

GIANFRANCO TUSSET, *Money as Organization. Gustavo Del Vecchio's Theory*, London, Pickering&Chatto, 2014. Pp. 200. £ 75. ISBN: 978-1-84893-425-2.

Gustavo del Vecchio's research on monetary theory was strongly influenced by the theory of money Walras had developed in the fourth edition of *Eléments d'économie politique pure* (1900). In a series of papers, which were published from 1909 onwards, Del Vecchio (1883-1972) applied the marginal principle to money and incorporated the special case of the value of money into the general structure built upon the law of marginal utility. Del Vecchio's work is clearly distinct from that of Marco Fanno. Whereas the latter is "Austrian" in character, Del Vecchio is more closely associated with Schumpeter's interest in the interplay between pure economics and economic history. Del Vecchio came also significantly near to a Schumpeterian approach in his 1928 Vienna paper 'Investigations on the Theory of Entrepreneurial Profit' in which he regarded profits as the most evident expression of the dynamic character of the economy and problems of equilibrium as only special cases in the study of dynamic theory. Del Vecchio, who got major inspiration for his analysis of interest, capital and time from Austrian theory, was also called "the Italian Schumpeter" (Fauci 2014: 177).

In his *History of Economic Analysis* Schumpeter (1954) not only praises Albert Aupetit and Karl Schlesinger as two excellent followers of Walras in the creation of the modern theory of money but also refers "to the original work of Del Vecchio" (p. 1082) which was "summed up in his *Grundlinien der Geldtheorie* and more completely in his *Ricerche sopra la teoria generale della moneta* (1932)". The German book on money was an outline of Del Vecchio's theory which was largely based on his earlier Italian papers but for the first time made the attempt of forming a concise theoretical unity, in which also problems of bank credits and the determination of – and effects of changes in – the discount rate were in the centre of his analysis. Although Schumpeter, in collaboration with Emil Lederer, was the general editor of the series *Beiträge zur ökonomischen Theorie*, in which Del Vecchio's book was the first volume to be published, in-

terestingly in the German edition, contrary to the later Italian one (1932), most of the historical explanations, as well as case illustrations, statistical data and critical discussions of other author's viewpoints, were eliminated in order to concentrate on the theoretical core. This procedure had caused several troubles for the translator and editor, which was openly admitted in the foreword by Otto Weinberger who himself had been one of a few exceptions to the widespread neglect of Walras's contributions to monetary theory. The Schumpeter-Weinberger edition was published in Italian by Riccardo Realfonzo in 1997.

Del Vecchio, who had completed his postgraduate studies in Berlin before World War I, and had been appointed professor in Trieste (1920) and subsequently at the University of Bologna (1926) and at Bocconi University in Milan (1930) was forced to resign from his academic activity when the Italian fascist government adopted anti-semitic laws in 1938. German contributions, like those of Fanno, can be regarded as an instance of the existence of an (academic) international civil society which during the Weimar Republic – although less intensively than before World War I, when, e.g., Wicksell had published his *Geldzins und Güterpreise* (1898) – still expressed itself in German as an international medium. During the Nazi years this academic framework collapsed under the impact of the same factors which forced many scholars, including Weinberger, to emigrate from Germany and Austria, as well as Del Vecchio to take refuge in Switzerland from November 1943 to July 1945.

In his fascinating study, Gianfranco Tuset aims to reconstruct and re-evaluate Gustavo Del Vecchio's theory of a monetary economy which is hardly known in the Anglo-Saxon world due to the fact that only little of his work has been translated into English. Tuset points out Del Vecchio's opposition to the quantity theory. Since he considered the capitalist economic system as intrinsically unstable, stabilization could not be founded on the quantity principle. Instead "Del Vecchio proposed a theory of money which was neither micro- nor macro-founded; rather it was a *meso*-theory built on the organization of a given economy into productive/social groups" (Tuset 2014: 64). Tuset elucidates Del Vecchio's emphasis on the role of money in coordinating economic actions and organization as an essentially dynamic function of the economy. Money enables the economy to improve the level of (self-) organization. This emphasis on money representing a medium/technology which organizes both economy and society gives Tuset's book on Del Vecchio's theory the title *Money as Organization*.

In focusing on economic groups such as farmers, manufacturers or workmen and their volume of transactions as the proper field of economic analysis Del Vecchio had been influenced by Cantillon's theory of monetary circulation. Tuset rightly emphasizes that Del Vecchio's outlines of a monetary theory were influenced by multiple economic schools including the cultural tradition of his native Italy and her leading economists. This includes a methodological balance between theoretical, statistical and historical analysis, similar to Schumpeter's analysis of business cycles, which found expression also in Del Vecchio's economic theory

of crises (1956). There Del Vecchio accentuates that static phenomena are no more than borderline cases of dynamic situations and cyclical fluctuations are inseparably linked to economic progress, compared to which they are only a secondary phenomenon.

Tusset points out that Del Vecchio “was a man of synthesis between contrasting polarities” (p. 17), that his writings are characterized by a contemporary Italian way of scientific realism. This comes out best in the intertwining between equilibrium and change, or the dialectics of statics versus dynamics as confronted also by Schumpeter. Thus Del Vecchio, on the one hand, was influenced by the theories of general equilibrium as developed by Walras and Pareto. On the other hand, like Schumpeter, he took the greatest interest in the study of economic dynamics, not merely understood as a modification of static analysis by a simple change in exogenously given data, but as a new economic approach to be constructed including the explanation of economic development. In his thoughts on economic dynamics Del Vecchio was profoundly influenced by Maffeo Pantaleoni who was the Italian economist who, much deeper than Walras and Pareto, investigated dynamic problems and phenomena such as crises and instability. This implied that Del Vecchio was not satisfied with Walras’s idea of a moving equilibrium in which dynamics is confined to the intra-period stage, i.e. a re-establishing of the equilibrium after a change in data. Tusset makes it clear that Del Vecchio came close to Walras’s notion of a desired cash balance but “added that the money demanded in a dynamic economy is greater than the corresponding money in a static one because of the cash demanded *per se* in a dynamic view” (p. 32). In Del Vecchio, the need for money includes subjective expectations concerning future prices. Tusset shows in his analysis that Del Vecchio’s monetary theory is strongly based on the role played by time. “Time involves expectations, and the latter play a crucial role in explaining the demand for money not directly linked to immediate exchanges” (p. 33).

Tusset’s attempt to condense and to re-evaluate critically Del Vecchio’s complex reflections on the circulation of money which focus on key concepts, such as groups, uncertainty, price expectations, interest and credit, and organization, provides a fascinating survey of the monetary theory of a great Italian economist. Del Vecchio praised Marshall for his realistic approach but criticized him for the pretended narrowness of his economic vision. He was deeply influenced by the model of general economic equilibrium as elaborated by Walras and Pareto but at the same time considered their model as more closing rather than opening an era of economic theory. Influenced strongly by Pantaleoni in Italy’s years of high theory, dynamics was at the centre of Del Vecchio’s scientific efforts. Tusset shows that Del Vecchio’s contributions to a theory of a dynamic monetary economy, which were mainly shaped in the period between 1909 and 1917, come closest to a Schumpeterian evolutionary approach. One may therefore hope that Tusset’s stimulating study will encourage a scholarly English edition of Del Vecchio’s most important publications which should not only attract the interest of neo-Schumpeterians and monetary theorists.

Harald Hagemann
University of Hohenheim
Harald.Hagemann@uni-hohenheim.de

References

- Del Vecchio G. (1928). Untersuchungen zur Theorie des Unternehmergewinns, in Mayer, Fetter and Reisch (eds.)(1928): 281-92.
- Del Vecchio G. (1930). *Grundlinien der Geldtheorie*, Tübingen, J.C.B. Mohr (Paul Siebeck). Italian edition *Lineamenti di Teoria Monetaria*, with an Introduction by Augusto Graziani and Riccardo Realfonzo, Turin and Rome, UTET Libreria Bancaria Editrice, 1997.
- Del Vecchio G. (1956). *Capitale e Interesse*, chpt. 7, Turin, Einaudi; Engl. transl. in H. Hagemann (ed.) *Business Cycle Theory. Selected Texts 1860-1939. Vol.IV: Equilibrium and the Business Cycle*, London, Pickering&Chatto, 2002: 239-88.
- Faucci R. (2014). *A History of Italian Economic Thought*, London and New York, Routledge.
- Mayer H., F.A. Fetter and R. Reisch (eds.)(1928). *Die Wirtschaftstheorie der Gegenwart, Vol.III: Einkommensbildung*, Vienna, Julius Springer.
- Schumpeter J.A. (1954). *History of Economic Analysis*, New York, Oxford University Press.
- Walras L. (1900). *Eléments d'économie politique pure*, 4th ed., Lausanne, Corbaz.

KARL POLANYI, *For a New West*, edited by GIORGIO RESTA and MARIAVITTORIA CATANZARITI, with a Preface by KARI POLANYI LEVITT, Cambridge, Polity Press, 2014. Pp. xv-258. € 24.30 pbk, € 74.30 hbk. ISBN-13: 978-0-7456-8443-7.

This collection of Karl Polanyi's writings includes twenty manuscripts, never published before. One of them dates back to 1919, from four to seven to the 1930s; all the others were written for lectures and courses Polanyi gave in the 1940s and 1950s. The date is often missing and has been estimated, when possible. The Editors' work is, in fact, that of a critical edition, considering their accurate transcription from originals not always in good conditions, and the useful notes they added. The book was previously published in Italian (*Per un nuovo Occidente*, Milan, Il Saggiatore, 2013).

Polanyi's theoretical reflection and political commitment are evidenced in the opening chapter, whose title – “For a New West” – has been adopted for the whole book. “Western culture”, “our civilization”, he says, has involved – invaded – the entire world: but its achievements have been paralleled by delusions, its fascination by exploitation, its power by its “barrenness”. Will the West be able to acknowledge its own responsibility “for the industrial, scientific, and economic road on which our world has embarked”? (p. 31)

The West is generally identified with the market system and modern freedom. That system, however, is not a necessary condition for safeguarding and improving civic liberties – Polanyi explains in Chapter 2. Besides, true freedom implies the ability to shape “our social destiny”: but this ‘positive’ freedom – allowing a creative adaptation capable to restore “the requirements of human

existence [...] in a machine civilization” – is undermined by the “dogmatic belief in economic determinism” (p. 33). This attitude derives from the unique market society’s historical characteristic of being “economically determined”, based as it is on the market system and the motive of gain. This motive was absent or ostracized in previous societies, in which the economic activity, including the presence of markets and the use of money, were subordinate to (“embedded” into) non-economic institutions. Max Weber’s analysis of the modern systemic “rationalization” and differentiation supplies a background to Polanyi’s approach to “general economic history”, which, in his view, “must comprise the study of the place occupied by the economic system in human society, in other words the study of the relationship between the economic and the noneconomic institutions in it” (pp. 137-38). The economy is ‘economically’ instituted, thence “rational” (Weber) and “disembedded” (Polanyi), only in the market society. In other words, in this society the economy has rules of its own; as a result, it constitutes a constraint for the relative freedom enjoyed, in turn, by the other aspects of social life. The whole society, under the domination of its economic system, becomes a “market society”.

