple resources. At this point there must be potential for variations in the developmental resources to restructure the life cycle in a way that is reflected in descendant cycles" (Griffiths and Gray, 1994: 296). That is, variations in different types of resources may occur within developmental processes.

In the DST vision the *unit of evolution* is thus the life cycle, the developmental processes that (varying more or less) in each reconstruction give rise to a stable organic form. "A population of individual developmental systems will exhibit *variation and differential reproduction* for a number of reasons. Parental life cycles mail fail to generate the full system of resources required reconstructing the life cycle. Resources generated by the activities of an entire population ... may also be scarce, or patchily distributed so that some individuals lack an important element of their developmental system. Finally, persistent resources ... may be scarce or patchy and so some individuals may be unable to re-establish the relationship to these resources that is part of their life cycle" (Griffiths and Gray, 2001: 207-208; emphasis mine). Not less important, as much as failures of development, innovative modifications in the developmental system are also causes of variety that carry evolutionary advantages.

Despite the deep conceptual reformulation proposed, DST is still able to accommodate the Darwinian notions of *inheritance* and *variety*. It also admits the possibility of *competition* for resources whenever "two or more developmental processes utilize the same resources, and there is a limit to these resources" (Griffiths and Gray, 1994: 301). Further, it also accommodates the concept of *population*, although in this case the individuals are the differentially reproductive 'life cycles'. It also acknowledges a broader environment whose changes impinge on the organism through the mediation of the "organism-referent environment", thereby leading to *adaptations*. Rejecting any teleological understanding of fitness, it is acknowledged that developmental systems "vary in their success in reconstructing themselves and [could] be *selected* on that basis" (Griffiths and Gray, 2001: 209; emphasis mine).

With this brief outline of DST I have arrived to a picture of natural processes that *intertwines self-organisation and selection at multiple levels*.²¹⁵ The life cycle is *at the same time* the unit of development and the unit of selection, the

²¹⁵ See also (Weber and Depew, 2001: 243).

former being the focus of analysis in the frame of one or more generations and the latter the focus of analysis in broad space-time scales, the evolutionary process. Rather than the dichotomised Neo-Darwinian idea of 'development *cum* natural selection', in the DST approach *evolution* "is the result of interactions in which outcomes are codetermined, or co-constructed, by populations [of life cycles] and environments with their own, often intricately related, histories and characteristics" (Oyama *et al.*, 2001 b: 6).²¹⁶

In brief, at the crossroad of different disciplines (physics and chemistry, molecular biology, ecology and psychology) it is emerging in the last two decades a new paradigm of evolution that dissolves the traditional antagonism between Neo-Darwinism and its critiques who work on self-organising complex systems and developmental biology (Griffiths, 1997). For social scientists the DST paradigm is important because it proposes *an extended concept of inheritance* that deals with the sociocultural features of the environment as developmental resources, in equal footing to biological ones.

Dissolving the entrenched dichotomies of 'nature versus nurture', the relational/interactional framework enables us to see that sociocultural elements play a central role in the generation-by-generation life cycle reconstruction that makes possible the development of an adult person and thus to see that, rather than another-reality-to-interact-with, *culture has always been part of human development*. "Culture does not "arise from" nature, nor is it "constrained" by it. ... culture is part of nature" (Weber and Depew, 2001: 249). Because cultural resources are indispensable components of each-generation-reconstructed developmental systems, as much as 'genes', Ingold (2000a: 63; emphasis mine) rightly claims: "*no information is being transmitted, genetic or cultural*. Rather, the manifold capacities of human beings undergo continual formation, re-formation and transformation within the contexts of relations between novices and relatively more experienced hands, through practice and training within an environment."

Under this new perspective the dispute (and attempts of compromise) between the 'evolutionary economics' traditions is dissolved because 'genes' do *not* carry information in any semantic sense; and thus no information is

²¹⁶ In another formulation: "The theory of evolution is the theory of the change over time of the numbers, proportions, and properties of all these things [developmental resources and interactions]" (Griffiths and Gray, 1994: 300).

'transmitted' by organisations' routines as well. Information is each time reconstructed through interactional processes specific to each context. Despite the dominant view supported by cognitivist psychology and codificationist theories of language, we do not 'internalise' social rules;²¹⁷ we develop a personal knowledge (an interpretation) about these rules with the help of material symbols. Each human being interactively develops his/her own knowledge (the 'I mean') within a community where systems of 'public' knowledge have emerged (the 'what means' or 'shared' understanding) (Christensen and Hooker, 1999).²¹⁸ Hence, social rules do not convey semantic information; they 'scaffold' a person's knowledge development, and in the process they raise 'oughtness' feelings that are attached to community's normative understandings through which individuals have been, and go on being, socialised.

As emergent entities, the so-called (social) 'rules' are best seen as cultural entities used in particular social settings; and they may be seen as resources for the reproduction of life cycles, which involve criss-crossing of causal mechanisms between the different levels and domains of systems. Further, today's rules are *not* patterns of current human interactions; *they have emerged upon past interactions* (Archer, 1995: 143-147), and are every day maintained-changed through myriad of current interactions involving "institutional structures, power relations, social conflicts, mistaken assumptions, betrayals, communicative failures, and so on, of *intentional agents*, not of 'machines for the replication of practices' (Benton, 2001a: 216; emphasis mine).

Despite my 'deleting' of the evolutionary economics debate, I conclude with a note of compromise. We should bear in mind that the purposefulness of human action, as emphasised by evolutionary economists more sensitive to the Lamarckian tradition, is *foundational* to the process of emergence-maintaining-changing of sociocultural systems. However, in the latter "there is a place for unintended consequences, contingency and impersonal forces"

For an early formulation of the interactivist-constructivist model, which dispenses with the idea of knowledge codification and its transmission through language, see Bickhard

²¹⁸ In fact, we do not *share* our understandings, or make them *public*. Drawing on Hooker's (1995: 73-79) discussion of science, by 'public' knowledge I mean an *invariant space of mental representations that emerges across individuals* through the adjustment of their different understandings (perspectives) after a period of socially regulated cooperative interaction.

(Benton, 2001a: 216), and this acknowledgement certainly makes happy those favouring a generalised Darwinism scheme who emphasise the non-teleological, cumulative processes.

5.2.3 For a Naturalist pluralism

In my view, the above presented evolutionary developmental paradigm provides the conceptual bridges that Veblen was looking for in his seminal endeavour to make economics consistent with the best of natural sciences of his time. Arguing for the specificity of sociocultural emergence, I hope to have shown that the understanding of economic phenomena can be consistent with an important stream of 'serious' biology and psychology (Vromen, 2007).²¹⁹ Of course, as biologists 'know best', I had to make an effort to understand the relevant contributions and debates in biology, and this leads me to address in the following Vromen's concerns about the trespassing of disciplinary borders by evolutionary economists.

For a long time those who have studied the evolution of the Universe have admitted that this process has emergent stages of growing complexity. About this difficult issue, Emmeche (2004) underlines that we need to go beyond the debate on the measurement of complexity and rather account for its qualitative aspects because what we experience among us, and around us, is also "information, signification, meaning and processes of sensibility, learning, intentionality, experience and consciousness" (Ibid, 43). Further, he argues that such qualitative dimension is not limited to the biological world, as most evolutionary economists seem to think; it is also present in physicchemical reality. This should not be a surprise taking account that autocatalytic processes based on "amplification in pattern formation", which are supposed to be at the origin of most elementary forms of life (Kauffman, 2001), tend to create a centripetal effect upon a set of networked, organisationally closed elements on the course of their transactions with the environment. Such 'directional' effect is per se an emergent quality. Ulanowicz (1997: 48) also addresses these qualitative aspects: "We see in cetripetality the most primitive hint of entification, selfhood, and id. In the

²¹⁹ Note that I refer to 'understanding' of economic phenomena in the sense of establishing meaningful relations between economic explanations and those of other sciences. For a discussion of the intertwining of the concepts of 'understanding' and 'explanation' see (Faye, 1999).

direction toward which the asymmetry of autocatalysis points we see a suggestion of a telos, an intimation of final cause."

In a similar vein, Deacon (2003a: 292; emphasis mine) emphasizes 'direction' and 'self-organized complexity' as crucial aspects of evolution: "evolutionary processes must be described as the successive emergence of new emergent phenomena from old. ... there is a temporal component to this kind of emergence as well as ascent in scale. There is an asymmetry in configuration across time—a development." Therefore, in order to distinguish this kind of approach to evolution from Darwinism, it seems appropriate to use formulations such as 'developmental evolution'.

The crucial point to be underlined here is that *the evolutionary process also* evolved; it has been subject to 'symmetry breaking' episodes in the sense that

we can distinguish at least three dominating instances of emergence: the emergence of galaxies, the emergence of life, and the emergence of linguistic culture. Each of these changed the rules of the evolutionary game to such an extent that no evolutionary theory can be taken as satisfactory without dealing with them. More specifically, in each case the historical nature of our universe acquired qualitatively more powerful ways of expressing itself (Hoffmeyer, 1998: 283-284; emphasis mine).

The *first* instance of emergence is the precipitation of energy into matter, which is the most basic emergence of a 'difference'. A *second* instance occurs when differences give rise to 'distinctions', which is inherent to autocatalytic processes in chemical systems that, after a long evolutionary time, acquired a boundary and a particular type of molecule we call DNA. Such symmetry break corresponds to the emergence of living systems. The *third* instance of emergence arrives with self-conscious human life. This is a different type of emergence, which enables human beings to take distance from reality; human beings *make distinctions* not only about the world but also about themselves. They interactively construct forward-looking internal representations of those differences using sophisticated cognitive processes (Bickhard, 2005),²²⁰ which turned them into intelligent beings capable of linguistic semiosis (Christensen and Hooker, 2000; Deacon, 2003b).

According to Tattersall (1998), *the symbolising capacity* is the very

²²⁰ As Hoffmeyer (1998: 289) put it, "the human brain would not function without the historically developed patterns of communication between some hundred billion highly organized nerve cells."

foundation of the human imagination and creativity, which underlies the production of artistic objects and the burial rituals that are signs of the emergence of *Homo Sapiens*.

The existence of these 'symmetry breakings' (emergent levels) in the evolutionary process of Nature enables us to see that, with life, differences in the realm of matter and energy became "a difference *for*" a living system. This is a new kind of emergence; it "constitutes the origination of information, semiosis, and teleological relationships on earth. It is the creation of an "epistemic cut" … the point where physical causality acquires (or rather constitutes) significance" (Deacon, 2003a: 300).

Much later, with humans' use of language, semiotic processes provide the highest level of "semiotic freedom". Due to the material basis that supports linguistic symbols, "today we can – in principle – think everything which has ever been thought. But thousands of years ago much of what we think today would have been simply impossible to think" (Hoffmeyer, 1998: 289). In this way, social and cultural entities can be represented across time and space thereby taking part in the causal net responsible for the emergence of each particular person, a process that in turn sustains the emergent process of present day institutions (Lemke, 2000a). Therefore, we can say that since the Big-Bang semiotic processes of rising complexity are at work in the evolutionary process; they are "both rationally understandable and just part of nature as mass, energy and force, yet demanding an alternative metaphysics, inspired by Charles S. Peirce, in order for them to be seen in continuity with the rest of Nature" (Emmeche, 2004: 46; emphasis mine).

Under the above presented view, abstract principles common to all levels of reality are unable to support a project of unification of all scientific knowledge (Wilson, 1999). Different emergent levels of Nature have different ontologies, which call for different kinds of meta-theories and theories. Therefore, as I see it, we need a multi-level ontology and its necessary implication, pluralism among sciences. Additionally, we should accept pluralism within each science in order to account for the epistemic limitations of scientists in their endeavour to explain reality in its full complexity.

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²²¹ In a similar vein, see (Salthe, 1998: 16).

This stance has been convincingly argued by, among others, Cartwright (1999), Dupré (1993), Giere (1999) and Mitchell (2003). On this much discussed issue I side with Midgley (1999: 901; emphasis mine) and her illuminating words:

Ecology, ethology, and developmental biology ask their own distinctive kinds of question, often large ones. It is not sensible to treat these questions as somehow *less scientific* than those of genetics or neurology and to try to reduce them to those sciences. If, however, we accept this plurality of questions, with the variety of methods for answering that it demands, we see that biology as a whole – indeed *science as a whole – could never be, and is not meant to be, the kind of single, vast, elegant, infallible, monistic calculation that unifying rationalists have visualised. It must always be a fallible co-operative enterprise, an ongoing, fluid, pragmatic compromise between many points of view.*

In Midgley's company, I assume that sociocultural realities can only be explained by theories addressing their specificities, albeit theories that dialogue, articulate, and (hopefully) are *consistent with* warranted theories of other sciences. In fact, emergent processes preclude both causal reduction and causal isolation of levels of Nature.²²² Therefore, *pace* Mäki (2001), the ideal of unification of science is not desirable, even in its 'ontological' version. We need to understand social and cultural entities in their emergent specificity as part of Nature's process, that is, "embedded in the natural world and arising naturally within it" (Hooker, 1995: 37). Nevertheless, I also bear in mind that ontological statements are not immune to epistemological riddles, which is why, in my view, Peircean pragmatism is of most relevance for those who aim to overcome both empiricism and relativism (Rescher, 2005).²²³.

With my Naturalist approach I acknowledge that physic-chemical and biological systems participate in the emergence of human beings and their societies, which is the reason why there are basic organisational features common to all levels of reality (e.g. evolutionary developmental processes involving some kind of variation, selection, inheritance). However, it is no less true that human beings are a very special kind of living being; humans vitally depend on a community, which they intelligently maintain and change

that may fit the world more or less well in something like the way maps fit the world more

²²³ Pragmatism also underlies the following statement by Giere (1999: 241): "Rather than thinking of science as producing sets of statements that are true or false in the standard objectivist fashion, we should think of it as a practice that produces models of the world

or less well."

²²² For a discussion of the current reductionist thinking that threatens psychology, see (Bandura, 2001).

by language-coordinated interaction. In order to develop, humans need an intertwined process of biological and sociocultural re-construction in and through time. This process is deeply different from what occurs at other levels of reality, particularly in the following aspects: (1) human relations, cooperative and competitive, always imply mutual constrains and management of power under different forms and degrees; (2) the exercise of power, redundancy of institutional norms, and normativity of culture provide on the overall indispensable social stability; (3) the radical openness of a human being, that is, her/his *imperative need to express identity and difference*, introduces in social relations an inexhaustible source of change, even when stability seems to prevail.²²⁴

Sociocultural reality has its own properties consistent with, but different from, properties of psychological, living, and physic-chemical reality. Thus it calls for theories that consistently connect with, and build on, theories addressing other levels of reality. This Naturalist stance (1) frames social and cultural realities within metaphysics of process, in the sense that institutions are organised processes that maintain themselves and serve societies' stability through continuous change; (2) keeps a thread of continuity linking matter, life, human beings and society; (3) overcomes unhelpful dichotomies such as informal/formal, agent-sensitive/insensitive institutions. Further, it leaves an instrumental place for analogies and metaphors whenever they present a heuristic potential for theory construction. On this point I side with those who argue that metaphoric use of language is not only inescapable (Lakoff and Johnson, 1999) but plays a central role in the production of new scientific concepts in social theory (Lopez, 2003). Therefore, I will recur to concepts from natural sciences insofar they are helpful in understanding the specifics of social systems.225

In my view, the specificity (*not* independence) of the sociocultural realm has a solid foundation that justifies the rejection of a conceptual scheme common

²²⁴ Discussing human organisations, Stacey *et al.* (2000: 112) qualify the concept of dynamics 'at the edge of chaos' proposed by Kauffman as a paradoxical state that combines systems' stability and instability: "the dynamic has a fractal quality in that no matter what the detail in which the attractor is examined, it displays intertwined stability and instability. So if one selects what looks like a stable part of a spatial or temporal pattern at the edge of chaos, it always contains chaos, or instability, and vice versa."