The “economic determinism” is an ideological expression of these fundamental traits of contemporary society. Only a theoretical definition of the latter makes it possible to criticize and thus avoid the economic determinism. Otherwise, this particular institutional organization of the economy tends to be fallaciously generalized, as it would represent the economy *per se*, the substance of the economy. On the basis of such “dogmatic belief” and the corresponding categories of conventional economics – Polanyi maintains – the analysis of the specific historical-institutional setup of other economic systems cannot but result biased, while our own economic system seems natural and therefore “inevitable”.

Two points are worth noting in this connection. 1) Polanyi writes “market society”, but he clearly means “market capitalist society” (see Stanfield 1977). His reference to the factors of production is decisive thereupon: “[t]he self-regulating system of markets emerges from the fact that the factors of production, too, have markets (market economy)” (p. 135). The whole economy, then the very livelihood of people, are now entrusted to the market mechanism and wage labor (“to labor for pay alone”: p. 59), both depending on the spreading of capitalist relations of production. 2) Writing around 1950, after the definitive crisis of the “nineteenth century civilization” and the “great transformation”, by “self-regulation” Polanyi means the autonomy and dominance of the economy as general traits of capitalist society, and not – reductively – the nineteenth-century myth of market perfect competition implying the formal separation between economic and political institutions. He raises, in fact, the general problem of “the obvious mishandling of the elements of social existence – man and his natural environment”, as long as they are reduced to commodities (p. 206). It is true, on the other hand, that the “collapse” of “nineteenth-century civilization” (Polanyi 2001[1944]: 3), with the break-down of the gold standard as its spectacular final act, was the immediate and principal object of Polanyi’s reflection. This is apparent, for example, in Chapter

17 of the book here reviewed, containing six lectures of the years 1937-38, where ideas developed in *The Great Transformation* are already sketched. However, also his major work of 1944 analyzes the origin, crisis and institutional transformation of liberal capitalism within the frame of a more general conception of the market capitalist society, in comparison to pre-modern societies.

The interest for current political problems inspires Polanyi's research, including that on primitive and ancient economic systems and the method of social sciences he undertook after his appointment at the Columbia University in 1947, in the epoch of the Cold War and McCarthyism. The manuscripts collected in *For a New West* usefully clarify his theoretical achievements, also as a way of supporting his commitment against the "determinist" belief in free markets and in favor of democratic socialism.

Fascism was the consequence of the refusal, in the name of the "liberal creed", to give the crisis of liberal capitalism a socialist democratic solution – Polanyi argues in *The Great Transformation*. The market capitalist system was safeguarded and freedom abolished. The New Deal took a different way from fascism, but even before Roosevelt's death the fall of many conquered freedoms was foreseeable, insofar as the *Pax Americana* was going to coincide with the diffusion of "universal capitalism" and free-market universalism (Polanyi 1945). The additional irony was that the advocated freedom primarily pertained to "giant trusts and princely monopolies" (Polanyi 2001[1944]: 265).

A really general – "substantive" – definition of the economy is, according to Polanyi, both the condition and the result of the comparative analysis of economic systems. The subject matter of the economic theory will then be the institutional setup allowing the procurement of material means needed for the reproduction of individuals and their society – in the different forms in which it is organized, instituted, in each society. The *market system*, within which the composition of individual choices is supposed to accomplish the economic function, is but a particular case.

This kind of "institutional analysis", Polanyi maintains, opens "new frontiers of economic thinking" (p. 47); indeed, it benefits all social sciences, economic history in particular, which are rescued from the authority of "formal or scarcity economics" (p. 58). Keeping to "the substantive meaning of 'economic'" allows us to eliminate "the market assumption from the picture – and therewith also its modernizing and economistic associations" (p. 61). The origin and uses of money and trade institutions, and in general pre-modern economic systems, can thus be understood in their cultural specificity in time and space, and not as "mere aspects of the process implied in the market system" (*Ibid.*).

Commenting on the dispute – begun in the nineteenth century and never ended – between "modernizers and primitivists" (p. 151) concerning ancient societies, Polanyi points out that the definition of the market system as a specific historical mode of social organization of the economy is the conceptual key for a solution. "Both primitivists and their opponents failed to realize that to contrast 'modernity' with 'primitivism' in relation to human society meant to contrast

the presence or absence not of trade or money, but of the market mechanism” (p. 152). The modernist “evolutionist fallacy” (p. 154) consists in giving trade and money institutions of ancient societies the same meaning they have in the market system; as a consequence, production itself, or at least part of it, is supposed to have a market organization. In short, modernism finds in those societies the same economy as in the market society, though at a lower level of development. Yet, primitivism too seems affected by an implicit evolutionism, insofar as ancient non-market economic institutions are considered as non-economic, and not studied as culturally specific ways to perform the economic function within different social organizations.

In the following pages, Polanyi illustrates his thesis by historical evidences from ancient Greece and Babylonia. It is also worth noting here, as well as in the other chapters of the book concerning the method of social sciences, an explicit reference to the principle of the complementarity of empirical inquiry and theoretical abstraction. Facts acquire an organization and therefore a meaning, indeed become visible, through the questions theory makes possible. A theory of the market capitalist system in its historical specificity is an indispensable starting point for the comparative study of previous social organizations; this study suggests, in turn, basic questions for that theory. Polanyi deals with this issue in Chapter 14, “General Economic History”, which includes a synthetic outline of “the discoveries made in the contiguous fields of anthropology”, of those, in particular that “implied a critique of the so-called ‘economic man’” (p. 138).

This methodological assessment is consistently linked to the issue of the practical relevance of scientific knowledge. Polanyi argues that sciences, whether natural or social, develop methodologically, thus differentiating from each other; however, they have a common “matrix”, their original “innate interest”, which is related to “the environmental universe to which man adjusts in the immediate task of living” (p. 111). And reciprocally, “changes in our concepts of society affect the laws governing social existence” (p. 115). Polanyi’s warning is, in this connection, against scientism, that is, “the liberal axiom of the indiscriminate usefulness of all types of knowledge” (p. 117). His conclusion reflects the meaningful combination of epistemology and political philosophy in his thought: “The use of the social sciences is not a technical problem of science. It is a matter of providing such a definition of the meaning of human society as will maintain the sovereignty of man over all instruments of life, including science” (p. 118).

The political relevance of knowledge is also at issue in Chapters 6, 7 and 8, dealing with “international understanding”, peace and pacifism. In Polanyi’s view, the limit of pacifism is that peace can be achieved only by solving the problems originating war, not by a mere refusal of it. Thence the importance to understand the institutional context, and the kind of institutional change – toward socialism Polanyi then believed, in the late 1930s, but also later – needed for avoiding wars. He thinks of peace the same as of freedom: they can only be attained “in and through society”. The “inescapable nature of institutional society”, in fact, sets “a limit to the imaginary freedom of an abstract personality” (p. 84). This

question will be dealt with in *The Great Transformation*, especially in its final chapter, as the question of “the reality of society”.

Like the above mentioned Chapter 17, also the following three deal with “Crisis and Transformation” – the title of the Fourth (and last) Part of the book. Ideas developed in Polanyi’s published works are announced or recalled in these manuscripts, as well as in the others of the present collection. However, they also offer new clarifying suggestions concerning the interpretation of Polanyi’s ideas, which never ceased to be a ‘sign of contradiction’. Besides – as Giorgio Resta points out in his Introduction (p. 4) – “questions elsewhere addressed only in passing” are examined. “These include – Resta continues – the relationship between class structure and the nature of English culture, or between public opinion and the art of governing”, together with “the problems of pacifism and war as ‘institutions’”, and “sociology of knowledge”.

Both Resta and Mariavittoria Catanzariti in her Postface usefully focus the relationship of the manuscripts with published Polanyi’s writings. Both make relevant references to the past and present debate in the social sciences. Catanzariti deals in particular with diverse aspects of the problem of law in Polanyi’s approach. Finally, the relevance of Polanyi’s thought in present times is pointed out not only in the Introduction and the Postface, but also in the Preface by Kari Polanyi Levitt. Polanyi’s analyses – notes for instance Polanyi Levitt (p. xiii) – are arousing growing interest from the end of the twentieth century, when they “emerged as a truly transformative critique of a predatory capitalism that is destroying the natural and social environment” and threatening democracy.

Michele Cangiani
Professor of Economic Sociology, retired
Università Ca’ Foscari Venezia
cangiani@unive.it
cangianimichele@gmail.com

References

- Polanyi K. (1945). Universal Capitalism or Regional Planning?, *The London Quarterly of World Affairs*, January: 1-6.
 — (2001[1944]). *The Great Transformation: The Political and Economic Origins of Our Time*, Boston, Beacon.
 Stanfield J.R. (1977). Institutional Economics and the Crises of Capitalism, *Journal of Economic Issues*, XI, 2: 449-60.

ERWIN DEKKER, *The Viennese Students of Civilization. The Meaning and Context of Austrian Economics Reconsidered*, New York, Cambridge University Press, 2016. Pp. 228. £ 69.99. ISBN: 978-1-107-12640-4.

The Viennese Students of Civilization is a book on an overlooked aspect of the Austrian school of thought. The main thesis of Dekker is that Austrian

economics conceived market theory as part of the study of civilization. This is a shared and broad interests of all members of the Austrian tradition (with the possible exception of Böhm-Bawerk). A second major Austrian idea underlined by Dekker is the therapeutic role of theory: economic thought shows us primarily what we cannot achieve, and this insight can have therapeutic effects.

The idea of civilization was a central theme of social theories in the eighteenth and nineteenth century, from Vico to Guizot, and also concerned political economy as in Venetian paternalism or in the German Ethical School. The definition of civilization refers to how individuals live together, their forms of interaction, practices, how things are done and to their manners. Also the cultural level and morality are normally included in the definition and these concepts present some difficulty because they are at odds with the subjective approach of economics. Therefore, the study of civilization involves a difficult combination of economic, social and moral dimensions.

The terms *Kultur* and *Zivilisation* became disconnected in the German language. *Zivilisation* refers to appearances, technology, organization, and manners. *Kultur* instead refers to accomplishments that define the identity of a people, art and its character. The elements of civilization are usually conceived as restraints to our natural inclinations and instincts. Norbert Elias talks of *interrelated effects of self-constraint and social constraint*. In anthropology, Bronislaw Malinowski has similarly emphasized obedience and submission to certain restraints. Moreover the idea of civilization is related to a view of a natural tendency of society towards development and progress, therefore towards an improvement of our living conditions.

Competitive markets are a central element of the modern civilization. Moreover, the market process has cultural effects and is dependent on a certain market culture for its continued existence. Valuation is the central process of economics, and markets collect a variety of individual valuations. Ethics rather deals with how we should value than with how we do value and it is incorporated in the theory of civilization. In fact, social science is different from natural science to the extent that the social scientist is always part of what he is studying.

Dekker defines the Austrians as *custodian of their civilization*. They thought that knowledge requires cultivation otherwise it will disappear. We can understand the sense of institutions only partially although the knowledge contained in them is of great value. That means that we should warn against attempts to revolutionize fields and traditions of knowledge. They also warned against optimistic individualism. They expressed a certain sympathy with the Habsburg empire, and they never expressed positions against the state. Dekker argues that we cannot define as pure methodological individualism the theoretical position of Austrians. It is best defined as the study of the interaction between the limited autonomy of the individual, institutions and social forces. Moreover, they never adopted a pure rationalistic method because in their studies we record the relevance of real world problems. In particular, in the work of Hayek we can distinguish the fundamental issue of the fall of Habsburg Empire and rise of socialism. How-

ever, their research programme is primarily founded in the analysis of scientific problems and methodological principles (Birner 1999).

Vienna is known for having been a cosmopolitan town but, at the same time, also a small village. In fact, it was a town where, at least at the bourgeois level, everybody knew everybody else. Dekker supplies an excellent description of how circles worked, how they intersected, what scholars did when they met. Therefore, he describes the frequentation, sympathies, relationships, rules, places, habits of the intellectuals meeting in the several circles of Vienna. Looking at this picture we realize what an incredible set of scholars interacted in that environment, from Kelsen to Morgenstern, from Hilferding to Popper (actually, a bit emarginated) and from Schumpeter to Haberler. The most interesting fact is the peculiar integration between the University and circles that allowed an over-supply of intellectuals. There were only three chairs of economics in Vienna and most of those intellectuals had other occupations: Mises was the secretary of the Chamber of Commerce, Hayek was the director of the *Institute for research on cycles* (created by Mises; Hayek was eventually substituted by Morgenstern), others as Machlup worked in a private firm. The University chairs were occupied by von Wieser, Böhm-Bawerk and von Philippovich, eventually substituted respectively by Hans Mayer, Carl Grünberg and Othmar Spann. Ex post, we may affirm that the chairs – as often happens – went to good scholars, but not the best. The consequence was that most of intellectual life took part in the meetings of the circles and in Cafés (the *Künstler* for the Mises circle, plus the *Ancora Verde* Italian restaurant...). That gave the advantage of the absence of disciplinary boundaries, which allowed for interdisciplinary research and integrated reasoning on economic issues. This stimulating environment allowed for the birth or the development of many streams of thought, sometimes conflicting, e.g. the philosophical circle developed logical positivism in contrast with the approach of Mises.

A particularly interesting point is the rise and fall of the hope to transform the Habsburg Empire in liberal sense from 1861 to 1873. In that period the liberal party had a majority in parliament. The stock market crash of 1873 ended this influence of liberalism. Nevertheless, after that, Carl Menger became the tutor of the crown Prince Rudolf who had a liberal-progressive attitude. Menger even took him on a study trip to Scotland in the places where Hume and Smith worked. However, history took another direction and the Mayerling tragedy in 1889 ended this particular experience anyway.

Dekker argues that Albert Schäffle is at the source of this interest for civilization of the Austrians. He was responsible for shifting the research interest from goods to the economic actor. Differently from the German Ethical Economy, which was interested in civilization as a whole, Schäffle started from the individual to understand the social structure, to finally end theorization with the satisfaction of man. Schäffle and Menger argued that the division of labour is not the main driving force of economic development. The true cause is the development of our knowledge and the embedding of knowledge in social struc-

tures. Planning the way to satisfy our needs is a fundamental phenomenon that, needing to be coordinated in society, needs a certain level of civilization. That requires calculation as well as prudence.

Wieser argued that the constitution is a process that has to be constantly affirmed and organically improved. It is a living and continued moral commitment to certain norms and values. Customs, traditions and morality are the most powerful forces in society. Masses could be elevated out of their poverty and mental backwardness, they could learn to be responsible and autonomous individuals. That assigned a paternalistic role of élites. This idea persists also in Schumpeter, who substituted industrial leaders for the élite. Böhm-Bawerk had instead a different perspective and emphasized the contrast between economic laws and the human attempts to overcome them. For this reason, he is a little bit extraneous to the Austrian idea of civilization. Here, Dekker does not develop the connection with Aristotle and classical philosophy that would have enriched the book.

Menger was optimistic about the extension of human knowledge, while Hayek was not. Useful knowledge for Hayek is embedded in institutions, traditions and customs, therefore it is encapsulated in *limits to human action*. According to Hayek man did not adopt new and better rules because he is intelligent, actually man became intelligent by submitting to new rules of conduct. In Hayek the individual is not the starting point, he is neither the end of economic discourse. His level of discourse is always something greater than man. It is Civilization makes individual autonomy possible.

Freedom was not considered as the absence of constraints. They saw it as enabled by constraints as traditions, customs, morality etc. Markets impose restrictions that we have to accept to have a long run improvement of our welfare. Hayek argued that man has been civilized very much against his wishes. Civilization and freedom itself come at a price of submitting ourselves to customs, traditions and values that we cannot always understand. The preservation of individual freedom is not compatible with a full satisfaction of our views on distributive justice. As a consequence, Austrians have emphasized the limited autonomy of the individual as her action is constrained by her knowledge, by social forces, traditions, customs and morals. But constraints are also an order elements helping overcoming the limits of the individual. Interacting people are always constraints and enablers to each other.

Market is studied in cultural and moral terms. Markets and freedom come at a price. Society is viewed as an organism and not an organization. On these issues, Dekker records an interesting contrast between Hayek and Freud. The latter, in fact, supported the view that we should get rid of most of existing morality. Hayek considered this as a revolt against the basis of civilization.

The difference between Schumpeter's and Hayek's theory of the entrepreneur is restated by Dekker in relation to the point of view of civilization. According to Schumpeter, in a highly civilized society, the role for the entrepreneur tends to disappear as its function is bureaucratized. In the view of Hayek, the entre-

preneur is able to reconnect knowledge dispersed in society and to use it for his scope. In this case, there is no reduction of entrepreneurship in a highly civilized society, and development is not, hopefully, going in the direction of Schumpeter.

The discourse became more complex when Austrians realized that markets could be no more supported by traditional institutions as the family, the church etc. Therefore, the market became not only the main cultural institution needing support, but also the institution that had to provide support to the others. Markets could assume the role of some “integrative” relationships in society – beside the exchange relationship that they represent. This circular relationship has been differently conceived and solved by the different scholars, however, it was responsible for some “degeneration” in the development of the Austrian theory. Therefore, the idea that markets would solve any structural problem gradually emerged in some of the neo-liberal economists. On the other hand, they matured the idea that society cannot be engineered. Forces of social move are almost “completely beyond our control, and the social scientist is consequently not the master of such forces but merely its student” (p. 111). Here, Dekker proposes an interesting and original discussion on *therapeutic role of theory* (ch. 8). The fundamental idea is taken from Norbert Elias who argued that Civilization can be maintained or improved by the understanding we have of it.

These ideas took a slightly different form in Schumpeter, who adopted a kind of fatalist position on the changing form of capitalism. On the other hand, he was, however, also influenced by Hilferding and by the Austro-Marxist theorization of capitalism. Yet, Schumpeter shares with Mises a certain sense of loss for the degeneration and decline of society.

Menger praised the tradition of Burke and Savigny for having shown the importance of organically grown institutions. However, any historically finalistic and deterministic evolutionary path of society is denied. On the one hand, the Austrian evolutionary model is that of *path-dependence*, on the other, they opposed the *therapeutic role of theory* to the *prophetic role of historicism*. They did not share the Hegelian view of universal historical laws. Both Hayek and Popper continued these reflections along the post-war period. But, as Dekker clearly explains, they developed some theoretical political insight that is not perfectly in line with Austrian scepticism and uncertainty. Then, the new U.S. Austrian generation did not stick at all to the humble theoretical position advocated by their fathers.

Dekker describes the emigration of Austrians in the U.S. and their adaptation to the new context. In the U.S. they had difficulty to cope with the new language of economics and positivism – also imported from Europe if not even from Austria. The change was more evident and radical in Morgenstern, Machlup and Haberler.

In conclusion, Dekker supplies a very enjoyable framework of a neglected aspect of the original Austrian school. He proposes a different angle of reading the theories of these scholars and the result is quite successful. We may lament the lack of a good backward connection with the pretended Aristotelian thought of Menger and with the other unclear roots of studies of civilization. The fact

is that also Venetian paternalism of the nineteenth century displayed a similar attention and reference to the process of civilization and this common feature could be a stimulating element to continue the study.

Stefano Solari
Università di Padova
stefano.solari@unipd.it

References

Birner J. (1999). The Surprising Place of Cognitive Psychology in the work of F.A. Hayek, *History of Economic Ideas* 7(1-2): 43-84.

ROGER FRANTZ AND ROBERT LEESON (eds.), *Hayek and Behavioral Economics*, London, Palgrave MacMillan 2013. XVII, 349. € 124.79 hbk. € 119.59 pbk. ISBN: 978-1-4039-9520-9.