²²⁵ I use the term 'understanding' in the pragmatist sense of 'intelligibility': neither *objectivism* (there is no direct relation between reality and scientific theories 'clean' of human judgments) nor *subjectivism* (scientific understanding is not reducible to a subjective state or feeling). About this see (De-Regt, 2004).

to other sciences. Consequently, evolutionary economics would better build on theories available in the different sub-disciplines or fields of research in *the social science*, explore connections and consistency with theories pertaining to other levels of Nature and, in the spirit of Peirce's Pragmatism, maintain systematic confrontation with the reality to be explained. This seems to me a more promising path for Institutional economics.

5.2.4 Do sociocultural systems evolve?

So far I have argued that *evolutionary processes have themselves evolved* and that this impedes the use of a generalised explanatory scheme. I have also shown how an important stream of evolutionary biology rejects Neo-Darwinism and proposes an integration of bio-physical and sociocultural realities in the explanation of human development and evolution.

On this point it is convenient to recall the stance assumed by Witt (2003: 28) in the above mentioned debate:

evolution extends from nature (where it is explained by the neo-Darwinian theory) into the historical process of long-term economic change. In that process, the forces of natural selection have increasingly left room for manmade influences.

However, a *sequential* view that pictures hominids without culture, and current human beings free from natural selection, deeply contradicts what we know today about the life of different species. We should accept that life cycle reconstruction with recourse to both natural and cultural resources is not exclusive of human beings; rather, what is unique to humans is their extraordinary capacity for *symbolic communication* (Donald, 2001; Laland *et al.*, 2000).

Further, like basic natural resources, human sociocultural resources are shared by many life cycles in a generation. They are handed over by past generations, and maintained or changed by the present one as part of current developmental processes, which shape developmental conditions for the next generation. Usually this change across time is called *history*, which in fact is "a specific instance of a process that is going on throughout the organic world. In fact, we do not need one theory to explain how apes became human, and another to explain how (some) humans became scientists" (Ingold, 1998: 96; emphasis mine).

To put things clearer, the DST approach integrates within a new conceptual framework two historical meanings for evolution, the Lamarckian genealogical perspective—the species-specific on going process of life cycle reconstruction at each generation—and the Darwinian population perspective (Young, 1992).²²⁶ Of course, it may be adequate to use population models in particular populations of unrelated individuals in a state of absolute incapacity to react to environmental pressures. However, such mathematical-statistical analysis corresponds to what has been named "predictive fitness" (Matthen and Ariew, 2002), and as such they are agnostic about the causal processes at work in self-organising systems defensively responding to the pressure of scarce resources, while in the same interactive process actively attempting to change or stop that pressure.²²⁷ The models that account for the varying distribution of individuals in a population omit the organisational process internal to the individual and the organisational process among the individuals and with the environment in complex systems that are not decomposable. Of course, human beings and sociocultural systems are emergent systems of this systemic, selforganising complex kind.

In my view, the alternative to Neo-Darwinism presented in the previous subsection clears the way for Institutional economics to accept the *breakdown of two conceptual divides* that so far have been an obstacle to its progress: the divide between "development" and "evolution" and the divide between "history" and "evolution".

Taking account of the foregone, my answer to the question "Do sociocultural systems evolve?" is: sociocultural systems evolve, and by this I mean that sociocultural systems change in and through time according to interactive processes entertained by persons, who continuously change themselves, the organisation of their societies, their culture, and the bio-physic ecology of their communities. Such processes involve a tangle of causal mechanisms that *cut across heterogeneous scales of space and time* due to the unique and powerful symbolising capacities of human beings.

²²⁶ As Oyama (2000: 62) puts it, "if evolution is construed as change in the constitution and distribution of developmental systems, the study of ontogeny is no longer a poor relative, to be lent evolutionary legitimacy by genetic hook or crook. Rather, it becomes the very heart of evolutionary biology."

²²⁷ For a critique of the concept of 'natural selection', see (Salthe, 2008).

If Institutional sociologists and political scientists take my understanding of economic processes as an *historical Institutionalist approach*, I can only agree. In fact, I hope to have shown that, as an institution of society, the 'economy' is a sociocultural reality. Thus, the study of economic processes requires intrinsically *historical* theories (Calhoun, 1998), that is, theories that both integrate the historical dimension of economic processes and the awareness that theories, as cultural entities, are themselves historical. In this sense, 'history' is the developmental evolutionary process that occurs at the sociocultural level of Nature. Of course, this understanding applies to the study of particular markets and the market system of an economy.

5.3 Markets as historically organised processes

5.3.1 Schumpeter and the Austrian school

In this section I attempt to focus on important contributions to the understanding of markets made by eminent economists of the twentieth century who had a focus on their historical nature. For the sake of brevity, in the following cursory discussion I will give particular attention to the ideas of Kirzner and Lachmann, central figures of New Austrian thinking, and to the singular contribution of Schumpeter, who in the first half of last century unsuccessfully attempted to make an original synthesis of different streams of economic theory.²²⁸

5.3.1.1 Schumpeter

I begin the discussion with Schumpeter (1934). It is widely recognized that his book *The Theory of Economic Development*, written in the beginning of the twentieth century and published in Germany in 1912, exposes Schumpeter's comprehensive vision of the dynamics of capitalism at the beginning of his academic life. On the other hand, his book *Capitalism*, *Socialism and Democracy* (1942), written at a later stage, presents a somewhat revised vision of the dynamics of capitalist economies, which gave

²²⁸ About this originality, Reinert (2002: 23) states that "Schumpeter's academic schizophrenia was caused by his attempt at unifying two fundamentally incompatible world-views", while Graça Moura (2002: 819) writes that "it is possible to detect, albeit in fragmentary form, two irreconcilable models that appear mixed up in Schumpeter's

Theory."

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rise to an interesting literature about the extent of the changes in his understanding of the entrepreneurial endeavour and his vision of the future of capitalism. ²²⁹ In the remainder I will only use *The Theory of Economic* Development (henceforth The Theory) because such debate bears no decisive implications for the purposes of the present section.

In The Theory Schumpeter firstly presents the scheme of a circular flow in a stationary economy where no element is endowed with the power of disrupting the established order, although he admits continuous incremental changes (p. 63, note 2). He states by the end of the first chapter: "With this we have closed the description of the circular flow. For an exchange economy as a whole there is the same continuity, and under the same assumptions, the same changelessness as for a non-exchange economy — continuity and constancy not only of the process but also of the values" (p. 55). Departing from this mechanistic picture of the economy, evoking Walras' thinking who he mostly admired, Schumpeter presents a vision of economic development that he embeds in the wider social development of a nation. However, because Schumpeter rejects the evolutionary rhetoric coming from biology, which he viewed as inadequate for economic theory ("metaphysical preconception", p.57-58), he assumed the conceptual framework of historical change "whereby social conditions become historical "individuals" in historical time. ... neither a circular process nor pendulum movements about a centre." (p.58).

Actually, in the second edition of *The Theory* Schumpeter states that his understanding of development is not well accounted by the term "dynamics" because development is much more than change in time, it is "that kind of change arising from within the system which so displaces its equilibrium point that the new one cannot be reached from the old one by infinitesimal steps" (p. 64, note 1, emphasis in the original). Certainly, as a social process, the economy is never in equilibrium, neither before the innovations introduced by the entrepreneurs nor after its major effects have settled, but this is where resides the paradox of whole Schumpeter's intellectual edifice. One is tempted to admit that, in the quotation above, he wanted to refer to a stationary flow, in which case the term equilibrium as meaning 'no change' does not apply. However, the problem is deeper than this issue of

²²⁹ See for instance (Langlois, 2003) and (Witt, 2002).

terminology. "Clearly, Schumpeter's crucial insights—on variable levels of consciousness in human action, on the interdependence of individual creativity and institutional arrangements, on the essential nature of money and the specifically capitalist role of the banking system—*cannot have their source in this equilibrium framework*. This suggest that this framework is not so much a product of ontological reflection as of a priori methodological preferences: that it is the product of a preconception of how what is must be fashioned so as to qualify as science" (Graça Moura, 2002: 819; emphasis mine).²³⁰

In fact, despite his developmental understanding of economic change being a major tribute to the German Historical School (Ebner, 2000; Michaelides and Milios, 2009), the fact is that Schumpeter has been reluctant to identify "his own intellectual affiliations and sources" (Reinert, 2002: 23) and only in the last years of his carrier left the neoclassical environment of the department of economics at Harvard and moved to the Harvard Business School where "he encountered the *verstehende* meso-level economics that was an important part of his intellectual upbringing" (Ibid, 36).

Such ambiguity is also patent in his formulations about the nature of both the economy and society just as Schumpeter closes his explanation of the circular flow in *The Theory* (p. 55-56): "The values with which we have to do carry meaning not with reference to the point of view of the whole economic system but only to that of the individual. ... individual values are interrelated and are not independent of ach other. The totality of economic relations constitutes the economic system, just as the totality of social relations constitutes society. ... They operate upon one another through the exchange relation so that they influence and are influenced by all the values of other individuals." And here is inserted a short note: "There is general interdependence between them."

This quote makes evident that Schumpeter's "methodological individualism" is of a particular nature, certainly not an atomistic vision of human beings, because he also admits that in a society there is more to it than individuals; there are also the social interdependencies generated by human interaction.

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²³⁰ Making a different exegesis of Schumpeter's writings, Freeman and Louçã state (2001: 53, note 13): "for Schumpeter, the circular flow was a real process, *simultaneous* with development, and a complete theory should integrate both dimensions in the same framework."

Nevertheless, it remains unclear if this "general interdependence" gives rise to a new ontological reality with causal powers of its own. In the second edition of *The Theory* (p. 61, note 1) Schumpeter replies to the critiques of his individualist emphasis on the entrepreneur as promoter of change. He argues that they misunderstood his stance and goes to state: "... it would obvious be nonsense. ... The "entrepreneur" is merely the bearer of the mechanism of change."

Now, Schumpeter turns to the opposite pole and defines the entrepreneur as an oversocialised human being deprived of autonomy, he "merely bears" the causal action of social structures. Here Schumpeter emphasises the causal powers of socio-cultural structures. What is not clear is the consistency of the overall causal framework. Festré and Garrouste (2008) have attempted to better define the specific character of this "methodological individualism" but, by lack of the adequate concept (emergence in self-organizing complex systems), are only able to maintain without a clear reasoning that Schumpeter's "holism and individualism do not contradict" (p. 379).

Actually, these authors tend to consider a 'soft' understanding of systems' causation ("They act in the sense that they define a set of constraints", note 30, p. 388), which may be understood as 'soft emergence' or, in philosophers' terms, an 'epiphenomenon'. The problem is that persons, not simply individuals, are much more than "constrained" by socio-cultural phenomena. Indeed, they could not even exist without them as they are interactively constructed all over their lives in a process that involves these same structures (Bickhard, 2008a). What Schumpeter (and most of his readers) lack is an emergentist ontology of sociocultural systems of the kind I have presented in chapter 3 (section 3.2). Only in the light of such ontology we gain the understanding of the methodological tension that we find in Schumpeter's work, the tension between his (socialised) entrepreneur promoting radical changes and his complicated acknowledgement of the "historical factors of change" (socio-cultural structures), which reveals his fears of falling into an individual-independent holism. Hence the use of the term "individualism". Nevertheless, as Graça Moura (2002: 820) has rightly asked, "is it really surprising that Schumpeter should have rather uncritically imported the conception of science of his time?".

At this juncture, notwithstanding the ambiguities and tensions (even contradictions) in his work, I take stock of some of Schumpeter's intuitions that I see relevant for a later discussion: a) an Institutionalist view of markets. economy, and the overall society as processes involving individuals and socio-cultural structures; b) being processes, markets and the economy are seen as flows that reveal variable velocity, that is, periods of smooth change and periods of high turbulence; c) periods of "small disturbances" may "in time add up to great amounts", that is, give rise to transformational, developmental change; d) the openness of the economic system to the wider society, and their interdependent (historical) change, although with a biased understanding of the source of economic development, which predominantly comes "from within" the system through entrepreneurial innovations (The Theory, p. 63); e) a theory of market competition through innovation, presented as the motor of socioeconomic development, which necessarily implies consecutive periods of expansion and recession, the "normal" business cycle (The Theory, Chapter 6).

To conclude, I assume that Schumpeter's contribution to the understanding of economic development may be labelled a theory of economic evolution, the latter understood without biological connotations, rather as a process of historical, structural change of capitalism.²³¹ As Schumpeter himself recognised, his vision of the evolution of Capitalism "is more nearly parallel to that of Marx" (*The Theory*, p. 60).

5.3.1.2 The Austrians, Old and New

Today it is evident that Carl Menger, the founder of the Austrian school of economics in the 19th century, has been an eclectic scholar that while contributing to the establishment of marginalism in economics also agreed with important aspects of the German Historical School (GHS). As Reinert (2005: 269) states, "like Schumpeter later, he insisted that history was an 'indispensable' tool for the profession." Despite the aggressive dispute he had with the GHS (the *Methodenstreit* of 1883-1908), represented by Gustav Schmoller, "they shared the same critical attitude towards the mechanical and barter-based English theory" (Ibid, 265). Their debate was mostly about

²³¹ Schumpeter rejected biological analogies when presenting is vision of economic development. On the other hand, Hodgson (1997: 138) notes that Lamarck's evolution was also based on development "from within" (the organism), meaning that those who 'read into' Schumpeter's work a Darwinist scheme are going too far.

human cognition and the role of historical facts in economics' explanations. However, the next generation of Austrian economists, much like Marshall's neo-classical followers, lost the original relationship between theoretical reasoning and historical reality and turned to a mechanistic view of the economy, one that tends to an 'equilibrium' state and is made of a network of 'perfect competition' markets. In this sense, "Schumpeter was surely the most 'Austrian' of both the second and third-generation Austrians" (Reinert, 2005: 292).

In the twentieth century, Ludwig von Mises abandoned Menger's concept of contextualised human rationality in which "the rational agent is one who works at the understanding both his needs and the means of satisfying them" (Langlois, 1991: 123) and argued for a subjectivist concept of rationality where needs are 'a given', in the sense that needs are subjectively defined by each individual. In this way needs are seen as detached from the objective situation of time and space where the individual lives. Thus, as psychological phenomena, needs are out of reach to economics research. The latter should only focus on the observable ('rational') action of an individual's attempt to economize on the means under his control. Within a particular interpretation of methodological individualism, Mises's version of human rationality becomes "the fundamental source of cohesion in the economic system (which is, of course, the social "whole" in question) (Langlois, 1991: 129), Actually, his late work in the fifties accentuated the negation of systemic wholes and, under the political climate of the Cold War, gave rise to a discourse "very close to being McCarthyst political propaganda" (Reinert, 2005: 284). In brief, while the founder of the Austrian school was concerned with time and uncertainty, with Mises (and part of Hayek's work) "Austrian economics came to seem like neoclassical economics in words rather than in mathematics" (Ibid, 276).

Hayek, who has been a student of Mises, found his teacher's restricted rationality unable to deal with his own understanding of market competition as *a process* of knowledge 'discovery' and 'diffusion', which for Hayek makes market coordination possible. Langlois (1991: 131) notes that "if "rational action" is to mean only the Pure Logic of Choice (as Hayek here agrees) then learning – the acquisition, as it were, of premises not previously "given" to the agent – cannot be a "rational" activity." Hayek ultimately solves the

problem with an expanded concept of rationality understood as 'reasoned' behaviour within an institutional context.²³² He emphasises the importance of rule-based behaviour, thereby going beyond Mises's reduction of human rationality to a calculatory procedure. Moreover, Hayek understands social rules as a socio-cultural evolutionary outcome (in a vague sense), which enables a reading of the late Hayek (Hayek III) close to Original Institutionalism in what concerns the understanding of economic change.

Even so, a concise summary of Hayek's view of *markets as an economic process*, as extracted from most of his work, could be the following: "In an inefficient configuration, market prices act as signposts for agents, providing new knowledge about the direction in which plans have to be modified. In that perspective, competition is by assumption an efficient device of knowledge discovery and entails the convergence of plans. The occurrence of unexpected change prevents the economy from reaching a long-term equilibrium. Competition permits the adaptation to the new configuration via its capacity to diffuse the new relevant knowledge" (Gloria-Palermo, 2002: 67; references to picture omitted).

Following Hayek, Israel Kirzner engaged in the contemporary revival of the Austrian school of economics and took the lead of the New Austrians, which is far from being a uniform stream of thinking. For instance, "the status of equilibrium among Austrian economists seems currently a matter of dispute" (Loasby, 1989: 160). For instance, while Kirzner argues for a (more or less strong) process of market "equilibration" Ludwig Lachmann emphasises the open-endedness of the market process and "clearly believes in the possibility of serious discoordination" (Ibid, 160).

Kirzner, similarly to Schumpeter and unlike Mises, gives a central place to the entrepreneur. However, much differently from Schumpeter, his entrepreneur has not a disruptive behaviour, rather he is alert to price differences within the market process and looks for opportunities of arbitrage. In profiting from these opportunities he not only follows the established rules but also makes the market converge to the proximity of a stationary state; he plays an equilibrating role.

²³² Here I recall the heterogeneity of Hayek's work and his late stage, identified in Chapter 2 as 'Hayek III'.

Describing Kirzner's market understanding, Gloria-Palermo (2002: 63-64) states: "in a disequilibrium world, discoordination is the consequence of imperfect knowledge, and imperfect knowledge is precisely the source of profit opportunities. ... The role of the entrepreneur is to reduce the initial ignorance of the economy through the discovery and diffusion of new knowledge that is revealed by the exploitation of profit opportunities."

Therefore, and at least unlike the late Hayek for whom the rhetoric of equilibrium makes no sense, "Kirzner insists that all these activities promote coordination" (Loasby, 1989: 161). He assumes that market competition "is by assumption an efficient device of knowledge discovery and entails the convergence of [firms'] plans" (Gloria-Palermo, 2002: 67). In fact, Kirzner expands Mises's 'logical choice' rationality in order to include the 'alertness' of his entrepreneur. However, by bringing in entrepreneurs' alertness, "he does not broaden the strict conception of rationality to destroy or supplant that conception; rather, he broadens it precisely to defend it from attack" (Langlois, 1991: 133).

In the attempt to answer Schumpeterian critiques of his smooth capitalist motion, Kirzner came up with a nuanced formulation that makes room for both equilibrating and disruptive periods. He argues for a view of "the *inside* workings of the capitalist system (its ability to offer pure profit incentives that can evoke entrepreneurial perception of available opportunities—some (but not all!) of which opportunities may consist in the potential for technological revolution (implementation of which calls for the "Schumpeterian" qualities of boldness, initiative, and creativity)) (Kirzner, 1999: 16).

This formulation opens the possibility of an integration of Schumpeterian periods emerging from continuous gradual changes occurring over the 'equilibrating' periods. While being an interesting step towards a synthesis, this move still does not account for socio-cultural sources of change coming from the interactions between markets and the wide society, which inspire new projects and make valuable new entrepreneurial competencies. In fact, Kirzner sticks to the (structural) opportunity for making profits, which still leaves outside the picture both the non-economic motivations of entrepreneurs and their capacity of creating and/or lobbying for new arrangements in markets' structures.

Ludwig Lachmann, another New Austrian outstanding scholar, has been qualified as a 'radical subjectivist' (Langlois, 1991: 135). In fact he extended and deepened the traditional subjectivism of the Austrians' approach that takes markets as knowledge processes – entrepreneurs making, executing and revising "plans" – insofar he explicitly considered the entrepreneur's *expectations* about the future of his business. Most importantly, he made a distinction between the market process in itself and the entrepreneur's interpretation of its events and environment. In Lachmann's (1986: 4) words:

what men adjust their plans to are not observable events as such, but their own interpretations of them and their changing expectations about them. ... market processes do not reflect the effect of a sequence of events on successive individual actions, but that of a sequence of interpretations of past and future upon them.

Therefore, Lachmann's perspective goes far away from a teleological understanding of markets and forcefully rejected the idea of a built-in tendency to an end-state equilibrium. "In a competitive game there are winners and losers. By the same token, competitive market forces will cause discoordination as well as coordination of agents' plans." And he reminds us that, even if there is some kind of strong coordination in the supply side (e.g. state planning or cartel agreement), producers are still dependent on consumers' autonomous decisions; "They remain unable to assure one another that these [productive capacities] will actually be utilized" (Ibid, 11). On the other hand, Lachmann emphasises that markets are at the same time interlinked and heterogeneous, at least in what concerns the horizon of business plans. This latter aspect suggests that new knowledge makes more vulnerable "those [markets] in which plans necessarily extend over a substantial period of time. ... in such conditions, coordination will rarely be achieved by price alone" (Loasby, 1989: 162).

It is obvious that Lachmann goes largely beyond Mises's framework and is an embarrassment to the New Austrians who stick to the more traditional views of Hayek and Kirzner. As Gloria-Palermo (2002: 67-68) perceptively notes, "the splitting point concerns precisely the definition of individual plans" because Lachmann accepts Hayek's interpretative view of past experience and adds a second interpretative moment, "expectations, that is, an interpretation of the future situation, understood as imagination." Therefore, Lachmann's entrepreneur is not only alert to opportunities but also creates them. "Creativity means the break in continuity towards a disequilibrium

dynamic" (Ibid, 70), which connects Lachmann to Schumpeter's formulation of "creative destruction".

For those who think that Lachmann has gone too far with his subjectivism, it is important to situate his entrepreneur within the Institutionalist perspective that he kept in the background. Just in the *Preface* of (Lachmann, 1986: xi; emphasis mine) he states: "Markets *are* institutions. Changes in the functions of different classes of agents ... have to be seen and explained as institutional changes." Note that, rather than the much used formulation of a "market *cum* institutions", Lachmann states that markets are themselves institutions. In this sense they must comprise the individual actors, the firms, and the instituted norms that help, constrain and even constitute the actors.²³³ Indeed such understanding is at the core of the present thesis.

Taking markets as institutions, Lachmann avoids falling into the absolute discoordination that a subjective arbitrary action could bring about.

Institutional norms help and guide entrepreneurs' actions; they are "interpersonal orientation tables", as he puts it in the following statement (Lachmann, 1977: 62):

there are certain super-individual schemes of thought, namely *institutions*, to which the schemes of thought of the first order, the plans, must be oriented, and which serve therefore, to some extent, the coordination of plans. They constitute, we may say, 'interpersonal orientation tables', schemes of thought of the second order. To them, praxeology, for which until now the plan and its structure have understandably occupied the foreground of interest, will increasingly have to turn in time to come.

This passage is explored by Foss and Garzarelli (2007: 801) who argue that "at some level expectations are, and must be, coordinated (this is the institutional level) [the structural level] in order that at another level they can be—and indeed must be for a dynamic economy—disparate (this is the individual plan level) [the interactional-communicational level]."

I take this quote of Lachmann as an excellent opportunity to enter into a conceptual territory that Foss and Garzarelli have excluded from sight. I

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²³³ Here I acknowledge that Lachmann's formulations in early works seem closer to the usual formulation of 'markets *cum* institutions'. To keep a thread of continuity in Lachmann's thinking we should interpret the dichotomy *internal/external* institutions in the sense of 'norms' '*internal* to a particular market' *versus* norms generated *outside* that market and pertaining to other institutions and the culture of that society (*external* norms). This is not the path followed by Foss and Garzarelli (2007) who rather reinterpreted Lachmann's vision by recurring to the New Institutionalist formulation of 'markets *cum* institutions'.

argue that Lachmann here should be read through the concept of emergence, and such reading enables us to see that Lachmann's 'radical subjectivism' gives us a *realist* ontology of institutional norms. Indeed, "the schemes of thought of second order" are *invariants of those of first order*, that is to say, they emerge as a new level of intangible, objective reality. They are *objects* that we re-present by material symbols, which call for different, subjective interpretations of individuals. In this way I present a Peircean reading of Lachmann's Institutionalism, one that highlights the cultural nature of institutional norms in line with my discussion of institutions presented in Chapter 3.

Now we can see why Langlois (1991: 135) states that Lachmann's radical subjectivism "does violence to much of Mises's program". In fact, he managed to connect his "interpretative" turn with the normative structures of the meso-institution 'market' and those of the broader society, which (to the annoyance of some New Austrians) not only cuts him from mainstream economics but also moves him closer to the emergentist view espoused by critical realists in social science. A movement that leaves Austrian economics even more exposed to conceptual tensions and paradoxes, a subject that I have no room to explore now (Lewis and Runde, 2007; Martin, 2009).

5.3.1.3 Legacies of order and change

The cursory review above presented shows that the Austrian school of economics, including its Schumpeterian derivation, has not produced a theory of institutions or a theory of institutional change. Nevertheless, it is also clear that both Schumpeter and the Austrian school were able to formulate a crucial intuition that I deem relevant for the present research, namely: the system of markets is an instituted process within society that is open to interchanges with the societal environment.

This intuition puts an emphasis on sequences of decisions made by individuals and firms participating in the market process, which has no precise beginning and no pre-given end. As processes, markets are inherently dynamic, as much as are societies, a view much in line with Veblen's sequences of "cumulative causation". Moreover, and notwithstanding the ambiguity and vagueness of some formulations, it may be said that both Schumpeter and the Austrians recognised that market processes comprise an interactional level of individuals and another realm

made of institutional norms, which has been labelled with different terms according to the authors ("rules", "institutions"). However, the way both levels relate to each other remained obscure in their analysis, even in the work of Lachmann, the most sophisticated of the Austrians.²³⁴

It is also true that most of the explanatory potential of institutional norms remained largely unexploited when both authors entered into detailed discussions about particular economic mechanisms, namely of market prices or economic cycles. This placement of institutional norms in the background of individual action might explain why Lachmann has been subject to the criticism of theoretical nihilism (Foss and Garzarelli, 2007; Gloria-Palermo, 2002).

It is important to acknowledge that both Schumpeter and Lachmann made an important rupture with the neoclassical school when rejecting the teleological vision of a market process that has an in-built tendency to equilibrium. Embracing a genuine understanding of markets as *processes*, one that integrates the creative initiative of those who defy established rules and face uncertain outcomes, both authors admitted that the velocity of economic and societal change is variable, comprising periods of small-scale change *and* periods of great turbulence.

However, this 'legacy of change' that contemporary heterodox economics has rediscovered is still underdeveloped. It is not clear how Schumpeter and Lachmann related their 'process' view with the existence of market order that both recognized. In others words, they did not explicitly address the mechanisms that enabled the generation of order (and not disruption) in markets despite their continuous change. Nor did they speculate about possible relations between what occurs in periods of smooth change and the dramatic periods of turbulence. In the case of Schumpeter, disruptive change comes *from within* the economic system by entrepreneurial action but, at the same time, this action is originated in individual creativity and boldness, which are *outside* the production and exchange processes of markets.

Further, although both authors made references to the relations between markets and the wider society, only Schumpeter theoretically discussed the connections between the state and the economy, both in terms of the

²³⁴ In this literature firms have not been directly under analysis and it remained implicit that they were represented by the individual actions of their managers and entrepreneurs.

economic impact of the fiscal system and in policies that promote entrepreneurial behaviour (Ebner, 2006a). His view of economic development was more balanced than Lachmann's who focused exclusively on the entrepreneurial source of change and did not discuss the role of society's culture and other institutions in moulding entrepreneurs' character and determining the norms of the particular markets where they operated.

Even if both authors assumed the historical dimension of economic phenomena, the fact remains they mostly emphasised the autotransformational power of markets and their impact on society at large. Notwithstanding the more nuanced view of Schumpeter, their emphasis on, and understanding of, radical change is biased to markets' internal dynamics, and thus contrasts with Polanyi's vision of a "double movement" involving interactive tensions between the logics of capitalist markets and the interests of the wider society. If we see the state as the "arena in which ... different rules of legitimate order converge, collide, and fold back on one another" (Skowronek, 1995: 95) it becomes clear why Polanyi saw in political struggles around and within the state a crucial ("exogenous") source of change in markets' processes in order to prevent markets' appropriation of nature, labour and money. Logically, Schumpeter's perspective has been driven by change from 'within' as his thinking had no room for such a concept of "fictitious commodity", and much less for Karl Marx's concept of class struggle.

With all their limitations, the contributions of the Austrian school and those of Schumpeter contained the seeds of a new kind of economics that quickly was seen to be incompatible with the equilibrium-based neoclassical school triumphant in the second half of the twentieth century. Nevertheless, the discussion of their contributions to the understanding of markets' processes enables us to acknowledge not only their limitations but also to gain an awareness of the scale of the work that contemporary Institutional economics still faces in order to become a credible alternative to the mainstream of the discipline.

5.3.2 Markets: an Interactionist approach

In presenting my own formulations about the market understood as an *organisation of processes* I will take the lead of Bates's (2006) discussion of 'agency-structure', which he sees as realms "related *in* and *through* time by a constantly fluid interpenetration" (Ibid, 157). In fact, the term "interpenetration" has already been used in chapter three in the discussion of the emergent nature of sociocultural systems; it comes from Luhmann's (1995) systemic understanding of societies. Ultimately, 'interpenetration' means that persons and the sociocultural systems in which they participate are *mutually constitutive* to the point that when we focus the analysis on the change of sociocultural systems we are taking on board (even if implicitly) the changes occurring at the interactional-communicational level of persons.

Here we have to distinguish between the 'time' of persons' experiences and the 'time' of the sociocultural systems in which they take part. While the time of the latter is related to the time of the former they are not the same. Human beings go on living 'in' and 'through' different kinds of 'time' (Adam, 1990) and this reality should be accounted for in a conceptual framework of sociocultural change that assumes its emergence in Nature's evolutionary process. The present section intends to be a preliminary step in that direction in discussing the 'time' of markets, the historical time of a particular kind of sociocultural systems.

5.3.2.1 Change in time and through time

At the outset I acknowledge that we share with the rest of Nature non-linear 'times'. This is explained in the work of Adam (1990: 154) and is well synthesised in the following passage:

Organisational aspects of time, for example, are found at the inorganic, organic, and the human social level, as well as in the design aspects of human artefacts. The organisational principles of time, in terms of sequence, duration, periodicity, rates of change, and synchronisation may be the same for all, but their meaning and expressive form change with context. ... All beings, it has further become apparent, are their own past, present, and future. The difference lies in the degree to which they are aware of this fact and the way they relate to it.

Accordingly, we need to identify what is specific in the time of human sociocultural systems. Here Adam (1990) is helpful in showing that only human beings have been able to develop an abstract, quantifiable time, a

common reference (an emergent 'cultural invariant') that enables the coordination of their life in community. Over the eighteenth and nineteenth centuries, with the Industrial Revolution, this abstract understanding of time turns into a powerful resource and gains a value and a price. Recurring to a pool of philosophical and historical works, Adam (Ibid, 117) shows that *time as a resource*

forms part of societies where the social interactions and exchanges have generally become independent of context and content, and where the time structuring is based on standardised, invariable units. Time in such societies has become stratified and separated into family, work, leisure, production, and market time, to name just a few. Chronological calendar and clock time, related to as being time *per se*, in terms of an independent, objective reality, forms the central link between all these aspects.