The title of this volume is attractive and the fact that it is part of the series “Archival Insights into the Evolution of Economics” promising. Yet it turns out to be ironical that it has been published in that series. The only three references to archival material in the entire book are limited to the Introduction and chapters 8 and 9 and they are only generic. The Introduction states: “The chapters that follow are inspired – and informed – by Hayek’s contributions to what may become a new paradigm in behavioral economics. Our understanding of the associated interrelationships will presumably become clearer when the “missing” Hayek archives become available for scholarly inspection.” (p. xiv). This is no more than wishful thinking. The observation that “[r]emarkable conclusions have been drawn” (p.xiii), presumably from unpublished archival material, followed by a reference to a paper by Kurt Leube in which he alleges that Mises and Hayek “initially favored Anschluss with Germany” (p. xiii) does not have any function in the context of this volume. Without further discussion or support in archival material this is no more than gossip. Chapter 8 just mentions two manuscripts by Hayek that can be found in the Hayek Archives. The author of chapter 9 writes that neither the Hayek Archives at the Hoover Institution nor the Simon Archives at Carnegie Mellon contain exchanges between Simon and Hayek. That is the extent to which archival material plays a role in this volume.

The book contains a mixed lot of contributions. Some are very good, others leave much to be desired, others contain disinformation.

The foreword by Vernon Smith is a brief personal account of his connections with Hayek’s work and inserts itself fully in the perspective of behavioral economics.

In the Introduction the editors write that archival material has to be embedded in its context. However, the lack of archival material in the volume leaves the very brief historical sketch hanging in the air. The extremely condensed history

the Austrian School that is given limits itself to some unsystematic observations about the intellectual, political and religious (!) climate at the end of the 19th century that is too brief to be useful.

The title of Roger Frantz's "Frederick Hayek's Behavioral Economics in Historical Context," the first chapter, suggests that there is such a thing as Friedrich (not Frederick) Hayek's behavioral economics in the sense of providing economics with more realistic psychological foundations (cp. Frantz' quote on p. 14). But that is not true. As I will argue below, Hayek explicitly rejected this reductionist variant of behavioral economics as psychologism. This fundamental mistake is compounded by what with a generous dose of good will might be called a chronological error. While it is correct that 26 years separate 1976 from 1940, this is not the number of years that separates the publication of Hayek's *The Sensory Order* from that of Katona's *Organizing and Memorizing* of 1940. Hayek's book was first published in 1952. The author also appears to be ignorant of the fact that the core of the theory of *The Sensory Order* is contained in a typescript from 1920.

But let me return to his main mistake. Hayek condemns the type of reductionism Frantz attributes to him. Part of *The Counter Revolution of Science* is dedicated to this. Cp. for instance p. 39:

In so far as we analyze individual thought in the social sciences the purpose is not to explain that thought but merely to distinguish the possible types of elements with which we shall have to reckon in the construction of different patterns of social relationships. It is a mistake, to which careless expressions by social scientists often give countenance, to believe that their aim is to *explain* conscious action. This, if it can be done at all, is a different task, the task of psychology. For the social sciences the types of conscious action are data and all they have to do with regard to these data is to arrange them in such orderly fashion that they can be effectively used for their task. The problems which they try to answer arise only in so far as the conscious action of many men produce undesigned results, in so far as regularities are observed which are not the result of anybody's design. (notes deleted).

In case this is not convincing enough, let me quote a passage from pp. 48-9:

Our argument is ... in the first instance, that for the task of the social sciences ... an explanation of the formation of mental entities and their relations to the physical facts which they represent is unnecessary, and that such an explanation would help us in no way in our task; and, secondly, that such an explanation, although conceivable, is not only not available at present and not likely to be available for a long time yet, but also unlikely to be ever more than an "explanation of the principle." (note deleted).

Notice that by mental entities Hayek means subjective ideas (see my discussion of Di Iorio, below). That puts paid to the idea of Hayek as a behavioral economist in the reductionist sense.

Of course, one may disagree with Hayek's anti-reductionism. It is also perfectly legitimate to argue that Hayek's theory of mind contains elements for arriving at a more satisfactory modelling of human decision processes. But that

is an entirely different issue from believing – and making believe – that *because* Hayek wrote *The Sensory Order* he *therefore* wanted to construct a more realistic theory of human decision making. As Boettke, Caceres and Martin make clear in chapter 4, Hayek's main interest was a different one. He was interested in the mechanisms that coordinate individual decisions – no matter how wrong these may be. As Siegwart Lindenberg argues in an article published in 1992 that deserves to be widely read, a methodological individualist is perfectly justified in adapting the way individuals are modelled to the explanatory objectives he pursues. If the analytical primacy is the explanation of collective phenomena, the choice of model of the individual is likely to be different from the case the analytical primacy is the explanation of individual decision behavior. The fact that Frantz is not aware of this nor of Hayek's anti-psychologism knocks out the foundation for what he does in the rest of his chapter, which is to compare Hayek's non-existent behavioral economics to that of others.

Unfortunately, Frantz is far from alone in wrongly attributing to Hayek the project of founding his economic and social theory on his theory of mind (often wrongly referred to as his theory of psychology; Hayek presented his psychology of perception as an illustration of his theory of mind). Uncritical free association takes the place of a thorough knowledge of Hayek's ideas – and not only his. Compare the following sentence (which, as far as it is understandable, also seems to confuse object and meta levels): “Hayek's neural net and Simon's vast maze of possibilities lead us to use (subconscious) pattern recognition in decision making, and limit our rationality.” (p. 16).

The same uncritical and unfettered associative argumentation is used to link Hayek to Leibenstein. This time the author uses a quotation from *The Counter Revolution of Science* (the part that he did read) and inserts “x-efficiency.” This is what he writes:

Is x-inefficiency inevitable? Hayek infers that it is not. In *The Counter Revolution of Science* Hayek says that “[I]f all the individual knowledge dispersed among many people could be mastered by a single mind, and *if* this mastermind could make all the people act at all times as he wished,” then x-inefficiency – my term not his – could be zero [ref. to CRS]. (p. 23).

Just to clear the wood from unnecessary double negations: if x-inefficiency (the difference between the actual state of an economy and its theoretical description) is not inevitable, that is equivalent to saying that this efficiency gap can be avoided. Now let us read what Hayek actually writes after “as he wished,”:

certain results could be achieved; but these results could, of course, not be known to anybody except to such a master-mind. It need hardly be pointed out that an assertion about a “possibility” which is dependent on such conditions has no relation to reality. There is no such thing as the productive capacity of society in the abstract – apart from particular forms of organization. The only fact which we can regard as given is that there are particular people who have certain concrete knowledge about the way in which particular things can be used for particular purposes. This knowledge never exists as an integrated whole or in one mind,

and the only knowledge that can in any sense be said to exist are these separate and often inconsistent and even conflicting views of different people.”

That is the exact opposite of what the author intimates in his pastiche.

Chapter 2, “A Hayekian/Kirznerian Economic History of the Modern World” by Deirdre Nansen McCloskey is mainly about McCloskey and her discovery of the work of Kirzner. Readers who expect to learn something about Hayek and his possible links with behavioral economics will be disappointed. The text, moreover, is an only slightly adapted version of an article that has been published elsewhere so it is legitimate to wonder why it has been included in this volume.

Chapter 3, by Walter Block, poses and answers the questions “Was Hayek an Austrian Economist? Yes and No. Was Hayek a praxeologist? No.” The author begins his chapter with a reaction to his own question: “Who cares?” (p. 70). He goes on to compare the extent to which Hayek’s work overlaps with that of other economists who are usually considered to belong to the Austrian school. Block shows that, contrary to some commentators, Hayek does not subscribe to praxeology. The author might have made it clearer what is meant by that, but on p. 74 he writes that praxeology aims at deriving apodictically the truth about economic phenomena. He correctly mentions Hayek’s “Economics and Knowledge” of 1937 as the place where he distances himself from Mises’ idea that the laws of economics are a-priori. As I have shown elsewhere (Birner 2016), in that article Hayek tries to combine two things. One is Popper’s idea that in order for a theory to have empirical content, it cannot be tautological. The other is to come to terms with the undeniably tautological “feel” that the rational decision making model of neoclassical economics, or the pure logic of choice, as Hayek calls it, has. As to what has become known as behavioral economics, Block correctly observes that in his economics Hayek was not concerned with the mental mechanisms leading to human decisions. He prudently concludes that “Hayek’s work is consistent with that of behavioral economists.” That is true in the sense that it is legitimate to disagree with Hayek’s anti-psychologism and to let oneself be inspired by his work in the philosophy of mind and the psychology of perception.

“Error is Obvious, Coordination is the Puzzle” by Pete Boettke, W. Zachary Caceres and Adam Martin sheds light on the reason why Hayek is not a behavioral (or experimental, as they call it) economists *tout court*. The authors distinguish two approaches in experimental economics, one that concentrates on failures in individuals’ decision processes, the other (much in the minority) focusing on how a particular institutional framework such as the market succeeds in coordinating the plans of many individuals in spite of their decision making failures. They rightly place the latter in the Hayekian tradition. By emphasizing this feature they also throw light on Hayek’s anti-psychologism (without explicitly mentioning it). In various articles and in *The Counter Revolution of Science* in particular Hayek criticizes the type of reductionism that wants to explain economic phenomena in terms of mental mechanisms. Hayek emphasizes that economists should take

individuals' ideas (no matter whether they are "objectively" right or wrong) as the data of their analyses. The typically economic strategy of explanation applies the "pure logic of choice" to these data. Hayek does not deny that the ideas individuals have may be explained, but that is a task for psychology. The problem that interests him primarily is, as Boettke *et al.* show, how the market may coordinate individuals' plans *despite* the fact that they make mistakes. As experimental economics, including computer simulations, demonstrates, coordination through the market may take place even in the case of very stupid individuals. Let me add that this is fortunate. As we know both from our daily experience and from experimental laboratory research, individuals *are* very ignorant and *do* make many mistakes. Nevertheless, market societies are very robust, do not easily fall apart and allocate resources perhaps not perfectly but often satisfactorily. This is a source of wonder that Hayek shares with Adam Smith.

Herbert Gintis' "Hayek's Contribution to a Reconstruction of Economic Theory" contains a summary of Gintis' extremely interesting work in progress on the conditions under which a decentralized economy may be said to reach an equilibrium. I fully agree with his observation that "[d]espite the centrality of the general equilibrium model to economics, we know nothing systematic about market dynamics" (p. 119; cp. also Birner and Ege 1999, which discusses the work of two network sociologists who did make progress in understanding how markets work). Gintis' attempts to come to grips with that problem is clearly inspired by Hayek's ideas. On p. 117, however, he is led by wishful thinking and reads more into Hayek than there is when he pleads for including "non-self regarding behavior" in the rational choice model, saying that this is in line with Hayek's reasoning. This overlooks the fact that Hayek harshly criticizes the role of altruism in Durkheim's sociology. That Hayek's criticism of Durkheim may be wrong is a different argument (for this, too, cp. Birner and Ege 1999). Apparently, Gintis' contribution is an adaptation of an article that has been published elsewhere, something the sloppy editing has let slip by (cp. p. 122: "explored in recent years in this and other journals ...").