However, such a sociocultural time can only emerge upon the particular biological time of human beings, and the time of the solar system and the wider universe. This is an understanding deeply inspired by the thinking of George Mead, one of the founding fathers the American Pragmatism at the beginnings of twentieth century, who followed Peirce in seeing human's interactive construction of a 'symbolic time' as an outcome of Nature, the latter also understood as an interactive ('social') process incorporating successive symmetry-breakings. In the words of Adam (1990: 156), "contemporary natural scientists have provided the substantive evidence for Mead's theory that natural and social time are therefore not mutually exclusive but implicating."

Following Peirce's Pragmatism, my view of markets as emergent sociocultural systems cannot be captured by the traditional dichotomy of 'structure *versus* change' or 'diachronic *versus* synchronic' perspective. Once and for all, we need to accept that *time is intrinsic to nature*, which means that my analysis of markets has to take on board the biological 'timescapes' of human beings, the 'timescapes' of organisations, culture and society at large, and their internal and necessary interpenetration as well.²³⁵

In line with the above presented stance, I acknowledge that biological 'time' is *non-linear* and cyclical (body temperature, blood pressure, hormonal

²³⁵ At this juncture we should bear in mind the interdisciplinary implications of Prigogine's research: "'How can we relate these various meanings of time', he asks, 'time as motion, as in dynamics; time related to irreversibility, as in thermodynamics; time as history as in biology and psychology? It is evident that this is not an easy matter. Yet, we are living in a single universe. To reach a coherent view of the world of which we are part, we must find some ways to pass from one description to another'" (Quoted by Adam, 1990: 67).

cycles, etc.). At the same time, it presents a *directionality* revealed in the aging process going from birth to death. As Adam (1990: 87; emphasis mine) highlights, "this cyclicality must not, however, be conceptualised as reversible recurrence but as change. Whilst the degree of change is context dependent, *it is in the very nature of these rhythmic processes to differ on their recurrence.*" This "rhythmicity" of human nature, intimately tied to the 'time' of the universe from which we have evolved, challenges us to understand the 'time' of sociocultural systems through an analytical framework that goes beyond the dualism of a successive switching between 'morphostatic' and 'morphogenetic' stages as proposed by Archer (1995). In brief, there is a circadian time in human social life that has emerged from the circadian time of nature; it appears as *interactive change through repetition*.²³⁶ I will take account of this connection in the discussion that follows.

5.3.2.2 Markets and path-dependent processes

In a much cited paper, Paul David (1994: 208) states: "the more strongly one wishes to assert that the slowly evolving institutional matrix of markets constitutes a fundamental historical constraint on the performance of market economies, the more essential it seems to try to understand why 'history matters' in the evolution of organizations and institutions, themselves."

In order to offer such understanding David draws on his previous work about "phenomena of 'path dependence' in stochastic dynamical systems" manifested in 'non-ergodic' systems, those that "are unable to shake off the effects of past events and do not have a limiting, invariant probability distribution that is continuous over the entire state space. ...they are drawn into the neighbourhoods of one or another of several possible 'attractors', selections among the latter being made, typically, by the persisting consequences of some aleatory and transient conditions that prevailed early in the history of the process" (Ibid, 208).

This path dependence approach to sociocultural phenomena has been widely diffused in economic history, mostly through the late work of Douglass North (2005: 62) who recently summarised his stance in the following terms:

²³⁶ "The concept of circadian means *circa* one day. It indicates an openness to variation rather than sameness, invariant repetition, and fixed accuracy" (Adam, 1990: 74).

Institutional change is typically incremental and is path dependent. ... It is incremental because large-scale change will create too many opponents among existing organizations that will be harmed and therefore oppose such change. Revolutionary change will only occur in the case of gridlock among competing organizations which thwarts the ability of organizations to capture gains from trade. Path dependence will occur because the direction of the incremental institutional change will be broadly consistent with the existing institutional matrix (for the reasons described above) and will be governed by the kinds of knowledge and skills that the entrepreneurs and members of organizations have invested in.

In the discussion below I will take the terms "conventions", "institutions", "institutional change" and "institutional matrix" used by David, North and other social scientists as amenable to my encompassing concept of 'institutional norms' presented in chapter 3. Most of the time they refer to cultural entities, although in some contexts the authors also seem to include organisations in institutions. Basically, I intend to show that the concept of path-dependence is in itself problematic and, above all, cannot be given primacy if we want to understand markets' change.

Actually, underlying path dependence explanations there are two different models that appear intertwined in the literature and thus make difficult the identification of which one the author is using, if he is not intertwining both at the same time. These models have been summarised by Ebbinghaus (2009: 191) in the following terms:²³⁷

One common image is the unplanned 'trodden trail' that emerges through the subsequent repeated use by others of a path spontaneously chosen by an individual. A different illustration is the 'road juncture', the branching point at which a person needs to choose one of the available pathways in order to continue the journey. ... The first model stresses the spontaneous evolution of an institution [institutional norm] and its subsequent long-term entrenchment; the second view looks at the interdependent sequence of events that structure the alternatives for future institutional changes.

The 'trodden trail' model has a serious limitation that stems from the assumption that the competing elements facing some "initial conditions" are in equal footing, which for instance means that (at that moment) the competing actors had equal resources. This is why the process is not launched by the strategic move of a 'stronger' actor but rather by "some aleatory and transient conditions" to use the words of David. In fact, because it is inspired by the 'Polya urn' model, the 'trodden trail' model explains the 'lock-in' of a closed system endowed with an internal, positive feedback

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²³⁷ In a similar manner, (Håkansson and Lundgren, 1997) summarise Paul David's two models of path dependence.

mechanism. "An end to the 'lock-in' would only be possible through exogenous intervening factors, which are certainly outside the theoretical model" (Ebbinghaus, 2009: 196). This is a problematic shortcoming, which makes the model inadequate when we are attempting to understand changes in sociocultural systems made of creative actors that participate in different institutions.

As for the second meaning of path dependence, the 'road *juncture*' model, we leave behind a population of institutional norms one of which will be 'the winner', and the analytical focus becomes "the long-term developmental pathway of an institution, or complex institutional arrangement [norms or system of norms], *shaped by and then further adapted by collective actors*" (Ebbinghaus, 2009: 199; emphasis mine).

Here we have what Ebbinghaus sees as a "more open path-dependence concept [useful] to describe *institutional development* ... in the sense of the *sequence* of contingent decisions. Earlier decisions, once institutionalized, 'structure the alternatives (Rokkan, 1999) of later ones." (Ibid, 200; emphasis mine). Comparing with the 'trodden trail' model (Ibid, 202), the 'road *juncture*' model acknowledges change coming 'from within' the sociocultural system in the triple sense of: a) *path stabilization*, which involves adaptations to external changes that preserve the 'architecture' of the system; b) *path departure*, which require adaptations that include a partial modification of system's core structures; c) *path cessation* or *switching*, which means the end of the system or its replacement by another one, possibly through the intervention of 'political entrepreneurs'.

This developmental perspective of path-dependence, 'road *juncture*' version (see Fig. 15), presents the enormous advantage of putting aside the deterministic aspect of the path-dependence/lock-in rhetoric, which has been inspired by the studies of technological innovation and its focus on the constrains to technological change (Arthur, 1989; David, 1985).²³⁸ In between the more extreme cases of 'inertia' and 'radical change', it allows for a

which allow de-locking and escaping from the past." However, exceptions

notwithstanding, it is also true that the analytical weakness pointed out by Crouch and Farrell (2004: 12) applies to most of economics path dependence literature: "[The more sophisticated versions of path dependence] ... fail to advance arguments about what such wide-ranging change involves, and how actors will respond to it".

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²³⁸ It is true that a number of economists, for instance Castaldi and Dosi (2006: 117), acknowledge that "lock-ins seldom have an absolute nature: the unfolding of history ... is also a source of new 'windows of 'opportunities – using again Paul David's terminology –

variety of intermediate 'departures' in line with the conclusions of some management studies about how firms and industries change (Huy and Mintzberg, 2003; McGahan, 2000).

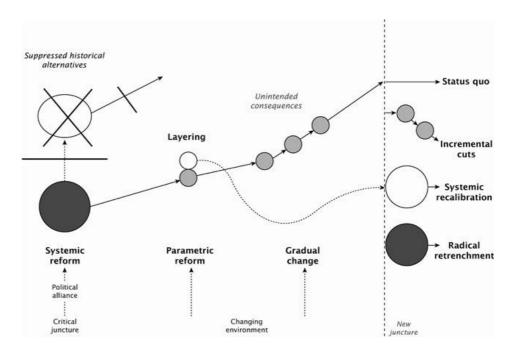


Fig. 15 - Illustration of a developmental path dependence (source: Ebbinghaus, 2009: 204)

Despite the merits of the developmental perspective of path-dependence phenomena, this variant of the model still sees most of the path as a minor-change 'time' obscurely connected to the changes that occur at 'critical junctures', the latter being recognised as the important 'times' of change. An example of such emphasis is Stråth (2009: 37; emphasis mine) who "argues for the analysis of social processes in terms of path-breaking responses to crisis rather than in terms of path-dependence" and proposes a focus on cultural entities such as interpretations, narratives, discourses ("cultural idioms") that "are or were activated in specific historical and institutional settings", even if such cultural resources have been created over the path that led to the crisis.

The relevant literature about path-dependence in economics typically puts an emphasis on the non-ergodicity of economic systems' path and its irreversibility, albeit sometimes with the important qualification that 'irreversibility' "is not only a constraint on the freedom to choose [in the future] but also a *continuous source of opportunities*" (Dosi and Metcalfe, 1991: 147). Nevertheless it appears that the constraints and the opportunities are quite different processes analytically unrelated. While some authors place industries' path dependence within an explanatory scheme similar to 'generalised Darwinism' (Langlois and Robertson, 1995) others explore some kind of analogy between market processes and those of biological evolution described by the 'punctuated change' model (Antonelli, 2007).²³⁹

As Schneiberg (2007: 50) perceptively notes, a 'generalised Darwinism' scheme is "typically incremental and evolutionary rather than fundamental. Thus ... overplaying continuities with the past, and downplaying or even denying the existence of fundamental change, off-path behaviour and the creation of new forms." On the other hand, the economic analysis inspired by 'punctuated change' stresses "a discontinuous succession of divides and qualitatively different institutional regimes, rather than an incremental accumulation of evolutionary changes. But to get to these ruptures, scholars typically invoke exogenous shocks to the system. ... [This strategy] denies institutional [stabilising] effects at critical junctures in order to preserve the recognition of fundamental change" (Ibid, 50-51).

A crucial problem of these approaches is that, either assuming paths of *incremental change* or of strong inertia punctuated by *temporally* concentrated major change, they do not reconcile processes of stability with processes of radical change within a *single explanatory model*. In a review of research in political phenomena, Thelen (1999: 399) addresses this crucial point when she states that "understanding moments in which fundamental political change is possible requires an analysis of the particular mechanisms through which the previous patterns were sustained and reproduced." Observing the conclusions of detailed empirical research in comparative

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²³⁹ Djelic and Quack (2007: 181; emphasis mine) argue that in their research "punctuated equilibrium, i.e., a single radical and abrupt jump from one stage to another, *was not observed*. Instead, multidirectional struggles, an aggregation of decision points, and multiple critical junctures charted a posteriori a series of crooked paths."

business systems, I am convinced that the norms of markets do change in multiple ways that go largely beyond the dichotomy of 'minor adaptive' versus 'major radical' types of change. "Instead of separating institutional development into periods in which agency matters more than structure or the other way around," it would be more productive to pay attention to "broad modes of gradual but nevertheless transformative change" such as "displacement, layering, drift, conversion, and exhaustion" (Streeck and Thelen, 2005: 19; emphasis mine) in the norms and organisations of markets.

The fact is that both 'incremental' and 'punctuated change' models prevail in evolutionary economics and they typically require an 'evolutionary time' of a varying population of individuals (rules, firms, technologies). As already discussed, the evolutionary approach implies the uneasy choice of a sociocultural entity that could 'play the role' of the gene. Notwithstanding the misunderstanding of the role of the gene in biology, this is an obligatory (but wanting) analogy in order to build upon it a mechanism of replication that could explain the continuity of the overall evolutionary process.

The 'stability'-bias of the path dependence approaches has been pointed out by Schneiberg (2007: 50) in the following terms:

It is hard to explain fundamental change and the rise of new paths using arguments about path dependence and the constraining power of context that were originally crafted to explain stability within—variation across—fields, systems or nation states.

In a similar vein, Djelic and Quack (2007: 162) also stated:

On the whole, and whatever the version considered, path de\pendency arguments tend to focus on mechanisms that anchor and stabilize trajectories while paying less attention to the sources and mechanisms of change. In the strongest versions of path dependency, path transformation is presumed to be highly unlikely except through rare radical ruptures or reorientations, which are often associated with violent external shocks.

Despite such serious limitation, path dependence explanations have been used in heterodox economics at least since the eighties of last century (Freeman and Perez, 1988). I am not denying the existence of such phenomena, at least in the history of technologies. The problem is that social scientists who rely *exclusively* on the path dependence model are not aware of the need of an analytical framework that could account *at the same time* for stability and change in a specific kind of systems: in multi-level,

sociocultural systems with fuzzy boundaries, as it is the case of markets. This requires an understanding of processes where time is "multiple in its forms and levels of expressions" (Adam, 1990: 169); a plurality of 'timings' that we need to integrate in our models of sociocultural change. In sociocultural reality we need to work with *different and related timescapes* because while inter-persons interactions are mostly organised in a short-horizon clock/calendar time, markets may be better understood in historical time (Harriss, 2006), and societal change certainly needs a long-horizon, 'evolutionary' time (Eisenstadt, 2006).

In brief, using the words of Kössler (2006: 297-298), "we are challenged to interlink these different time-scales or timescapes in our account if we wish to arrive at a picture of the overall process as well as its concrete local and regional variations."

5.3.2.3 Markets have a history

The above presented discussion of path dependence models should be placed in the context of a broader enquiry about *causal* processes and *outcome processes* in sociocultural change. This is provided by Pierson (2003) who not only makes a useful distinction between 'short' and 'long' horizons of both causes and outcomes, but also explains how path dependence processes (its initial historical event and the ensuing reinforcing feedback loops) are only one among various types of historical processes in the sociocultural realm. Therefore, economists should be aware that path dependence models, although relevant, have not the monopoly of historical explanations of economic processes. Further, they should acknowledge that "as feedback loops become central to the process that follows a critical juncture, it becomes impossible to delineate clear causes and effects; instead, a set of factors mutually reinforce each other" (Pierson, 2003: 195, note 193). This is already proposed in Chapter 3 as a general methodological principle for the study of sociocultural phenomena.

Path dependence explanations have been imported from the study of physics and chemistry (Prigogine and Stengers, 1979). However, besides my critique in section 5.2 of the analytical procedure of abstracting a 'generalised scheme' from theories pertaining to other levels of reality, there is an additional and quite simple point that should convince us to embrace a

specific understanding of sociocultural processes. The point is (almost perfectly) stated by Thelen (2003: 231; emphasis mine) in the following:

Increasing returns arguments focus mostly on the winners and on adaptation effects (after an institution has been "selected") that reinforce a particular trajectory. But this emphasis obscures ongoing political contestation over the form and functions of institutions forged at (often distant and receding) critical junctures. Increasing returns cannot tell the whole story because, in politics, *losers do not necessarily disappear* and their "adaptation" to prevailing institutions can mean something different from "embracing and reproducing" those institutions, as in the worlds of technologies and markets.