Chiara Chellini and Sonia Riva in "On the Relationships between Friedrich Hayek and Jean Piaget: A New Paradigm for Cognitive and Evolutionary Economics" compare Hayek's and Piaget's theories of cognitive mechanisms. They consider this to be "a first step in a broader paradigm of research." (p. 144), without, however, indicating more precisely what that "paradigm" should look like. That is perhaps due to the authors' gappy grasp of Hayek's ideas. Thus, on p. 143 they write: "Knowledge, in Hayek's view, is interpreted as an adaptation [of what to what?] and is extremely related to the process of norms formation: when new facts emerge, they trigger new norms..." quoting a passage from *Law, Legislation and Liberty* I. In that passage, however, Hayek discusses the role that norms have in making our expectations of others' behavior stable. That is a completely different context from that of the acquisition of knowledge.

Francesco Di Iorio's "Cognitive Autonomy and Epistemology of Action in Hayek's and Merleau-Ponty's Thought" contains a comparison between the

two authors that is well worth reading. It is a mistake, however, that Di Iorio mentions Frederick (sic) Hayek as a (first-generation) behavioral economist (on p. 151). To repeat myself: this flies in the face of Hayek's anti-psychologism. This mistake is all the more surprising as Di Iorio explains at length that Hayek's methodological individualism is not a reductionism. The author apparently bases his counting of Hayek as a behavioral economist on a misreading of a passage in the last chapter of *The Sensory Order*. He writes that Hayek on p. 193 of the book "points out that his connectionist explanation of mind "is ... of the greatest importance for all the disciplines which aim at an understanding and interpretation of human action." If we check what Hayek writes in the quoted passage, we see that he does not mention his connectionist explanation. The passage reads: "The recognition of the fact that for our understanding of human action *familiar mental entities* must always remain the last determinants to which we can penetrate, and that we cannot hope to replace them by physical facts, is, of course, of the greatest importance for all the disciplines that aim at an understanding and interpretation of human action." (italics mine). The mental entities he refers to are the ideas of individuals or the opinions of the agents, as he calls them in "The Facts of the Social Sciences." They are not (parts of) neural networks, as Di Iorio thinks. What should have alerted him to his misreading of this passage is that Hayek writes that we cannot reduce these mental entities to physical facts. In the light of his identity theory of the mind and his project to explain the mind only in terms of the laws of physics this excludes that mental entities are anything else but subjective ideas, which are familiar to us because we are capable of introspection.

A passage that is very puzzling is at the top of p. 152:

According to Merleau-Ponty the act of perception involves an interpretation of the external environment. In addition to Hayek's in *The Sensory Order*, Harvey Leibenstein's theory of the entrepreneur involves an individual's interpretation of the environment. Leibenstein views the economy as a net made up of nodes and pathways.

Something has gone wrong with this text. In addition to Hayek's *what* in *The Sensory Order*? His neural-network model? Unfortunately, this is one of many passages in the volume where the editors failed to do their job: edit the text.

Taiki Takahashi and Susuma Egashira in "Hayek's Sensory Order, *Gestalt* Neuroeconomics, and Quantum Psychophysics" follow Hayek's example of discussing both theoretical and methodological arguments when trying to come to grips with a problem. Unfortunately, they differ from Hayek in that they fail to keep the object and meta level clearly distinct. That makes reading the chapter confusing. Let me give one example. On p. 180 the authors make a comparison between a Platonic and a Heraclitean philosophy of science (which they somewhat confusingly call "theory"). The former looks for invariant explanatory factors, according to the latter none can be found. The authors state that if we can find such invariant features in economics (for instance, Gary Becker's homo economicus),

Plato's theory will finally win over Heraclitus' theory in social sciences as well. It is to be noted that Gary Becker is also a practitioner of behavioral economics in his disposition, although he does not emphasize human irrationality [reference deleted]. Regarding this point, Hayek was strongly opposed to Plato's view of the system of society and criticized ... constructivist rationalism ...

It escapes my comprehension what the authors want to achieve by this seamless sliding from discussing something on the meta level (methodology) to something on the object level (Plato's sociology).

I do not feel competent to discuss what the authors write about neurobiology (of the cellular or the molecular kind), neuro-economics and quantum psychophysics so I will limit my further comments to what they write about Hayek. That Hayek criticized macroeconomics and asserted the significance of subjectivism (p. 182) is true but he did not do so in *The Sensory Order*, as the authors allege. That individuals *arbitrarily* revise their economic plans in response to information coming from markets (p. 182) is not what Hayek says. The authors state that Hayek continued his studies in psychology, introducing the arguments of Karl Popper. That is misleading, to say the least. The papers they refer to are primarily about the mind-body problem, not psychology. Popper was highly critical of *The Sensory Order* (cp. Birner 2009) and Hayek did not introduce any argument of Popper's into his mind-body theory. What Hayek did do was to take up Popper's challenge that his mind-body theory could not account for the higher functions of language. And indeed, Hayek failed to show that it could (cp. Birner 2009). That "Hayek was an economist who tried to introduce *Gestalt* psychology officially [sic] into economics in an earlier era" is simply false. Not only did he not do any such thing, he (I apologize for repeating myself again) explicitly rejected the reduction of economic regularities to psychology as psychologism. In other passages the authors do more justice to Hayek, for instance where they write about his ideas of individuals' disposing over imperfect knowledge. This mix between true and false statements, however, makes the chapter unsuitable as an introduction to Hayek's thought.

Leslie Marsh' "Mindscapes and Landscapes: Hayek and Simon on Cognitive Extension" discusses how Herbert Simon and Friedrich Hayek answer the question whether complexity is a feature of objective reality or the result of our cognitive limitations. According to Marsh, the two authors agree that the "mind is constrained in its computational capacity to detect, harvest and assimilate ... data generated ... in complex social environments." (p. 197). Hayek locates complexity both in the mind and in the social environment that is a product of. Simon thinks that complexity is a feature of the environment that the limited computational capacity of the mind cannot fully come to grips with. According to both, the mind has the mixed blessing of enabling us to acquire knowledge while at the same time posing limits on what we can know. Marsh calls the latter "cognitive closure." He correctly observes that according to Hayek this closure ultimately lies in the logical contradiction that arises when the mind tries to explain itself. In the light of Marsh' emphasis on complexity I find it surprising

that he does not elaborate what Hayek's argument for this is. Let me supply the missing details. That needs stating three premises. First, for Hayek explaining is tantamount to classifying. Second, according to Hayek the mind operates through a mechanism of (multi-level) classification. Third, a classifier A can only classify an object B if A is more complex than B. This leads Hayek to the *reduction ad absurdum* that the mind, in order to explain itself, would have to be more complex than it is. Even if one disagrees with Hayek on the first premise, it is not easy to criticize this argument. And indeed, Hayek's friend Karl Popper refers to it positively as late as in *The Self and Its Brain*. This despite the facts that he always remained highly critical of *The Sensory Order*, in which the argument is stated, rejects the notion of explanations as classifications as instrumentalism (for details, cp. Birner 2009: n. 24 and text), and could not possibly agree with the final "philosophical consequence" in the last chapter of *The Sensory Order* (for this see the penultimate paragraph below).

Marsh shows how Simon and Hayek, each in his own way, indicate how the mind can overcome many of its inherent cognitive limitations by relying on the social environment as an extended cognitive system. He discusses this in terms of particle swarm optimization theory that was developed for explaining the behavior of insects. He makes it plausible that this offers a framework for Simon's and Hayek's ideas on the role of distributed knowledge. "Their key insight is that "perfect" knowledge is both unnecessary, impracticable and indeed irrelevant if one understands the mechanism at work in complex sociality, a stigmergic [*i.e.*, that has to do with indirect coordination of agents through the environment] sociality that in effect augments or scaffolds cognition." (p. 215).

The chapter contains a criticism of attempts to characterize complexity. Marsh follows an indirect approach, one which invokes both the various phenomena that are associated with complexity and the theories that try to come to grips with it. This is summarized in a diagram that is far more useful than any definition of complexity and which Marsh calls a smorgasbord of research projects.

Morris Altman's "Hayek's Complexity Assumption, Ecological and Bounded Rationality, and Behavioral Economics" contains an informative comparison between Hayek's and Simon's ideas on rationality. Their theories are largely complementary – with one important exception, to which I will return. While Hayek concentrates on the institutional setting that makes the coordination of individual decisions possible (the point that Boettke *et.al.* make, too), Simon's focus lies on the limited processing capacity of the human decision maker. What Altman or any of the other contributors to this volume could have observed but do not, is that in his business cycle and capital theory Hayek supposes that individuals decide using the "pure logic of choice." The crux of his business cycle theory is that individuals optimize their plans given the informational input that they dispose over. That this nevertheless leads to the wrong decisions (wrong in the sense of leading to a failure in the intertemporal coordination of production and consumption) is due to the fact that part of that input is wrong: it consists of money prices that due to the money multiplier do not reflect real scarcities.

(Keynes' snide remark about Hayek's *Prices and Production* that the book shows how a rigorous logician who starts from the wrong premises ends up in Bedlam perfectly summarizes the crux of Hayek's explanation of the business cycle.) In his later, post-economics work, however, Hayek emphasizes rule-guided behavior without addressing the question whether or not this is tantamount to, or comprises, the pure logic of choice. The suggestion that arises from that work is that it does not and that optimizing behavior according to the pure logic of choice is at the most one of many possible rules. In "Individualism: True and False" of 1945 he writes that Rationality ("with a capital r") exists only in a network of interacting individuals and not at the level of the individual: rationality is a social phenomenon.

Altman is one of the few commentators of Hayek who discusses a major problem in his work, which is also the item on which Simon and Hayek diverge. On the one hand Hayek is critical of the role of the (scientific) expert, for instance in his contributions to the socialist planning debate. The economic or social system that is best is the one that evolves spontaneously from the interactions of freely choosing individuals. On the other hand, Hayek the student of social systems knows that a competitive market society yields the best results. Apart from the fact that he vacillates in what he means by the best results, it is legitimate to question, as does Altman, how Hayek-the-expert knows this. He justly writes: "This remains a key tension in Hayek's work..." (p. 249). He also correctly observes: "If whatever evolves is optimal because it is a by-product of bottom-up decision making, the argument for ecological rationality becomes tautological." (p. 244). Simon, on the contrary, emphasizes that a social system may get stuck in one of many equilibria, including ones that are only locally optimal. Altman's last two paragraphs are dedicated to illustrating this and are well worth reading.

In "Subjectivism and Explanations of the Principle. Their Relationship with Methodological Individualism and Holism in Hayek's Theory", Stefano Fiori convincingly argues that Hayek's early emphasis on methodological individualism is not inconsistent with assigning an explanatory role to social wholes, a feature that is prominent in Hayek's later work. Explanations of the principles according to which social entities may arise from the interaction of individuals are a satisfactory alternative to describing wholes in detail. Fiori is rightly critical of Hayek's distinction between individuals' ideas that are constitutive of social wholes and their speculative ideas about how to explain these wholes. As the author correctly observes, "both kinds of ideas generate human action" (p. 264) and hence their separation is arbitrary and unfounded. This is closely related to Altman's criticism of "Hayek's Marxism," that is, his vision of the best society (which, contrary to Marx, is a market society) that is presented as the conclusion of a scientific argument.

A point on which I disagree with Fiori is his apparent approval of Caldwell's idea that *The Sensory Order* served to give a physiological foundation to subjectivism. That is both chronologically and materially wrong and inconsistent

with Hayek's anti-psychologism. I have already dealt with this in my discussion of Di Iorio.

Peter Earl's contribution, "Satisficing and Cognition: Complementarities Between Simon and Hayek" is in large part an economist's interpretation of *The Sensory Order*. Earl elaborates a number of implications for the study of decision making that Hayek's book may have if we add the idea that the human mind fails to have unlimited computational capacities. He gives a number of examples, not all taken from economics, of how we can explain features of the world if we observe it through this lens. In addition, he presents a number of possible applications to economics. The chapter is very much in Hayek's spirit in that it uses associative thinking to suggest solutions to problems: in terms of Hayek's "Two Types of Mind" Earl is a fellow muddler or puzzler of Hayek's. The difference lies in the fact that Earl speculates explicitly on the possible consequences the theory of *The Sensory Order* may have for economics whereas Hayek in his later work appears to have been guided by the ideas of his book in an implicit and only partly self-conscious way (mostly in *The Counter Revolution of Science*). The most explicit application of these ideas that can be found in Hayek's work is in the fields of epistemology and the philosophy of social science and not in his economics, and they are very problematic. I will briefly return to this below.

It is an interesting fact that with a few rare exceptions (Gerald Edelman, for instance) psychologists and neuroscientists have not discussed *The Sensory Order*. Perhaps it is time they did, even at the risk of creating problems of cross-disciplinary communication with economists, a much greater number of whom have studied the book. This, by the way, is not meant as a criticism of Earl's chapter. I find his examples and suggestions refreshing, amusing (he refers to Monty Python) and stimulating, for instance his comparison of the operation of the human mind with internet search engines. But I am not a neuroscientist, either. It would be a good thing if the speculations by us, economists, about *The Sensory Order*, no matter how plausible they may appear to be to us, were checked by specialists in the fields it covers. After 38 years it is high time for a successor to *Cognition and the Symbolic Process*.

In "The Oversight of Behavioral Economics on [sic] Hayek's Insights" Salvatore Rizzello and Anna Spada try to find an explanation why Hayek's work on knowledge has been neglected in behavioral economics. But they come up with the wrong answer because they, too, commit the mistake of overlooking Hayek's anti-psychologism. This shows where they state that "according to Hayek, in explanation of economic performances what matters is not just how much information an economic subject can collect, but the knowledge he is able to build on that information. It is a result of the complex interaction between external information, *mental structures, and their modifications* as a consequence of past information. (p. 303, italics mine). In two publications that are fundamental for understanding his economics, "Das intertemporale Gleichgewichtssystem der Preise und die Bewegungen des 'Geldwertes'" and "Economics and Knowledge" of 1937, Hayek argues that what may change under the influence of information

are the individuals' plans. As I have already argued above, the mental structures he refers to are human individuals' subjective ideas. In addition, when the authors compare Hayek with Simon, on pp. 303-4, they wrongly create the impression that Hayek shares the idea of human decision makers as satisficers. Let me repeat what I have written above: in his economic theory Hayek assumes that individuals choose according to the pure logic of choice: they are optimizers. *The Pure Theory of Capital*, the crown on Hayek's economics, consistently applies this optimization model to the analysis of investment decisions. The only way his model differs from the standard neoclassical optimization model – and this is very important difference – is that Hayek does not assume individuals to have perfect knowledge. It is only after he had shifted his research from economics to the theory of society that he started emphasizing that individuals are irrational and that “Rationality” exists only at the social level – without ever invoking anything like satisficing. But unfortunately and paradoxically, very few economists seem to know Hayek's economics.

On p. 304 the authors write that “both [Simon and Hayek] aim for a more realistic micro-foundation of economic analysis (Rizzello 1997).” The fact that Hayek not only does no such thing but he explicitly criticizes and rejects this as psychologism answers the question why behavioral economists for a long time have neglected him. Contrary to what the authors write, there is nothing surprising about this.

The final chapter is Gerald Steele and Hamid Hosseini's “Complexity and Degeneracy in Socio-economic Systems.” The chapter is about connectionism in brain science and its metaphorical application to social systems. Quoting, amongst others, from Herbert Simon's work on complexity, Gerald Edelman's work on biological structures in general and the brain in particular, and Hayek's *The Counter Revolution of Science* they point out a number of analogies between neural network models of the brain and society. They call attention to a phenomenon called degeneracy, the capability of a system to let the same function be performed by structurally different elements. They mention the poor predictive record of econometric models as an indication of the pervasiveness of degeneracy “or something very much like” it (p. 319). Degeneracy is different from redundancy, which is the capability of a system to let the same function be performed by structurally similar or identical elements. The authors rightly warn against taking the connectionist metaphor too far. That is the case when the consciousness of society is invoked.

A couple of times the authors use the expression “systems within systems.” This cannot but be a reference to a manuscript that has remained unpublished. (That is about to change with the publication of the next volume of Hayek's collected works, edited by Viktor Vanberg.) Its title is “Within System and about Systems; A Statement of Some Problems of a Theory of Communication.” They do not further discuss it.

One of the positive aspects of this chapter is that it presents the details of Hayek's argument why the mind cannot explain itself, including his references

to Cantor and Gödel. When the authors discuss complex systems and logic and mathematics, however, they slip into the mistake of confusing the object level of complex systems with the meta level of explaining how they function and predicting how they develop, at which logic and mathematics may or may not play a role: “Complex orders are difficult to chart, most obviously because logic and mathematics are not prominent within adaptive systems.” (p. 314).

Let me conclude by signaling that none of the contributions in this volume discusses the conclusion Hayek draws in chapter 8 of *The Sensory Order*, viz. that, if left to operate long enough, the human mind arrives at a unique system of classifications that consist of tautological definitions. Let me quote from *The Sensory Order* 8.24:

Science thus tends necessarily towards an ultimate state in which all knowledge is embodied in the definitions of the objects with which it is concerned; and in which all true statements about these objects therefore are analytical or tautological and could not be disproved by any experience.

This conclusion of Hayek’s is highly problematic. For one thing, it gives rise to the suspicion that his effort in “Economics and Knowledge” to distance himself from Mises’ a-priorism has failed. Several authors in this volume freely switch between or even confuse the object level of the role of knowledge in economics, the meta level of knowledge as it is analyzed by economics, and the “meta meta” level of epistemology and the philosophy of science. This is very much like what Hayek does in the concluding chapter of *The Sensory Order* and in *The Counter Revolution of Science*. This epistemological naturalism is a “Hayekian vice” that deserves a critical analysis. Many of the problems with Hayek’s methodology of the social sciences find their origin in this conflation of levels of analysis (I have hinted at this in Birner 2014, pp. 275-7).

Some final observations of a more general character about the volume. The editors have a shared responsibility with the publisher for a host of grammatical and spelling mistakes. These make reading some of the chapters an annoying experience. The penultimate chapter is the clearest example of this; it is written in a maccheroni English no editor should have let pass uncorrected. But perhaps editors who actually edit are a memory of the academic standards of happier times past.

Jack Birner
University of Trento
University College Maastricht
jack.birner@unitn.it

References

Birner J. (2009). From Group Selection to Ecological Niches. Popper’s Rethinking of Evolution in the Light of Hayek’s Theory of Culture, in Parusnikova and Cohen (eds.)(2009).

- Birner J. (2014). Popper and Hayek on Reason and Tradition, *Philosophy of the Social Sciences*, 44(3): 263-81.
- Birner J. and R. Ege (1999). Two Views on Social Stability: An Unsettled Question, *American Journal of Economics and Sociology*, 58(4): 749-81.
- Coleman J.S. and T.J. Fararo (eds.)(1992). *Rational Choice Theory. Advocacy and Critique*, London, Sage.
- Hayek F.A. (1928). Das Intertemporale Gleichgewichtssystem der Preise und die Bewegungen des "Geldwertes", *Weltwirtschaftliches Archiv* 28: 33-76.
- Hayek F.A. (1937). Economics and Knowledge, in F.A.Hayek, *Individualism and Economic Order*, Routledge and Kegan Paul 1949.
- Hayek F.A. (1945). Individualism: True and False, in F.A. Hayek, *Individualism and Economic Order*, Routledge and Kegan Paul 1949.
- Hayek F.A. (1952). *The Sensory Order. An Inquiry into the Foundations of Theoretical Psychology*, Chicago, University of Chicago Press.
- Hayek F.A. (1955). *The Counter Revolution of Science*, Glencoe Ill., The Free Press.
- Hayek F.A. (1975). Two Types of Mind, in F.A. Hayek, *New Studies in Philosophy, Politics, Economics and the History of Ideas*, London, Routledge & Kegan Paul.
- Hayek F.A. (n.d.). Within System and about Systems; A Statement of Some Problems of a Theory of Communication, Hayek Archives, box 94/51, Hoover Institution on War, Revolution and Peace, to be published in F.A. Hayek, *The Sensory Order and Other Writings on the Foundations of Theoretical Psychology*, edited and with a foreword by Viktor Vanberg, Chicago, Chicago University Press, March 2017.
- Lindenberg S. (1992). The Method of Decreasing Abstraction, in Coleman and Fararo (eds.) (1992).
- Parusnikova S. and R.S. Cohen (eds.)(2009), *Rethinking Popper*, Boston Studies in the Philosophy of Science vol. 272, Springer.
- Popper K.R. and J.C. Eccles (1977). *The Self and Its Brain*, Berlin, Springer 1977.
- Weimer W.B. and D.S. Palermo (eds.)(1978). *Cognition and the Symbolic Process*, Vol. 2, Mahwah N.J., Lawrence Erlbaum.