Thelen's point fully applies to the study of markets. For instance, the recent strikes of British Airways airline staff remind us that the routine work in producing a daily service for market exchange is based on front office and back office human interactions and communications, which implies (frequently unnoticed, but at times largely mediatised) conflict, contestation, negotiation, and certainly *continuous change*.

Economists working in the tradition of Original Institutionalism, but also Neo-Schumpeterians and New Austrians, should acknowledge the research made available by Historical Institutionalism in sociology and political science. An important outcome of this research is an enriched insight about the processes of sociocultural change that enables to see "there often is considerable continuity through and in spite of historical break points, as well as dramatic institutional reconfiguration beneath the surface of apparent stability or adaptive self-reproduction, as a result of an accumulation over longer periods of time of subtle incremental changes" (Streeck and Thelen, 2005: 8). This research tradition provides an important building block for the construction of the encompassing framework we need in order to understand the richness of markets' history beyond the conventional dichotomies of 'incremental' versus 'radical' processes of change and 'continuity' versus 'discontinuity' in their outcomes. Its contribution helps to eliminate an ingrained shortcoming in heterodox economics, that of "separating institutional development into periods in which agency matters more than structure or the other way around" and to see "the way actors cultivate change from within the context of existing opportunities and constraints—working around elements they cannot change while attempting to harness and utilize others in novel ways" (Ibid, 19). Such understanding is enhanced, and better framed by the concept of

sociocultural emergence when it is connected with the acceptance of different timings for bottom-level interactions and upper-level structures of the system. To this synthesis I turn in the following.

The *point of departure* in the building of a new conceptual framework for the understanding of markets' change is the acceptance that markets are sociocultural units, that is, markets are meso-institutions of contemporaneous capitalist societies, and as such *markets have a history*. Markets undergo historical change in different ways: transformation processes of production, distribution, appropriation and consumption change in/through historical time; the firms (and other organisations) that operate in the markets, and the norms that make markets organised processes, change as well.²⁴⁰ Recalling previous arguments, and much in agreement with Schumpeter (although not exactly for the same reasons), I will dispense the analogy with evolutionary processes in biology, or any other realm for that matter, in order to build a theoretically based, historical understanding of markets 'timing'.²⁴¹

1. The *first* assumption of my historical perspective enables to overcome the traditional divide between causal processes operating 'from within' the market and causal processes coming 'from outside' the market. This dichotomy is still present in the above mentioned literature of Historical Institutionalism in sociology and political science. As Schneiberg (2007: 51) summarises, there are researchers who "look outwards from the path, and begin with the recognition that institutional systems or fields coexist, interact or even overlap with other systems organized according to different logics", while other researchers' approach "looks inwards and backwards at the paths themselves, at what actors can do on or with existing institutional arrangements, and how the histories of path creation themselves generate resources for transformation or the creation of new forms."

According to my interactive understanding of self-organising systems, we need to work with a combination of both perspectives (from *within* and from *outside*) because no self-organising complex and open system could survive

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²⁴⁰ In line with my stance in section 5.2, here I share the point made by Snooks (2007: 140; emphasis mine) that "to understand the real 'global state' of human society, we need to adopt a realist general dynamic theory *from within the social sciences*, not a statistical theory from the physical sciences."

²⁴¹ Actually, "human [biological] evolution and human history turn out to be two inseparable aspects of the same overall process" (Berry, 1999: 137).

without a continuous interaction with its environment, which is a joint-"within/outside" process. It is through such interactive mode of being - which is a unique process - that a market emerges and, in so doing, exerts an influence on the environment. It is understood that the latter is composed by the market system, the economy and the broader national society, the other societies in the world to which the market is related and, last but not least. the bio-physical ecology.²⁴² Therefore, a market's process is *a joint outcome* of interacting events, internal and external, which means that while internal sources of change need resources from the outside in order to emerge and to operate, external sources of change would produce no effect on the system without adequate linkages internal to the system. Hence, Neo-Schumpeterians' emphasis on the 'from within' entrepreneurial process are reminded that successful, pervasive technologies could not transform markets (and feed back into transformative processes in wider society) without the scientific knowledge produced outside market processes by creative individuals belonging to other institutions, and the new state regulations and unperceived cultural changes that enable and sustain the transformative power of new 'constellations' of technologies (Freeman and Louçã, 2001). Therefore, a first critical juncture in the history of markets resides in the productive *relationship* between creators (scientists, artists) and entrepreneurs.243

2. The *second* assumption relates to the non-teleological nature of markets' history. Firms have strategies, either formalised in planning exercises or simply implicit in their operational management. Nevertheless, as their future cannot be controlled, firms' *actual* strategies will emerge "as time goes by", and thus can only be known a posteriori (Mintzberg *et al.*, 1998). In the process, firms (as *autonomous* systems; see 3.3.2) attempt to change their environment through a variety of networks in which their managers and owners participate (Granovetter, 1985).²⁴⁴ These networks, legislated or

²⁴² The natural environment disasters produced by the extraction and transport of oil, and by its transformation and consumption, are there to remind economists of this basic, though frequently glossed over, interdependence.

²⁴³ Another critical point in the road from invention to innovation is found at a later stage in the test of the market. As Metcalfe (2004: 165) states, "The entrepreneur must bring the conjecture to fruition in a working business organization for it to be tested by the market, and thoughts must be turned to profitable action if the conjecture is to be of consequence."

²⁴⁴ The same could be said for other types of non-for profit organisations operating in the same market like trade/labour unions or industry training centres.

informal, reach the social group of policy-makers, their law and economics advisers, and the media, thereby channelling a lobbying activity for favourable changes in legislation about diverse domains such as market competition, taxes, labour or environment standards. In this sense, a market has a history, which is a process; and, by definition, processes have no pre-existent end to be attained, be it an 'equilibrium state' or a dynamic systems 'attractor'. Whatever the history of the market within a chosen time-frame (stability, renewal, radical change, disappearance) it will emerge from individual and collective actors' interactions with a multi-level environment providing scarce resources.

Recurring to the evolutionary economics conceptual framework (mostly focused on firms), in metaphorical terms we could say that markets "may be always 'on their way' to something, but never arrive, because their external environment [the economy and the wider society] and their internal components adapt and change as history unfolds." (Allen, 2001: 346). Making a bridge to the evolutionary economics literature, the history of a particular market corresponds to an interactive developmental process while the history of the 'market system', if (reductively) seen as a 'population of markets', could be statistically described as an evolutionary process (for the relations between 'development' and 'evolution' in biology, see Oyama, 2000). In any case, there would be variation, inheritance and selection processes of a sociocultural kind operating at different levels. In my view, however, the crucial point to retain is that markets and societies are coimplicated in their histories, and if social scientists have forgotten this crucial dimension of capitalism the financial-economic-social (and possibly political) crisis that began in 2007 is with us to recall that such co-constitution is a "matter of fact", to use Veblen's terms.

If markets and societies have a non-teleological history, could we say that they have at least a directionality? In what sense can we speak of sociocultural development? Here we need to make a distinction between a directionality of history assessed in terms of *moral values*, and a directionality assessed in terms of a set of *sociocultural indicators*. The former case seems much problematic, as there will always be scholars

²⁴⁵ A formulation that is neutral with respect to the problem of directionality in economic development is given by Metcalfe and Ramlogan (2005: 220): "all economies are developing economies, in the fundamental sense of continuous self-transformation".

inclined to look back to history as progressive betterment while others would see no trend at all, if not one of decadence. As for the second option, the idea of *directionality* in socio-economic processes is widely accepted under the concept of 'development'. This has been argued for instance by Brinkman (1995) who, adopting a Schumpeterian approach, recalls the succession of technological revolutions that structurally transformed not only the economies but whole societies. Brinkman brings to the fore the work of the Institutional economist Gunnar Myrdal "who defined development as "... the *movement upward* of the entire social system" (Ibid, 1182; emphasis mine). In the last decades the Human Development Indicator published by the World Bank, inspired among others by Myrdal's understanding of development and the philosophical work of Amartia Sen, has been widely accepted as a useful tool for assessment of the 'progress' of each country, one that involves *both* economic growth *and* an 'up-lifting' structural change both in the economy and in other domains of society.

However, it seems to me that the evidence of directionality defined in terms of sociocultural 'development' is weak. Many societies have not consistently followed such developmental path. Evidence of this exists at least in Africa. Further, the idea that development implies continuous economic growth, at least in terms of the past Western style, is increasingly seen by environmental experts as unsustainable (Kallis and Norgaard, 2010). For the good and the bad, it seems there are reasons to doubt that the history of human societies has some sort of directionality that could be taken as an historical 'law'.246 If a developmental directionality could be discerned at all, one would need to leave the sociocultural realm and adopt an encompassing perspective about the whole *universe* to look at the different emergent levels of Nature, whose complexity (however it is measured) some biologists see as continuously growing (Hoffmeyer, 1998; Ulanowicz, 1997). Notwithstanding the validity of this vantage point, I note that the evolutionary timescape to which it refers is largely beyond the historical time of markets, which I measure in decades of 'calendar time'.

²⁴⁶ This topic of historical patterns is (so far) an unresolved issue. On the one hand, some argue that "an historical approach to economic growth is unlikely to be acceptable, unless it ... is also capable of identifying and explaining *recurrent* phenomena, as well as special cases" (Freeman and Louçã, 2001: 130). But, on the other hand, Seabrooke (2007b: 395-396) warns against the trap of seeing *history as cyclical* by mapping onto the past (through a selective reading of data) a particular model of the present, and then proposing a rationale (the 'cycle' or 'wave') that enables to predict a trend for the future.

3. The timescape of markets' history leads me to a *third* assumption. So far I have taken for granted the intuitive idea of sociocultural change observed *in reference to* either "a parameter of retrospectively fixed points" (change 'in time') or to "the process of change" *per se* of a system (change 'through time') (Adam, 1990: 101). However, we could consider another possibility, that of the 'organising time' of the clock and the calendar, which is a socially instituted tool that emerged with Western industrialisation and enables to "co-ordinate, synchronise, and sequence specific actions; when these are to take place; how long they are to take; how often and within what length of time span they are to happen; and in what order of priority they are to be selected" (Ibid, 101). In this sense, the 'abstract time' becomes contextually dependent and endowed with a normative character, one that enriches my concept of 'institutional *norms*' of the market.

The abstract nature of this 'organising time' is objectified as a conceptual tool that establishes the public meaning of a quantifiable time (minutes, months, years), "a resource that may be budgeted, wasted, allocated, sold, or controlled" (lbid, 104). This man-made time is well described by Adam (1990: 109) in the following statement:

I suggest that it is only with our relating to the human creation of calendar and clock time *as* time, that time became a receptacle to be filled, a resource to be allocated, and a commodity to be sold and exchanged on the labour market.

This 'organising time' bears another important connection to my institutional understanding of markets, although this time the connection is not with the norms that regulate markets; it is a connection with the *powers* embedded in, and among, the 'organisations of the market'. Therefore, "once we ask who structures whose life, what rules are being adhered to, and how these processes occur, then timed social life becomes fundamentally embedded in an understanding of the structural relations of power, normative structures, and the negotiated interactions of social life" (Adam, 1990: 109). Here 'time' becomes an organising principle of powers and resources; of our *social* life in the market.

Time as a resource around which there emerge struggles of power is at the core of the capitalist firm where "labour is exchanged for money in a mediated form and time is the medium through which labour is translated into its abstract exchange value" (lbid, 111). Indeed, "the time of some

members of such a society may be deemed more important or costly than of others. ... This in turn relates to its use and the extent to which the control over such usage is discretionary or imposed" (Ibid, 113).247 "What emerges as significant here is the need to recognise industrial time as a resource with both a use and an exchange value" (Ibid, 117), a "reified time ... externalised and imposed" (Ibid, 120) on the circadian time of human biological life.

This new understanding of time brings into the analysis of markets' history an important source of change, albeit a much neglected one in the heterodox traditions inspired by Schumpeter and the Austrian school. While the former directs his attention to the applications of radically innovative knowledge that could lead to profits of a large scale, and the latter emphasises the distributed source of all kinds of knowledge about the market as the main (if not the only) source of endogenous-driven change, both neglect power struggles as a source of change of organisations, particular markets, and the wider market system. Therefore, a model of markets' history needs to incorporate the interdependence of different 'timings' in the knowledge/culture domain (the processes of emergent institutional norms) and in the power relations/social domain (the processes of emergent organisations). In both kinds of processes, their different 'timing' involve interactions with the societal environment, which is by nature emergent, complex, and thus also multi-'timing'.

4. A fourth and final assumption. If we accept that 'market time' is revealed through sociocultural emergent processes, then we should assume that the rhythmicity of the interactional-communicational level of sociocultural life should be present in the history of markets under some kind of rhythmic path such as expansion followed by decline, or boom followed by burst. This is a point so far unexplored, but one that intuitively appears fundamental and parallel to a point made in this thesis (see 3.3.3): culture, as a system, has a sign-based nature because it emerges from the persons' communications through semiotic processes which are at the core of their learning processes. For instance, I suggest that the 'circadian hypothesis' should be explored in the study of expectations in market processes, which Keynes related to the *uncertainty lived* by economic agents when assessing

²⁴⁷ This 'organising time' is well illustrated in Lazonick's (1991: 119) discussion of Karl Marx's analysis of industrial work.

the future outcomes of markets, which he causally linked to economic fluctuations. This is a line of research waiting to be explored in an interdisciplinary style by the social scientists who share an historical understanding of the economy.

5.3.2.4 Interactionist model of markets

In what follows, the elaborations previously presented (see Chapter 4) about the systemic nature of markets are implicit. This understanding enables me to treat markets as sociocultural units/systems without running the risk of being criticised of 'holism', of ignoring the structure, relations and interactions involving individuals, firms and other organisations (e.g. regulatory bodies) of markets. I also recall that I have defined firms as sociocultural autonomous systems, where the term 'autonomous' refers to their strategic capacity to plan their future and to undertake actions intended to change the business environment into their benefit, which are properties that markets lack.

Therefore, it should be clear that by using the terms systems/sub-systems I am neither incurring into a functionalist explanation nor am I ignoring the autonomy of the persons that sustain (by continuously changing) these systems. In my emergentist understanding, I intrinsically assume that sociocultural systems such as firms and markets have emerged upon persons' social interactions and communications, and have differentiated into intermediate levels that are made of networks of social relations and meanings that define the roles that persons enact. Hence, the model that I am proposing acknowledges that the processes relating firms within a particular market and to other institutions of society are made by persons enacting their specific roles and behaving according to an institutionalised rationality (see 4.2.3).

The model described below is represented in Fig. 16²⁴⁸, which symbolises the interactions that make up the being 'in and through' time of a particular market (market A), an element of the market-system, itself a sub-system of the economy.²⁴⁹ The former is a meso-institution of society while the latter is a macro-institution. It takes account of three relevant institutions: Market A

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²⁴⁸ The term model is to be understood in the wide sense of a mediating instrument, as discussed in (Morrison and Morgan, 1999).

²⁴⁹ I recall that the economy also comprises non-market provisioning (see 4.2.2).

plus the institutions of science and state/polity, beyond others that are kept in the background of the analysis. To these selected three institutions (one meso and two macro) I add culture – the 'ideational background' of all institutions of society.²⁵⁰ They have been chosen after a review of some contributions in organisation management (Greenwood and Hinings, 1996; Spender, 1989), evolutionary economics (Metcalfe and Ramlogan, 2005; Metcalfe and Warde, 2002b), economic sociology (Beckert, 2009; Dobbin, 2004; Harvey, 2002b; Harvey and Metcalfe, 2005) and comparative political economy (Hall and Thelen, 2009; Streeck and Thelen, 2005).