JOHN E. KING, *The Microfoundations Delusion. Metaphors and Dogma in the History of Macroeconomics*, Cheltenham, UK and Northampton, MA, USA, Edward Elgar, 2012. pp. 304. £ 85.00. ISBN: 978-1-84980-317-5

This book by John King constitutes a survey of a vast amount of literature, presented by a heterodox economist who describes his own ideas as being particularly influenced by the Kaleckian blend of Marx and Keynes. The position expressed from the very outset is clear. Macroeconomics is an autonomous science, with no need for microfoundations of any kind. The problem, therefore, is not to provide new and better microfoundations but to dispense with them altogether.

As suggested in the subtitle, a key idea of the book is that microfoundations are a metaphor, and a bad one, which created a dogma. In chapter 2 King develops this idea by taking an anti-McCloskeyian view. Metaphors are not mere rhetorical devices but have a content of themselves. In King's argument, this content is a logical one. Every metaphor (or analogy) creates a logical space of its own in which something is possible and something else is not, and in which something

is necessarily true while something else is necessarily false. Microfoundations are a bad metaphor, King argues in chapter 2, because they create an unsound system of implications regarding the relationship between micro- and macro-economics. Even worse, borrowing a concept from the studies of linguistics, microfoundations are a “dead metaphor”. While a living metaphor still remains a linguistic device which is explicitly and consciously used as such, thus allowing the possibility to enter or exit it at every moment, a dead metaphor is one which has entered deep enough into our language to be used uncritically. In this case, rather than individuals using a metaphor we have a metaphor which drives individual thought in certain directions while inevitably excluding others. It is such a mechanism that has led to the microfoundations “dogma”.

For King, the right metaphor would be that of the two buildings presented on p. 26. Equal in height and with footbridges communicating them, they are both solidly founded on the same “solid and extensive set of social and philosophical foundations”, while there are no “methodological grounds for evacuating the macro building and moving all its occupants into the micro building” (p. 26). Consistent with this view, King argues that neither of the two buildings (micro- and macroeconomics) can be reduced to the other.

The issue of reductionism is addressed in chapter 2, both from a broad scientific standpoint and, subsequently, from the specific economic point of view of economics. Even more than in the previous chapter, where they are introduced, the fallacy of composition and downward causations are the two concepts that emerges most forcefully in chapter 3. The third fundamental element upon which King’s argument is based is that of “emerging properties” – roughly speaking, those properties that belong to a system but not to its components, and that can therefore only emerge when the whole system is considered. This notion is presented more extensively in chapter 4, on reductionism as a minority position among the social sciences, which closes part I.

It is only in part II, and especially in chapters 5 and 6, that King enters upon the economic literature on microfoundations. The two chapters are a detailed survey of how the case for, or against, microfoundations emerged, directly or indirectly, explicitly or implicitly, since the publication of Keynes’s *General Theory* in 1936. A vast literature is considered in these two copiously packed chapters, and this sometimes makes it difficult to follow the thread, but a thread there is, and it can probably be summarised as a large-scale example of collective question begging – the need for microfoundations is more assumed than demonstrated – while ignoring all the difficulties, which for King are the three above mentioned concepts of downward causation, the fallacy of composition and emerging properties. This is the pattern that slowly lead to models based on the adoption of a RARE individual (a representative agent with rational expectations), which are the very object of King’s attack. The first to ignore the difficulties was J.R. Hicks (*Value and Capital*, 1939), and here King emphasises what is fact rather curious: it was not some Cambridge Keynesian, but Oskar Morgenstern, who rebutted Hicks. Many others followed thereafter, even before Sidney Weintraub

introduced the term microfoundations in 1956 and Fritz Machlup offered the first explicit methodological defence of the case for microfoundations in 1963. The S. Agaro conference of 1975, on the other hand, is the best example of question begging. As King writes, “The majority of the participants seem to have taken the desirability of micro-foundations for granted” (p. 96). By this time, no clear proposal as to how microfoundations were to be provided emerged. A general consensus coalesced around the idea that general equilibrium was supposed to be the framework within which to frame this solution, but the framework was still empty. From then onwards, the debate on how to provide these foundations evolved, and economic research pointed in other directions, but always with the same aim of building the microfoundations that macroeconomics was supposed to be lacking. What follows, in chapter 6, is a chronical of how different approaches dealt with this (pseudo-)scientific endeavour – once again, not necessarily in an explicit manner. Adoption or rejection (be it explicit or implicit) of the RARE hypothesis is for King the crucial issue, a dividing line separating different approaches under several competing labels (real business cycle theories, a range of New Keynesian macroeconomic models, general disequilibrium theories). What clearly emerges in these pages is that those models within which the RARE hypothesis was formulated were at an advantage in terms of internal consistency, and this at a time when the quest for logical consistency was overshadowing any quest for realism, compatibility with data or forecasting power. Here King seems to assume a sociological perspective on macroeconomic methodology, in which competition among economists is not a race to come up with the best explanation of the outside world but, rather, a kind of conformative behaviour in which each economist is trying to provide the kind of model that her/his colleagues will like best. As long as this was the new game in town nobody disputed the idea that the ideal model should incorporate microfoundations, with the result that the only opposition to the RARE models were models adopting other types of microfoundations. In turn, this has created at least two problems. On the one hand, the heterodox/non-RARE models are less elegant variants within a community which tends to favour “beauty” at the expense of “truth” – or, perhaps better, to consider the former as the defining concept of the latter. On the other hand, and even worse, the truly crucial question as to whether macroeconomics actually needs micro-foundations was completely done away with. To resurrect this question, King closes part II with a chapter, the 7th, on microfoundations in other social sciences. The outcome of this brief survey of how sociologists, political theorists and historians dealt with this question is that every time the need for microfoundations has been discussed instead of assumed, the result has been that the need has been denied. The analytical Marxists possibly constitute an exception but, as it seems, a short-lived one.

Part III of the book is dedicated to the “dissenting voices”. It opens with a chapter on the Post-Keynesians which is, in my opinion, the chapter that should be read first, for it is here that the very reason why the book was written is to be found. It describes the many ways in which Post-Keynesians divided over the

question of microfoundations and the many ways in which they changed their minds on the issue, the author's recantation of his own previous position being part of the story. Another opinion of the present writer is that the most important, or the most pressing, question that emerges from this book, and from this chapter in particular, is not so much why the microfoundations dogma emerged, but "Why ... did many Post Keynesians come to endorse the microfoundations dogma, with or without reservations and hesitations, and why have relatively few of them explicitly denounced it?". Especially from the strictly HET perspective of a student of Keynes, it is this question which seems to be the most relevant as well as the most difficult to answer. Perhaps Jan Kregel's case for macrofoundations for microeconomics, summarised on p. 162, might even seem to be the most obvious interpretation of Keynes's original thought. For sure, it is far from being representative of the Post-Keynesians, divided by King into "the supporters", "the opponents" and "the uncertain", Sheila Dow making a case of her own in section 5 of the chapter.

It is perhaps less surprising that the mainstream dissenters, the subject of chapter 9, also failed to find a common ground against the dogma of RARE microfoundations. Surprising, here, is the number, and the relative weight, of the dissenters, to the extent that the word "dogma" itself sounds somewhat exaggerated after the result of these pages. Greenwald and Stiglitz (who also featured among the Post-Keynesian "supporters") belong to the "ours [microfoundations] are better than yours [RARE]" club; Baumol has "little sympathy"; Laidler sees macro as having a "separate identity" which is lost once microfoundations are provided; Tobin had "second thoughts", while Mankiw is "sceptical", and even Lucas "denied that it was crucial for macroeconomics to have choice-theoretic microfoundations" (p. 178). Others, including Solow, Colander, and Kirman, have been oscillating, but King shows that all have taken positions against microfoundations at least once in their lives.

And then there are the non-mainstream dissenters. Understandably enough, even more than in the mainstream, the parade of Austrians and (loosely defined) Institutional economists (the latter group includes Lance Taylor's structuralist project but not North's and Williamson's "off-centre variant of mainstream") is a "motley crew". The impossibility for, or inability of all arrays of dissenters to coalesce around a common critic of microfoundations once again emerges as one of the most plausible explanations for the success of a thesis that, at least as it emerges quite convincingly from this book, was never demonstrated. In response to this situation, King suggests that unless serious attention is paid to the philosophical core of the case against microfoundations the situation is doomed to continue. This core consists of the above-mentioned notions of downward causation, emerging properties and the fallacy of composition. In many of the cases described by King they were simply ignored, and even in the cases in which they clearly emerge in the literature, quite surprisingly, this barely have any consequence. A possible explanation for this curious fact, the one which seems to emerge from King's detailed survey of hundredths of works by a large

number of economists of so many schools, seems to be that these are merely methodological questions, philosophical complications, or curiosities, which the economists usually feel they can put aside. It is therefore quite natural that before coming to the conclusions in chapter 11, King dedicates an entire chapter, the 10th, to deal with “The economic methodologists and microfoundations”. The central message of this chapter, however, is not so much that a certain neglect of methodology is at the roots of many misunderstandings as that even the methodologists fell into the same trap.

To a large extent, King is not satisfied with the works of the methodologists. Five of the seven pages of the section on the Popperians are devoted to showing how difficult Larry Boland is to read in general and especially on the question of microfoundations, the remaining part being dedicated to a more sympathetic but rather cursory overview of T.W. Hutchison’s contributions. Immediately after this comes the section on the Lakatosians, entirely occupied by Marc Blaug. Here the emphasis goes on a Popperian (even more than Lakatosian) theme, which is old Blaug’s typically retrospective view of the Keynesian revolution as the theory which prompted the construction of models that could be empirically tested. At best, this is a very indirect case against microfoundations. Wade Hands and the critical realists (Roy Bhaskar and Tony Lawson) do not fare very much better, not to mention Kevin Hoover, whose contradictions and ambivalent attitude are the subject of a large part of chapter 10.

After so much discussion of methodological issues, this disparaging overview of the work on microfoundations done by methodologists might look odd, and it is in fact rather disappointing. But it is not inconsistent with King’s point of view. Had the methodologists (they at least) been more straightforward and clear in constructing a case against microfoundations, the dogma might now have been easier to demolish. And among the conclusions of the book, mainly a survey of the possible explanations for the success of the RARE dogma, the most convincing (in my opinion) is the negative one, namely that a strong case for microfoundations based on methodological considerations is altogether to be ruled out.