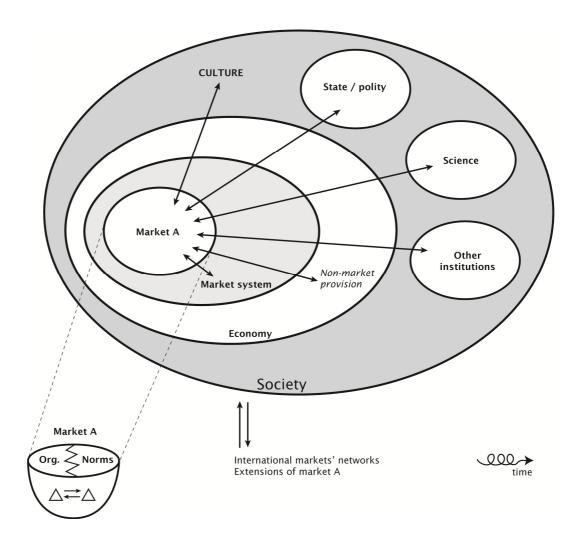


Fig. 16 - Markets' interaction processes

²⁵⁰ For a brief discussion of the integrative role of culture across society's institutions, albeit under a different terminology, see (Sorge, 2005b: 116-117).

The discussion is exclusively centred on the *interactions involving the actors* of a particular market ('market A')— among themselves, with the actors of other markets, the actors of other institutions, and the actors of other societies. The interdependence among institutions, and their connections with the wider world, have been assumed in Chapter 3 and thus will not be addressed here in order to keep the discussion manageable.

Simplifications are inevitable in any scientific endeavour. However, although I have no room to expand on all relevant connections (for instance with the education/training institution), when going over the discussion of the model I want the reader to keep in mind the *international connections or extensions* of markets, in some cases their very supra-national nature. I am aware of the rising flows of international trade, of the multinational production, distribution, and exchange networks of large corporations, and their sometimes deep connections with local clusters of small and medium firms in different countries. Of course, the electronic technologies used in the final markets have transformed these in extreme examples of international markets endowed with supra-national norms (e.g. Basel III).

The important point that should be present about the international scale of markets relates to the Interactionist nature of the model proposed. I accept that national markets are, in large part, an *interactive construction* of the internationalisation process. Precisely because the process is interactive (between 'within' and 'outside'), there is not on the one side the national market and on the other side the forces of the international markets that impinge on it. On this point I agree with a strong argument made by Sorge (2005a) and with Campbell's (2007: 181-182) reading of it: "International pressures ... are mediated by already existing domestic practices. New practices originating outside a country are translated, layered or otherwise recombined with nationally specific metatraditions [culture] that have been inherited from the past. ... internationalization is a simultaneous move to universalism (convergence) and particularism (divergence)."

Now I move to the details of the model. The arrows in Fig. 16 stand for interinstitutional networks or organisations (e.g. professional training centres, networks for innovation, networks for legislation lobbying), and for processes (causes/effects) relating market A to the institutions, culture and other economies and societies in the world. It could be argued that, for

analytical reasons, two kinds of interactions should be separated: (a) the interactions within market A and between market A and the rest of the market system, and (b) interactions relating market A to culture, state/polity and science. However, in doing this separation, even only for analytical purposes, I would be inconsistent with my methodology as I argue that market processes appear as a joint operation of different sorts of interactions (causes or effects); they present themselves as 'constellations of interactions', which is proper to the nature of complex self-organising systems. Therefore, in the following discussion I assume there is an intertwining of different kinds of interactions at each moment of the analysis.

Below I follow the contribution of Beckert (2009), which gives a valuable explanation of markets' processes, but I also diverge in what I see as shortcomings of his analysis in light of my social ontology. This author highlights the contingent nature of interpersonal relations in the market and the inherent uncertainty that individual and collective actors face. In Beckert's (2009: 249) words:

Only when it is possible to integrate the individual behaviour of market actors in such a way that they develop enough confidence to accept the risks of market exchange can the market operate as a mechanism for the fulfilment of adaptive functions in society. But how can we explain this integration of action and thus the order of markets?

Actually, the question put forward by Beckert is about markets' emergence as an organisation of different emergent processes, the latter being (by nature) a continuously organised change in particular segments of sociocultural reality. In Beckert's words: "I argue that one can distinguish between three fundamental coordination problems which represent at the same time the central sources of uncertainty for market actors. ... I call these issues the *value* problem, the problem of *competition*, and the *cooperation* problem" (Ibid, 253; emphasis mine). In the following I discuss each of these coordination problems from my vantage point.

a) Competition and market interactions

Metcalfe and Ramlogan (2005: 220) bring to the discussion of market competition some neglected contributions of heterodox economics that see the competitive process much differently from the price-based understanding of neo-classical economics: "What all of these writers are pointing to is

competition as a process of rivalry and for rivalry to be meaningful the competitors need to be different. It is this that connects us immediately to the evolutionary foundations of competition and development."

The idea "that markets are open to the rival behaviours of producers and consumers" (Metcalfe and Warde, 2002a: 194) leads me to emphasise a fundamental idea about market competition: it is a process of rivalry that cuts across both sides of the appropriation process, supply and demand. Most of the literature, either in evolutionary economics or in economic sociology, focus only on the supply side, and some extreme formulations seem to adopt a selectionist rhetoric as if there existed an independent demand that 'selects' for the fittest firms.²⁵¹ The current poor understanding of the demand side is acknowledged by Nelson and Consoli (2010) for whom "Evolutionary economics badly needs a behavioural theory of household consumption behaviour, but to date only limited progress has been made on that front."252 For instance, the knowledge of the demand-side will be improved with more work on the understanding of how new products are accepted and diffused among consumers (Kalkan, 2010), and (most importantly) how these processes are influenced by the strategies of rival producers. I think that the behaviourist psychology is not the best available partner for economics research in the field of consumer behaviour. Nevertheless, our understanding of the full process of market competition certainly needs interdisciplinary research and still has some way to go.

This encompassing picture of market competition leads us to acknowledge that supply and demand are indeed *interactively constructed*, which is a vision that is seldom adopted, even in evolutionary economics literature. One exception is Allen (1994: 595) who places this crucial feature at the core of the competitive process:

Potential 'supply' and 'demand' are not given independently of each other. People cannot experience what is not made available, but can only be affected by what is produced. Their lifestyle, demands and preferences are shaped by the supply that really occurs, and so a 'learning' dialogue shapes the patterns of consumption that develops the system. These patterns

²⁵¹ The canonical formulation of the evolutionary model is given by Metcalfe (1998: 33; emphasis mine): "It is the variant properties of the units of selection which play the causal role and the critical factors [of the environment] which translate the variant properties into the differential fitness of the units of selection. Fitness itself is not a variant property of anything."

²⁵² For a review of theoretical approaches to consumption that dissent from neoclassical economics, see (Ackerman, 1997).

emerge, and the chance details of the process of emergence alter what is finally 'revealed'. Supply affects demand, and *vice versa*, and cultural structures are formed by the effects of positive and negative feedbacks—imitation, economies of scale, learning by doing etc, are positive, and competition for attention, for market and for resources are negative.

This quote is a good support to my Interactionist approach to market competition and is much helpful in highlighting the existence of important relations between markets and the culture of a society when we look at its demand side. Of course these relations are also at work in the production processes on the supply side taking account that the beliefs prevalent within the firms are actively promoted by managers and entrepreneurs (Witt, 2000) who carry into their firms the ideas and values of their communities and society at large. In fact, and most importantly, the network of market producers (the industry) tacitly accepts a system of norms about how to compete in their market, which bear important linkages to society's culture. In line with Marshall's understanding of industries, Spender (1989: 68) argued that uncertainty "is resolved by the manager using his judgment to supplement the description of the decision situation"; managers "draw their judgements from a shared pool [of ideas and values], the "industry recipe." This industry-specific identity highlights a crucial linkage between the broader culture of society and one important set of non-legal norms, the 'business model' that informally regulates the supply side of the market and seldom is identified in economics literature as a source of organisation in the competitive process.²⁵³ It corresponds to a negative feedback expressed in "the idea that people interpret their environments and the forces operating within them through a set of taken-for-granted cognitive and normative templates (metatraditions)" (Campbell, 2007: 183). In some cases, the 'business model' gains a powerful normativity that 'blinds' the firms to the strategies they would need to survive competitive challenges (Porac et al., 1995). This means that, as a cultural entity, 'business models' are analogous to 'worldviews'; they "embody fixed presuppositions which determine how "facts" are interpreted, even, and perhaps particularly, facts that may appear to undermine an underlying worldview!" (Reynolds, 2004: 546).

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²⁵³ On the close concepts of 'business model' and 'market framing' see respectively (Porac *et al.*, 1989) and (Fiss and Kennedy, 2007).

Markets' history is also made by entrepreneurial firms willing to shake the prevailing norms and undertake competition through more or less radical innovations. This dimension of rivalry in market processes has been explored extensively by evolutionary economics literature, mostly by the Neo-Schumpeterian strand, with theoretical and empirical study of technological innovation across industries (Metcalfe, 2003) and in specific industries (Malerba, 2006) occupying a prominent place. In broad terms, over the twentieth century there has been an acceleration of innovations of a technological kind, which came largely from the interaction between science (public and private) and industry, through the market of R&D patents and through the activity of *cross-border networks*.

These inter-institutional, cross-border interactions connect the strategies of entrepreneurial firms with the ideas of inventive actors working in the science institution in order to build innovative solutions to problems created by the competition process (Metcalfe, 2010; Metcalfe *et al.*, 2005) (see Fig. 17). This is a central source of positive feedbacks into markets' history and into economic growth through technological innovation (Nelson, 2001), although its importance should be tempered by the acknowledgement that the effects of interactions with science intertwine with interactions with other institutions, namely with the state through its economic policies. For instance, a high interest rate induces short-run profitable investments that tend to displace expensive and time-demanding R&D projects (Ramazzotti, 2001: 75). After all, the technological dimension of the competitive process is only a piece in the big puzzle of markets and society interactions (Perez, 2004).

Market competition is always regulated by the state.²⁵⁴ Beckert (2009: 258) notes that "the state is involved through its legislation, for instance in antitrust law, labor law, or intellectual property law as well as through the introduction of subsidies, duties, and consumer protection measures." But, besides its regulatory role, the state can also be entrepreneurial "in the sense of providing the 'vision' for the future and building new institutions and the 'managing of conflicts' which inevitably arise during the process of structural change" (Chang, 1994: 293).

²⁵⁴ For a broader discussion of the relations between the state and markets, see (Block and Evans, 2005: 505).

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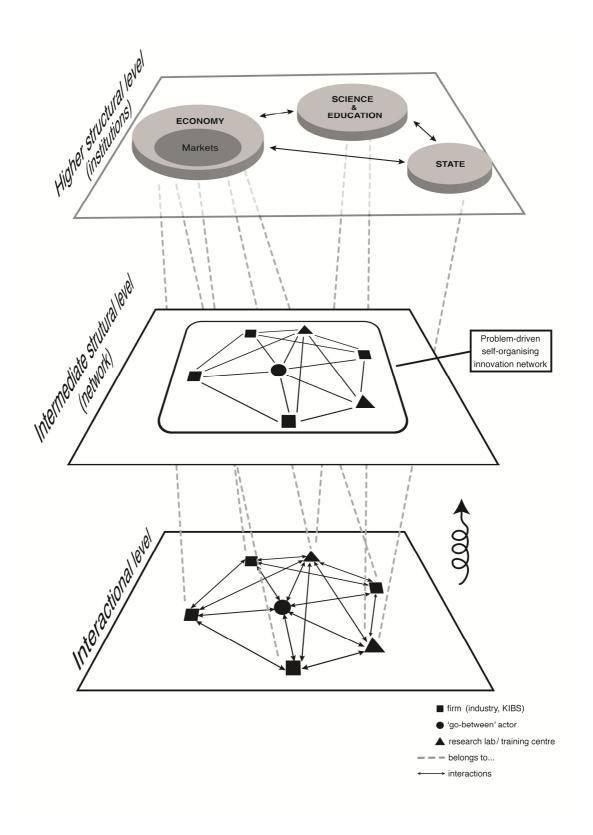


Fig. 17 - Model of a network for innovation

In a more focused study, Harvey (2007a) discusses three mechanisms relating markets and state in a co-constitutive way: law, welfare regulation and fiscal rules. His contribution highlights the economic, but non-market, nature of important causal processes in markets' functioning. "So legally or welfare regulatory instituted economic processes are immanent in the economic environment, shaping it in significant ways" (lbid, 31). Further, "the interaction between different regulatory modes [law, welfare regulation, fiscal rules], as much as with the economy, is a critical aspect in understanding the process of historical transformation" (lbid, 33). Therefore, he concludes: "because the dynamic involved in the model is multipolar, it may be that the language of complex, open-systems causality is more appropriate that one that implies a bi-polar dynamic or any straightforward opposition or dichotomy between variation and selection processes" (lbid, 36). This statement fully applies to the Interactionist perspective of market processes here argued.

Another important dimension of markets interactive change relates to the exercise of power (Schutz, 1995).²⁵⁵ While mainstream economics tend to admit that "people meet as equals in markets", in fact "some must work, while others need not, and the latter dominate the former in the strictest senses of the term, albeit perhaps by indirect and inconspicuous means" (Ibid, 1165). Beyond this historical class divide, other forms of power occur under the heading of 'market imperfection', namely the existence of "a business hierarchy defined by firms' possession or lack of monopoly power and by their sizes and positions in financial markets" (Ibid, 1166). Using a different conceptualisation, Harvey (2002b: 82; emphasis mine) states that "the exchange relation is characterised by mutual dependence (owners of capital need labour; people are, in varying ways obliged to sell their labour) and asymmetrical power relations", a social relation that is different from 'competition'. The latter "takes place within the same class of economic agent, but not between classes of economic agent" (Ibid, 82), for instance among firms in the situations of 'market imperfection' discussed by Schutz. Differently from competition, and falling under the category of 'mutual dependence with asymmetrical power', are the relations between vertically

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²⁵⁵ It is important to note that Max Weber defined 'economic action' as "peaceful exercise of power", according to the translation provided by Parsons (Baecker, 2007: 28). For a Peircean view of power, see (Garnar, 2006).

integrated businesses such as between food retailers and food manufacturers, which Harvey (2002b) discusses in detail.

Discussing the so-called 'labour markets', Beckert (2009: 259) understands that "they demonstrate very obviously how the institutional [state] regulation of competition not only reduces uncertainty by creating stable expectations but establishes economic inequalities and allocates market risks between market actors. ... Only if the resulting inequalities are accepted will the organization of economic activities through markets gain the social legitimacy that is itself a precondition for the functioning of markets". When there is a loss of legitimacy power struggles may ensue and take different forms and outcomes (Seabrooke, 2007a), which are in themselves a source of change in markets' norms and organisations.

Therefore, and despite ignored not only by the mainstream but also in important streams of heterodox economics (New Austrians, Neo-Schumpeterians), power should be present in the analysis of markets. As Hall and Thelen (2009: 13) put it, "achieving and maintaining coordination usually also involves the exercise of power, because forging and maintaining particular institutional arrangements creates winners and losers, notably in both sides of the class divide". In brief, "markets are as much political arenas as they are economic realms" (Beckert, 2009: 259).

Finally, I want to stress that the initiative of the interactions between firms and the state belongs to both sides. The state elaborates legal norms for the market, and firms exercise their power through collective action in the multiple forms aiming to promote favourable changes in markets' norms, namely those that regulate competition. Galbraith, a notable Institutional economist who studied the power of corporations in modern industrial capitalism gave us an illuminating formulation with which I conclude this discussion:

When the modern corporation acquires power over markets, power in the community, power over the state, power over belief, it is a political instrument, different in form and degree but not in kind from the state itself. To hold otherwise—to deny the political character of modern corporation—is not merely to avoid the reality. It is to disguise the reality (Galbraith, 1973: 6).

b) Cooperation and market interactions

The burst of the speculative bubble in the housing markets that produced an international crisis, and forced the states and central banks to intervene in the financial markets in 2008, is a conspicuous illustration that without trust markets collapse. Such massive intervention prevented (in extremis) a dramatic generalised rush to banks by depositors in fear of losing their savings. Facing important limitations in the knowledge about the quality of the products and the ultimate intentions and future behaviour of other actors in the market, and also the future outcomes of the market itself, the solution to such uncertainty has to come from generalised trust. Inspired by Luhmann's sociology, Bachmann (2001: 342) presents 'trust' as a foundational mechanism of social coordination:

at the origin of the social world lies the constitution of successful generalised forms of social practices induced by individuals' repeated decisions to co-operate with each other rather than remaining in isolation. In any case, such mechanisms are essential in regard to the constitution of differentiated social systems.

This basic mechanism involves someone's assumption that a trustee will not behave opportunistically without guarantees or enforceable promises of exchange. It is a necessary but risky engagement that calls for continued search of good reasons to be judged acceptable. In this perspective, 'trust' is neither a kind of strategy that rational actors use to maximise their interests, as Coleman puts it, nor it comes out of the need to reduce costs of opportunistic behaviour, as viewed by Transaction Cost Economics. Although both Coleman and Luhmann argue that 'institutions' (institutional norms) help social actors to assess the risk of trust investments, there are important differences between both authors:

Luhmann, who rejects the concept of solipsistic and solely calculation oriented actors, suggests that institutions are to be understood as reducing risk by providing patterns of social behaviour which in a *non*deterministic manner orient social actors' expectations and decisions (Bachmann, 2001: 345).

This means that the interplay between markets' norms and individual behaviour is of a recursive nature, which preserves individual's freedom to break the rules; both legal and non-legal norms "do their job in a latent manner".

The emergence of an institutionalised culture of trust, as part of markets' norms, is the adequate theoretical basis to the understanding that market processes are not only about competition but also about cooperation. And it is a better alternative to the approaches summarised by Beckert (2009: 260) such as the individualistic explanations of game theory in economics, the power oriented explanations unilaterally emphasising the enforcement of norms, and the sociological explanations based on a 'flat' ontology of social networks.

There is no doubt that cooperation is complementary and supportive of market competition. An important example of this complementarity has been theorised by Alfred Marshall (1919) in his analysis of industrial districts. Today, the literature about these synergies, either theoretical or policy oriented, is voluminous and constitutes a field of fertile research (Becattini *et al.*, 2009; Belussi and Caldari, 2009; Uyarra, 2010). In fact, the surge of studies on cooperation for competition have begun earlier under the label of 'National Systems of Innovation' (Freeman, 1995; Lündvall, 1992; Nelson, 1993). Paying attention to culturally specific instituted processes, these studies addressed inter-firm cooperation and inter-institutional networks at a national level aiming at building innovation-based competitive capabilities.

The above mentioned literature provides compelling evidence that cooperation is not a phenomenon internal to the firm, as suggested by Transaction Cost Economics; rather, cooperation is indispensable to the functioning of modern capitalism and to the success of firms' competitive strategies (Richardson, 1972). This has been historically documented by Lazonick's (1991) detailed study of the decline of Britain's industrial power and the rise of those of the USA and Japan. And I conclude this discussion of market cooperation with a Lazonick's incisive remark:

A theory of economic activity that assumes from the outset that the absence of market coordination represents a failure in the economic system cannot grasp the growing importance of planned coordination for generating economic growth (lbid, 9).

c) Value and market interactions

Value is seldom discussed in the analysis of markets, either in heterodox economics or in economic sociology, and this is strange given the fact that "one crucial source of uncertainty confronting market actors derives from the

difficulties of assessing the value of commodities" (Beckert, 2009: 253). Beckert discusses the issue of value from the point of view of market demand, actually the point of view of the consumers who strive to form a judgement about the value of what they want to buy, and below I will draw on his contribution.

Contra the idea of an exogenously given set of preferences assumed by neoclassical economics, Beckert rightly recalls the critique of Talcott Parsons and his view of a socialised determination of consumers' valuation process. Hence, Beckert discusses different ways of attributing value according to the particular type of the goods/services exchanged. Some goods may be ranked according to a technical standard, which is a social construct that gives the customer an idea of their qualities and adequacy for a purpose in view. Other goods are valued according to theoretical, social or political conventions. For instance, in the financial markets neoclassical models of finance 'informs' the software used by the traders, and thus coordinates their action "providing a cognitive basis from which to judge the relative value of heterogeneous products within the market" (Beckert, 2009: 254). In other markets (e.g. art, wine) it is the informed opinion of an expert that guides the buyer in his judgement about the value of the product. His assessment "relies on socially constructed judgments that reduce uncertainty and thereby stabilize expectations in a market field" (Ibid, 254-255).

Another source of judgement lies in religion, which has been an obstacle, in the nineteenth century in the USA, to the creation of a market for life insurance, and still is today important in what concerns the consumption of some foods. It is also clear that the value of a large number of goods depends on their recognition as signs of status in social ranking, which is the essence of the fashion markets and justifies large investments of corporations to build and maintain a successful 'brand'. On the other hand, cultural changes in society at large may turn obsolete, and in time lead to the disappearance of, a number of goods/services and their markets. These are not evident processes and much of the rhetoric about the 'knowledge economy' conceals the multi-dimensionality of what is being changed in the last decades and will continue to change (Slater, 2002): the materiality of products or infrastructures of services provided; the productive processes, the logistics of distribution and exchange interfaces; consumers' capabilities

to use new products; symbolisation of social status. In much, if not all, of these aspects the market's supply and demand are actively constituting each other.

So far I have followed Beckert (2009: 257) in his argument that "it is through processes of standardization, cognitive anchoring, normative legitimation, and social positioning that the subjective value attributions arise with which market actors assign value to goods." Nevertheless, products and services must have some material basis to support the valuation of consumers. Indeed, this was the perspective of the classical political economists for whom, namely Ricardo and Marx, the value of goods was exclusively originated by the labour used in their production; the good (in itself) incorporates the value. Whatever the merits of the labour-value theory, we will not understand the creation of value in the market if we ignore the process of production. At least because it is there that is made the distribution of the revenue, which is sustained by the final validation in the quantities sold at a given price taking place in the appropriation stage of the market.²⁵⁶ And the problem of revenue distribution makes a full circle in our story as it connects with the problem of the competitiveness of the firm. which may be seen in two close but different perspectives: "the Schumpeterian because the enterprise organizes the innovation process that permits the development of productive resources [and thus higher profits and higher wages] and the Marxian because the enterprise has incentives to invest in new technologies and ensure their fullest possible utilization [with less employees, better paid and more stressed]" (Lazonick, 1991: 290).

The above presented discussion gives some detail to what I have named an Interactionist model of markets' (Fig. 16), an understanding of the key forces that jointly create the history of each market, and of the whole market system of modern capitalist economies. Underlying this discussion is the systemic, sociocultural view of the market presented in chapter 4 where, in line with my particular understanding of institutions, I make a central distinction between the market's organisations and the market's norms. The latter have an ontology of a cultural kind (which includes technologies) and therefore bear meaning connections with the common pool of society's

²⁵⁶ In modern markets the price is usually fixed by the supplier within a procedure of cost accounting and a (flexible) policy of mark-up (see Tool, 1995).

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culture, as do the other institutions. The multiple interactions in which the market's actors are engaged as members of different institutions of society, and therein hold particular interests, have a bearing on the *norms* that regulate market activity, and thus are causal sources of its history. These interactions involve market actors' judgements about what are their personal interests, those of their firms, and those of society at large. This is the social dimension of markets – as distinct from, but interdependent with, the cultural dimension – that accounts for actors' interactions in mobilising power and resources of different kind to change norms (Dimitrakopoulos, 2005). Of course, these multiple inter-institutional interactions have a bearing not only in markets' norms but also in market's *organisations* (networks, firms, unions, etc.), and therefore are important causal sources of market's history.

To close the chapter I would like to emphasise the particular role of the state in the model. It would be a mistake to understand the state either as one institution of society on equal footing with the others, or as the 'pilot' that commands society. Modern societies have differentiated into highly complex sociocultural systems (institutions) that cannot be guided in a hierarchical command-and-control mode (Amin and Hausner, 1997). In the Interactionist model the state (and the polity that turns around it) is not simply one among other institutions; it has a specific status. The state not only *produces* normative meanings and guidance for the whole society but also is the enforcer of last resort through police, courts, jails, and in some states death penalty; in fact, the state is a meta-institution that interacts with the other institutions.

Therefore, the political projects that strive for society's legitimation in contemporary democracies, and aim to control the state, are in a large part projects that address the architecture and the consequences of a capitalist organisation of the economy.²⁵⁷ Political struggles are thus a source of markets' change, which is central to the argument of Hall and Thelen (2009: 26): "the kind of coalitional analysis that has been so important for explaining the origins of many institutions [norms or organisations] in coordinated market economies also provides the basis for a dynamic account

²⁵⁷ For a systematic discussion of these consequences see (Metcalfe and Warde, 2002a: 199-204).

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of how shifting alignments of interests bring about the reconfiguration of institutions and forms of coordination in both liberal and coordinated market economies."

Markets, when understood with the restrictive meaning of 'exchanges', have been part of human societies long before capitalism. However, as Karl Polanyi forcefully argued, with capitalism markets have been extended to new domains (labour, money, nature) thereby introducing a source of both dynamism and violence in industrialised societies. The state, understood as a meta-institution, is the instance from where modern societies attempt to moderate that violence inscribed at the core of the capitalist economy. As Baecker (2007: 29) put it,

Without the society intervening, that kind of economy - envisioning an uncertain future and making provisions with respect to it - would socially, evolutionarily, and materially not be possible.

Chapter 6

Conclusion

In the concluding chapter of this thesis I present the answers that the thesis provides to the research questions advanced in Chapter 1 and highlight the main results of the research that lend support to them (6.1). Then I show how these results make a contribution to contemporary Institutional economics (6.2). I finish with a provisional account of the limitations of the research outcome and the possible directions in which to explore the potential of the Naturalist Institutionalism argued in the thesis (6.3).

6.1 Research questions: the answers

The thesis aimed to discuss the nature of markets and, as it has been argued in the Introduction, this required a deeper understanding of the core concept of 'institution'. To achieve such aim, research questions have been formulated; some of a broader scope and others more circumscribed. In the present section I return to four main research questions (RQ) and give them straightforward answers, which are followed by a summary of their theoretical underpinnings.

RQ1 – What is the main legacy of Institutional economics?

The main intellectual legacy of Institutional economics is of an ontological nature; it is a proto-emergentist understanding of economic phenomena.

The review of the work of Veblen, Polanyi and Hayek provided in Chapter 2 opened a new intellectual window: the three authors make a distinction between a *micro* level of human sociality, namely transactions in markets, and a *macro* level that Veblen names 'institutions', Hayek names 'rules' and Polanyi terms either as 'institutional set up' or 'structures'. Whatever the terms used, the three authors tentatively approached an original idea: the micro and the macro levels of sociocultural reality are interdependent and mutually constitutive. This is an *emergentist* perspective that overcomes 'monist' approaches (*either* the micro *or* the macro) that are unable to

understand that we are dealing with a new ontological reality (*sociocultural systems*) that emerges upon these mutually constituting levels.

This core legacy has been neglected in the revival of Original Institutional economics of the last decades, and when today the term 'emergence' is used it is softened into a "non-reductive physicalism" in order to preserve the monist ontology of materialism. This manoeuvre is mostly evident in the absence of the concept of 'person' in Institutional economics literature, which is typically reduced to an epiphenomenon, the mind "supervenient" on the human brain. Inspired by Polanyi's legacy, section 2.5 connects with converging contributions of different disciplines to argue that persons emerge through linguistic, social and material interactions and, as such, persons have causal powers on their own right.

The concept of person is the point of departure for an ontology of sociocultural systems. It is recognised that interactions and communications make the life-experience of persons through cognitive, emotional and material processes, which give rise to inter-personal bonds. *Social relations* are emergent invariants of these bonds, some of which are internally and necessarily related (e.g. teacher-student), and thus constitute roles and positions that exist beyond the persons that occupy them. Persons' social life *and* the systems of 'social relations' and 'public meanings' that emerge from that life should be analytically distinguished. Using a spatial metaphor, while the structural level feeds-downwards to persons that occupy roles-positions, the outcome of their relations also feeds-upwards to maintain and change that structural level.

In brief, this chapter describes in detail the interplay between human agency and the structural levels of sociocultural systems and shows how they make systemic wholes, that is, self-organising complex and open systems of a sociocultural kind.

RQ2 – What is an institution?

An institution is a sociocultural system emergent from inter-related organisations, networks, norms and material reality, which structure individuals and organisations thereby serving with reliability a societal function.

This definition of institutions has the advantage of providing a conceptual clarification that was for a long time needed in Original Institutional economics. This literature gives us definitions of institutions such as "habits of thought" (Veblen), "ways of thought or action" (Walton Hamilton) or "patterned behaviour and the ideas and values associated" (Neale). However, if institutions are to be understood as sociocultural reality they should not be *reduced to persons*' propensities for habitual behaviour, patterns of behaviour, or a mix of both.

The above presented definition places institutions within sociocultural reality, the latter seen as the latest stage of the evolutionary process of Nature. Such view means that the properties of sociocultural systems build upon, and are consistent with, those of previous levels.

Chapter 3 provides some inter-disciplinary findings that are helpful to understand why social scientists should not accept 'methodological individualism'. For instance: underlying empirical reality there are contingent configurations of causal processes criss-crossing different structural levels; biological, physical and social systems have irreducible emergent properties, and thus take part in causal processes involving both their components and other systems, at the same or other levels; rather than 'things', systems are multi-level 'organised processes' interacting with other processes in the environment of the system.

The chapter also shows that sociocultural systems have properties that make them specific. In fact, human sociality requires each person to play different meaningful roles, which gives rise to *cross-border networks* that connect the various sociocultural systems of society. Further, and differently from the biological systems, sociocultural systems interact in a *multiplicity of scales*, both in time and space, due to the use of language. This configuration takes sociocultural reality to the highest levels of self-organisation and complexity in the evolutionary process of Nature.

In the definition of institutions, *cultural* components ('norms'), endowed with different kinds of normativity, are combined with *social* components (networks, organisations), and meaningful *material* reality. The reference to the specific symbolising nature of human beings and their societies points to a crucial link: material reality is involved in the semiotic processes that give rise to institutional norms. Therefore, if we want to understand what are

institutions we need to draw on the philosophical roots of Original Institutionalism, which means that Institutional norms are better understood in the context of Peirce's triadic semiotic.

This thesis elaborates a Peircean ontology of culture and treats culture as society's 'pool' of meanings that supports the huge diversity of institutional 'norms'. Here resides the basis for the distinction between the social and the cultural components of institutions; although interdependent, they are ontologically distinct.