Carlo Cristiano
University of Pisa
carlo cristiano73@msn.com

ROBERT J. GORDON, *The Rise and Fall of American Growth, the U.S. Standard of Living Since the Civil War*, Princeton and Oxford, Princeton University Press, 2016. Pp.784. \$ 29.95. ISBN: 978-0-691-14772-7.

The Rise and Fall of American Growth is a good book of economic history, both accessible to a wide public and relevant for specialists. The text of Robert Gordon goes thorough to a set of relevant historical and theoretical issues with

a very enjoyable style explaining in a precise and simple language some crucial technical issues. It challenges some received view of growth and, at the same time, it supplies his view and solution of the problems in a way that is understandable and quite convincing. However, the main feeling remaining after reading this book is dismay and discouragement as he convincingly destroys our innate faith in an on-going progress in our life.

Gordon, in particular, challenges the view that economic growth can or will continue unabated, and he supplies good arguments to demonstrate that the life-altering scale of innovations between 1870 and 1970 can't be repeated. He contends that the U.S. productivity growth, which has already slowed to a crawl, will be further held back by the vexing headwinds of rising inequality, stagnating education, ageing population, and the rising debt of both college students and the federal government. Gordon warns that the younger generation may be the first in American history that fails to exceed their parents' standard of living. His solution is that, rather than depending on the great advances of the past, we should find new solutions to overcome the challenges facing us in the present.

Changes have always been intended as progress. Gordon understands that progress is an *overall modification of lifestyle* and small changes are simply small pieces functional to the whole. Gordon explains well what he intends with such *overall modification of lifestyle*, even if he does not discuss the relevant methodological implication of this *organic* view of history and progress.

The period between 1870 and 1970 is defined as a *special century* because of a major change of lifestyle and because the fruits of innovation diffused on the whole population in the USA (and later in Europe). After 1970, fruits of innovation were no longer shared equally because of rising inequality. Innovation was focussed on entertainment, communication and information technologies. In particular, we had no more relevant inventions regarding food after 1970.

Gordon criticizes the technical measure of the standard of life through per capita GDP. GDP omits many dimensions of the quality of life that matter. Moreover, deflators we use to calculate the increase of real GDP tend to overstate prices' increase. In order to compare our standard of living with that of families in various moments of the past, Gordon assumes the *point of view of the household* by adopting a simple set of indicators: the goods available and the time needed to perform some activity (e.g. washing cloths...). That allows him to single out the periods of major increase of well-being. Therefore, he traces improvements omitted from GDP.

Inventions have a long gestation. In order to be exploited and diffused, they do not only need a certain level of investment, but they also need a whole set of changes in complementary activities as well as a favourable context. The point made clear by Gordon is that the New Deal has been important for the diffusion of the main inventions that produced growth in the twentieth century. The slump of 1929 confuses the mind of economists that do not see that most of innovations took place during these times. Electrification of the US happened mainly with New Deal (he affirms that Paul David is wrong when affirms that it

mainly happened in the 1920s). Unionization helped to raise wages and greater consumption allowed higher productivity. The learning by doing induced by productions of the Second World War also helped to raise productivity. In fact, the highest jump in welfare took place in the two decades after the War.

Data are abundant, meaningful, well selected and presented. The communicative strategy of Gordon is that of supplying data first and then to propose his interpretation. Besides that, he shows an interesting way of presenting problems. He formulates very simple and crucial questions as what did they eat? And how did they cook it? The same is done for clothing, housing, transportation, etc. Although Gordon never mentions this, he adopts a Keynesian demand-led view of development. In fact, he argues that the introduction of consumer credit is an event that changed the lifestyle in a way to expand the investment in durables. Moreover, he highlights the historical role of educational attainment as a creator of productivity as well as the fact that wages increased more than productivity. Also public investment in the 1930s-1940s are considered crucial for the subsequent expansion of well-being.

On the other hand, ITC has supplied a short lived increase of productivity with a 1996-2004 peak of labour productivity. Therefore, we assist to a narrowing scope of progress. Gordon attempts in this way to understand present slower growth, pointing also at the less uniformity of change. ITC has no effect on life as previous generations of innovation. In particular, it is “less freeing” us from work. Finally, Gordon analyses the issue of inequality, trying to understand whether it is an effect or cause of slower growth.

This book is great for breaking with economic history conventions, for stating something that is not clear in the literature of economics of innovation adopting an incremental and individualist perspective.

Stefano Solari
Università di Padova
stefano.solari@unipd.it

FREDERIC S. LEE, BRUCE CRONIN (eds.), *Handbook of Research Methods and Applications in Heterodox Economics*, Cheltenham and Northampton, Edward Elgar, 2016. Pp.612. £189.00. ISBN: 978-1-78254-845-2.

This book represents one of the last efforts of Fred Lee, who left us on October 23, 2014. His life was dedicated to heterodox economics and this book testifies his interest and his generous effort to help developing this variety of approaches. He founded and managed the *Association of Heterodox Economics* as well as the *Newsletter of Heterodox Economics*. He was also an expert of history of economic thought as testified by his 2009 book.

The effort placed in this book by the two editors is to write a handbook useful to PhD students and young researchers to help them getting acquainted

with methodologies that can be usefully used in heterodox research. Actually, it is useful to every researcher as nobody is confident with all the methodologies included in the chapters of this manual. We should add that heterodox economics is not an *unregulated* or inconsistent field of research where anything goes, as many mainstream scholars often think. The fundamental problem is how to produce a solid scientific discourse even abandoning the stifling conventionalism of mainstream.

Contrary to the habits of heterodox that get inspiration from pragmatism or by Marx, this book is not looking much in the past but only on the last 30 years of scientific practice. Critical realism is adopted as a philosophical foundation for the *method of grounded theory*. Therefore, the emphasis on critical realism, born in the 1970s, is used as a unifying foundation of heterodox economics. Personally, I find that critical realism has difficulty to replace the whole wealth of different methods and philosophical backgrounds that characterized political economy in the past (e.g. economic humanism of Röpke or the Hegelian framework of romantic theories...).

Whatever we may thought of critical realism, the *Method of Grounded Theory* is a good synthesis of how heterodox research is performed in most of cases (except for Mises and a few rationalistic non-mainstream approaches). Therefore, this book constitutes a precious handbook of ways in which research can be grounded in some empirics. In fact, the first part of the handbook is devoted to the discussion of the general problem. The second highlights the variety of techniques to base reasoning on facts and consists in twelve chapters. The third represents a series of applications that show how these methodologies are applied.

The first section contains a contribution on critical realism as a social ontology for economics by Jamie Morgan, a contribution by Fred Lee on “theory construction” dealing with critical realism and the method of grounded theory, and a writing by Rick Szostak on heterodoxy. Fred Lee argues that heterodox economics supplies a theoretical explanation of the historical process of social provisioning, a historically contextual explanation. He correctly argues that scientific theory-building requires a philosophical foundation on which the research strategy for theory creation and evaluation is based. The nature of social reality determines how it should be studied (or at least how it should not) and what kind of knowledge claims about it can be made. Every economic theory is founded in an ontology, even if that is often not explicit. The aim of critical realism is to explicitly build a method grounded on realism. This ontology is based on causal mechanisms and structures (little is said on the nature of objects). Actually, the aim is to substitute a specific ontology to the variety of *common sense* notions used in the many streams of heterodox economics. Therefore, the editors admit the central place of the *common sense view of knowledge*, but they never enter in the issue of the connection of this critical realism with the various streams of common sense philosophies, from Vico to Moore and Pierce. Actually, I do not feel a strong transport for these new philosophical developments as I have difficulty to see the relationship with the standard currents in philosophy and

epistemology. In my works I always refer to philosophical foundations, but I never adopt a philosophical perspective that has less than a century of maturation – just to be sure of what I am dealing with.

Fred Lee further develops the connection between critical realism and the method of grounded theory. The latter is a theory developed from empirical evidence. Lee suggests, first, to get familiarity with the literature on the issues to be explored as past ideas help framing the problems, useful for abduction. Second, fieldwork collection of evidence, data and experiences constitutes the empirical part of the process. Third, the theory is built as a complex analytical explanation of the events empirically detected. That means elaborating both theoretical categories and causal relationships. This, however, is not an inductive process. There is no generalization from the empirical evidence collected. Lee says that this kind of realist theory has no pretence of going beyond the specific and historical phenomenon studied: no generalization is admitted. Lee admits that this grounded theory is as good as its theoretical categories. The best test of the theory is how it responds to new data on the same phenomenon.

The second part of the book consists of twelve papers dealing with different research methods. It has no pretention to be exhaustive regarding useful methods, but it is surely useful to young researchers to find the analytical technique fit to their needs. Therefore, we find qualitative research, historical data analysis, survey methods, experimental methods, factor analysis, cluster analysis and non-parametric statistics in general, regression analysis, econometrics, the analysis of social networks, agent-based simulation, the general way of modelling, and multiple and mixed methods of research. The last two chapters of this section are important because Fred Lee (14) and Bruce Cronin draw some synthesis from the single thematic chapters. Lee deals with “modelling as a research method in heterodox economics” and he develops the theme of *credible models* and *inference*. Cronin, on the other hand, presents the theoretical strategy based on multiple and mixed methods. The analysis of the problem of triangulation and complementarity between methods deserves a particular attention.

In the final section, we find applications of the previous analytical methods, acting as examples of how to apply them to concrete cases or as further presentation of specific methods. Actually, some chapter as that of Gennaro Zezza, presents some further methodology as the stock-flow modelling of post-Keynesian economics.

Interestingly, at p. 9-10 of the introduction, a network analysis of the referential structure of the book is presented, which let the reader magnificently understand the constellation of heterodox economics.

In my partial career of applied economist, among the techniques illustrated in this book, I have used both quantitative and qualitative analysis, surveys, non parametric statistics and network analysis. Maybe what is lacking in the book is a good chapter on comparative research methods. However, I have to say that reading this book before would have helped much my research, clarifying how to make the best use of specific methodologies and how to develop the correct

inferences. In conclusion, this is a good handbook and is not just methodology *per sé*, it is useful for applying it to our work in a consistent way.

Stefano Solari
Università di Padova
stefano.solari@unipd.it

References

Lee F.S. (2009). *A History of Heterodox Economics: Challenging the Mainstream in the Twentieth Century*, London, Routledge.