Summing up:

- social and cultural entities have distinct roles in institutions. The cultural components (norms) provide normativity while social systems (organisations, networks) provide functionality;
- on the overall, four analytical levels are assumed: interactional-communicational, institutions, society, world, each relatively autonomous to the others;
- different combinations between social and cultural elements account for a large range of institutions and for the existence of tensions between social and cultural domains, and between institutions themselves and the whole societal system.

RQ3 – Is the market an institution?

The market is a meso-institution of society, a sub-system of the institution 'economy'. More specifically, it is a (sociocultural) self-organising, complex and open system endowed with structural levels that have emerged from persons' interactions-communications, many of them acting as members of organisations, in the transformation processes of production, distribution, appropriation and consumption, using matter-energy and symbolic tools in order to maintain and enhance the provisioning of society.

The thesis connects Karl Polanyi's thinking with Talcott Parsons systemic sociology through the idea that the *'economy'* is a macro-institution of society. Differently from most Institutionalist literature, it also establishes a distinction within the economy between the 'market system' and the non-market activities of provision.

The traditional 'division of knowledge' between economics and sociology is also blurred with the proposal of a new concept of human rationality: human rationality is multi-dimensional and socially situated; it always intertwines concerns about efficiency, effectiveness, and values about *interdependent ends and means*, in contexts where institutional norms and structural powers of the economy (and other institutions) constitute, and are constituted by, the persons involved.

In line with the understanding of institutions presented in the previous chapter, the market is seen as a multi-level self-organising, complex, and open system. The *upper level* is made of two kinds of structures: the 'social', composed of organisations and networks; the 'cultural', composed of norms, some of which may constitute ideational systems (e.g. business models, management theories, ideologies). The *intermediate level* is constituted by networks of both social relations and meanings that make up the 'transformation processes'. At the *bottom-level* of markets are persons' interactions and communications and the "transactions" that consummate the legal transfer of ownership and use of goods and services. This is an inclusive understanding that nevertheless excludes from the scope of the concept the transactions involving *land*, *labour* and *money*, the "fictitious commodities" of Karl Polanyi, which are only (market-like) exchanged but not subjected to the other transformation processes that are indispensable to the existence of a market.

The reader might wonder why neoclassical economics understanding of markets is not addressed in this thesis. The reason is well explained by Geoffrey Hodgson (1999: 36-37) in the statement that that "Neoclassical theory is Market-Blind", "the main element of the narrative is the increases of utility received by the individuals involved, not the transfer of property rights within a framework of legal institutions." In neoclassical economics, markets equate to momentary physical exchanges of goods, money is absent and processes (continuous change) are ruled out. Its 'representative agent' is alien to 'real world' persons, which have different competencies and knowledge. In brief, neoclassical economics is not relevant for a discussion of markets because it is based on erroneous assumptions such as the concept of 'representative' agent, the absolute dominance of negative feed back effects leading to market equilibrium, the ignorance of the systemic

nature of markets and the consequent adoption of methodological individualism.

For these reasons Chapter 4 overlooks neoclassical economics and closes with a discussion of the most important differences between my emergentist view of markets and those of a few contemporary outstanding heterodox economists.

RQ4 - Do markets evolve? If so, how?

Yes, markets evolve but this evolutionary process has a specific sociocultural nature that goes by the name of 'history'. The history of a market depends, among others, on its interactions with science, the state and culture, aiming to manage uncertainty and coordination in three crucial domains, competition, cooperation and value.

In Chapter 5, the thesis takes a stand about the current debate between those Institutional economists who argue for a generalised explanatory scheme inspired in biological evolution and those who prefer the inspiration of physic-chemical systems. Whatever the level of abstraction adopted, both stances actually build on foundational analogies. They argue for the 'right' analogy with another level of Nature, and do not realise that the emergence of a sociocultural level brought with itself *a new kind of evolutionary principles*. From the point of view of Naturalist Institutionalism, the debate is off the point for the analytical focus of economics should be on what is the *specific nature* of markets, rather than on analogies with other levels of Nature.

The thesis summarises a critique of Neo-Darwinism made by non-mainstream biologists, which strengthens the idea that autonomous systems, while interacting with their environment, co-constitute the overall evolutionary process. This perspective, amazingly glossed over in 'evolutionary' economics literature, undermines its typical reasoning in terms of 'population thinking'. Further, not only population thinking does not address the causal processes through which biological evolution occurs but it is also inadequate for understanding the history of sociocultural systems. In the case of markets, their components (e.g. firms, clients) establish *stable bonds* among themselves and with other systems of the societal environment (e.g. state, science, family) that cut across *heterogeneous scales of time and space*. These are features

that invalidate evolutionary population models, at least in the study of markets.

Chapter 5 specifies how the history of markets unfolds. It presents a model of markets' motion that combines an ontology of time with the structural analysis of market processes. Market interactions addressing the problems of *competition*, *cooperation* and *value* are addressed in detail. The emphasis on interactions is inspired by the Classical Pragmatist vision of relational processes. The model highlights key inter-institutional interactions that jointly create the history of each market, and the history of the whole market system in modern capitalist economies. In this sense it provides a bridge to the Varieties of Capitalism literature.

With science and culture, the state plays a central role in the model. It would be a mistake to see the state either as one institution of society on equal footing with the others, or as the 'pilot' that commands society. Modern societies have differentiated into highly complex sociocultural systems (institutions) that cannot be guided in a hierarchical command-and-control mode. In the Interactionist model the state has the specific status of a 'meta-institution'. It is seen as the instance from where modern societies, and the political projects that compete for state power, attempt to moderate the tensions inscribed in the nature of markets, the powerful core of modern capitalist economies.

6.2 Novelty of the thesis

Attempting to update Original Institutional economics, the present thesis turned out as an outcome of cross-disciplinary research. Its point of departure is the proto-emergentism hinted by Veblen, Hayek and Polanyi, which has been fleshed out with relevant work in different disciplines. The outcome is a reconstruction of Institutional economics that, in my view, could avoid intellectual pitfalls, conceptual dichotomies and sterile debates that impede the building of a consistent alternative to mainstream economics. Of course this reconstruction opposes received ideas and certainly creates intellectual tension with other approaches in the field. I see this outcome in a positive perspective; it could provoke discussions, lead to further research and give rise to new ideas. This is the constructive spirit in which the thesis has been written.

There is a fundamental originality in this thesis. It presents at the outset its methodological foundations, which enables those who so far have been working in the Original Institutionalist tradition to compare their own with my methodological choices and trace at least some of our theoretical differences to those fundamental choices. In this sense the thesis is radical; it goes down to the roots of the theoretical problems that Institutional economics presently faces.

A metaphysics of process is in itself a radical novelty. Taking reality as organised processes, the social scientist is comfortable when discussing sociocultural change and the existence of order and stability, which contrasts with the Institutional economics traditional bias to emphasise permanence. Highlighting that sociocultural processes are 'organised', that is, stably related among themselves, the thesis shows how we can articulate the 'structural' and the 'flow' views of sociocultural phenomena that usually are seen as incompatible.

This same methodology provides a ground to overcome the present debate between those who invoke basic concepts of Darwinism and those who see it inadequate for Institutional economics. Notwithstanding the careful use of metaphors and analogies, Institutional economics has to be built on what is specific to sociocultural reality. Human reflexivity, human semiotic processes of thinking and communicating, and the enormous learning capabilities and creativity of human beings are central properties of a new emergent level in the evolutionary process, which call for a conceptual framework distinct from those that are abstracted from processes at other levels of Nature. This is the bedrock of Naturalised Institutionalism.

The proposed understanding of institutions enables Original Institutional economics to deal with the great complexity of markets in an inclusive, rich and non-reductionist way. Inclusive, because the systemic view enables to nest firms within markets rather than oppose them to markets; also inclusive because it embraces the diverse processes of market transformation rather than limit the analysis to market exchanges. Rich, insofar it makes an ontological distinction between norms on the one hand, and firms and networks on the other hand, which enables to trace different processes endowed with different velocities and rhythms. Non-reductive, because it provides the description of the processes that give rise to the structural level

of markets, above and beyond the transactions involved, thereby accounting for system-wide causal relations that escape 'mechanismic' explanations. It rescues the economic sociology of Talcott Parsons and, without incurring in a functionalist shortcoming, combines it with the emergentist intuition of Veblen. At last both streams are reconciled.

Further, the emergent systems perspective helps to see the functional differentiation of society into institutions and the place of culture in relation to them. It enables an Interactionist understanding between markets and culture that acknowledges sources of change working both ways; markets change culture (values and life styles; see Sennett, 1998), and culture changes markets (labour capacities, theories about the economy and management, demand shifts). The connection between markets and culture also becomes enriched with the contribution of Peirce's semiotic, which accounts for the *material dimension of culture* and shows why technological innovations are in fact one aspect of culture-markets interactions. In brief, Naturalist Institutionalism provides an encompassing conceptual framework that can be useful to frame the empirical study of markets and market systems in contemporary capitalist economies.

Consistently with a multi-level ontology, the thesis argues that different levels of Nature require different ontologies, and hence different kinds of meta-theories and theories. This stance implies, on the one hand pluralism among sciences, and on the other hand invites economics to a friendly dialogue with the other sub-disciplines of social science. I surmise that my emergentist, multi-level ontology provides a helpful grounding for: (1) *intra*-disciplinary dialogue, namely with political scientists, economic sociologists and the Varieties of Capitalism literature; (2) *inter*-disciplinary dialogue, namely with researchers working in developmental psychology. The thesis suggests that there are opportunities for synergistic gains in 'inter' and 'trans'-disciplinary research projects, which could transform the study of markets and the broader economy in "an everyman's land", to use Schumpeter's words (Swedberg, 1999 [1989]). That day, whatever the scholar background and the research methods used, all those engaged in the study of the economy would rightly name themselves 'economists'.

Another innovative contribution of Naturalist Institutionalism is related to the concept of institutional 'norms'. Rather than 'rules', a word with a

computational connotation, the thesis proposes the term 'norms', which is encompassing enough to integrate different cultural entities such as laws, customs, theories and values. The latter are of most importance because it brings into the analysis of markets something that long ago has been abandoned in favour of (only apparently) amoral terms such as 'efficiency', 'utility' and 'self-interest'. In this sense, Naturalist Institutionalism reconnects with the Classical roots of economics; it is Political Economy.

Further, the thesis argues for what Schumpeter understood as a reasoned history of capitalism. For instance, the model of markets proposed in Chapter 5 (notwithstanding the differences in scope and merit) has characteristics similar to Schumpeter's *Theory of Development*. The model describes the market as systemically organised processes of social and cultural nature that emerge from interactions and communications between persons. It is an intellectual tool to be used in the study of empirical data recurring to different kinds of research methods, both quantitative and qualitative, in order to understand the history of particular markets and the market system of a society. In this sense, Naturalist Institutional economics is also *theoretically informed* history of the economy.

Finally, the Interactionist model highlights the interdependence of the different institutions of society and shows how they are connected by networks of agents acting on behalf of organisations pertaining to these institutions. This is illustrated with *innovation processes* (Fig. 17), which are organised in more or less formal networks involving persons with different institutional belongings, that is, different interests, powers, competencies, ideas and values. They are historically specific institutional articulations of a particular society, which is a view that differs from the concept of Systems of Innovation adopted in 'evolutionary economics' literature. On this point, the originality of the thesis comes from the acknowledgement that innovation is at the core of developmental change, which involves changes in the community's culture, in the norms of its institutions (values, ideas, worldviews) and in the balance of power between different groups at different spatial scales. It suggests the need to *build multi-level coalitions for change*.

Because the Interactionist model places norms of different kind (legal and non-legal) at the core of institutions, it highlights the risks of voluntarism in

policymaking. In fact, change in legislation is only one move in the overall process of institutional change, which also depends on other norms such as ideologies and business models, and on the 'social' components of institutions where power and interests are of prime importance. The awareness that the social and the cultural domains do not change at the same pace is of most importance for sensible policy decisions. A policymaking going down to local partnerships and experimental projects could reveal unintended and undesirable effects of centrally designed policies. Only such participatory style is able to engage public services in a collective learning process that creates opportunities and capabilities for new developmental paths. The model suggests an Interactionist policymaking.

6.3 Limitations and research prospects

The thesis provides what should be understood as the first step of a new research programme in heterodox Institutional economics. While such a programme should cover the study of other institutions and their interplay within the nation-society, and beyond its borders, the thesis has a limited focus, the study of markets. The in-depth discussion of the ontology of institutions came from the need to overcome the ambiguities that pervade the existent definitions of markets. The proposed concept of institution certainly needs to be improved with contributions from other bodies of knowledge in social science.

The model of markets presented in Chapter 4 and 5 incorporates time as an intrinsic dimension of interacting processes of transformation of matter-energy and meanings. It is only a sketch of a research project that needs cooperative work in an extended horizon. For instance, the institution 'family' has not been discussed in the model. It has been included in 'other institutions', and yet an explicit account of the interactions between markets and the 'family' would explicit crucial links between the market and the non-market domain of the economy. The same could be said of the interactions with the institution 'education'.

Another aspect of the model that needs further work is the definition of a theoretical criterion to help empirical research to define a particular market. For instance, do the utilitarian and the luxury cars belong to the same market, the market of 'cars'? How should we make explicit the international

scale of transformation processes involving multi-national corporations with a model that is anchored on nation-state institutions and culture while international norms are still absent or in a early process of emergence?

The completeness of the Interactional model of markets was not sought from the beginning, to which add limitations such as the above mentioned. Of course it does not provide a set of equations, which nowadays is the standard of 'elegance' in mainstream economics modelling, although it is certainly more in tune with the reality that it seeks to understand than such formalisations. On the whole, the model is a sketch that needs to be developed and matured through critical debate. It explores new directions in theoretical research and provides some conceptual novelty, which hopefully will stimulate discussions that could further the achievement of a broad consensus in Original Institutional economics.

The thesis presents unfinished work. It provides an ontology of markets that should be followed by two kinds of research streams. One, at the theoretical level, should aim to identify complementary contributions from other literatures that could help to make a more robust connection between Institutional economics and the sociology of markets. Here, beyond Weber and Parsons, I am thinking of classical sociologists such as Tönnies and Simmel whose rich work I have not explored (for instance, see Zafirovski, 2007).

Another stream of research that could follow is the empirical work, without which any theoretical contribution remains at best an interesting hypothesis. In the spirit of Classical Pragmatism, I assume that it is not enough to engage in debate with peers about theoretical contributions. In the case of markets, to do rigorous empirical work means, in a trivial sense, to do historical work; any empirical data about markets is about what has already happened. The theoretical framework proposed in this thesis could *inform* historical studies of markets of different kinds of goods-services at different geographical scales. For instance, there is a lack of studies in services despite the fact that the economy of contemporary developed societies is mainly a 'services economy'.

The study of a given market, when informed by a theoretical framework such as the one proposed here, enables to ask pertinent questions, organise the data, and clarify what is historical and contextual in light of the general

features of the model. At the same time, empirical work raises questions about the relevance of the theoretical framework, which may lead to adjustments or even a change in fundamental assumptions. For studies involving an extensive timescape, 'historical narrative' might be a useful method of research if structured by the theoretical model (Büthe, 2002). Case studies and historical studies of markets could provide a fruitful test to the *usefulness* of Naturalist Institutionalism.

And I finish with that Pragmatist idea that usefulness of economic theories should be a central concern to Institutional economics, a concern brilliantly expressed by a great Institutional economist of the twentieth century:

And since we will be in touch with real issues, and since issues that are real inspire passion, our life will, again, be pleasantly contentious, perhaps even usefully dangerous (Galbraith, 1973: 10).

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