



## Introduction

In 2000, in Paris, the second meeting<sup>1</sup> of the “Association des Historiens de la Tradition Economique Autrichienne” (Association of the Historians of the Austrian Economic Tradition) (AHTEA) was devoted to the Austrian contributions to Applied Economics. The idea was to show that, in Walrasian parlance, Austrian Economics (AE) was not only a “pure” theory but also an “applied” one. In other words, there was room for an Applied Austrian Economics (AAE). After two levels of editorial selection (at the AHTEA level and at the RAE one) this volume presents some of the contributions that were presented at this meeting.

The fact that AE is able to address most of the theoretical and public policy questions is now recognized even by those who challenge its approach. However, the capacity of AE to produce applied economic results remains a great challenge. Indeed the main arguments advanced against the existence of an AAE can be presented as follows.

- First, AE is said to be reluctant to empirically test the conclusions of its theories. This argument is certainly true for some Austrians. Indeed the *Misesians*, because they assume some *a priori* categories, consider that thanks to the logical properties of the *if...then* proposition, it is necessary for a proposition, logically deduced from a true assumption, to be true. It is then not necessary to test the *praxeological* propositions just because the *praxeological* assumptions are true.<sup>2</sup> The only thing we then have to ensure is the logical coherence of the chain of our deductive reasoning. *Hayekians* are not accepting this *a priori* conception. Even if it is possible to discuss the fact that Hayek is or not Popperian, it is difficult to accept the idea that he is an apriorist. He is fundamentally a realist in the sense that he thinks that we need to test our theoretical conclusions. Menger, because he is an “essentialist”, and Mises, because of his “apriorism”, do not think that it is necessary.<sup>3</sup>

The idea that empirical tests are needed is then, according to *Misesians*, a false problem because the hypothesis logically deduced from praxeological assumptions empirically apply. According to Hayek, the empirical element is fundamental to progress in economic science, because economics is not a “pure logic of choice”.<sup>4</sup>

- Second, AE is said to be reluctant to use mathematics, which makes its arguments less conclusive and its results untestable. On this point there is confusion. It is often argued that mathematics is less ambiguous than natural languages. The syntactic clarity that mathematics ensures enables it to produce (quasi) universal and perfectly coherent reasoning. There is, however, a trade-off between the degree of ‘realism’ of the assumptions and the richness of the language used to translate and manage them. In other words, “the mathematical problems [...] are formulated *completely in unambiguous words.*” (Georgescu-Roegen 1971: 91, italics in the original). As an example, let’s assume that time is not “Newtonian” but “Real” (O’Driscoll and Rizzo 1985). This idea is deduced from the assumption that

it is important to take into account the fact that individuals are sensitive (in terms of the way they behave) to their own representation of time. In this way as far as real time is space- and-time-dependent (i.e. real time is different for different individuals and is varying in the course of time itself for the same individual), it is impossible to use any formal language to take this phenomenon into account.<sup>5</sup> The decision to use or not to use a formal language is then dependent on the richness of the assumptions that are introduced.<sup>6</sup> The utility of mathematics (or more generally formal tools) is then linked to the trade-off defined above.<sup>7</sup>

More fundamentally, the use of mathematics is dependent on the very definition of economics one holds. As an example, Menger, when he exchanges the five famous letters with Walras, tells Walras that for him mathematics is only a tool of exposition but not at all a tool for research. Indeed his essentialist conception of the “exact orientation of research in economics” is incompatible with the use of mathematics.<sup>8</sup> In a different way, Mises is also sceptical as to the use of mathematics due to his conception of economics. In this case it is not at all a question of trade off but a much more fundamental problem of the conception of our discipline.

To sum up, the question (is AE compatible with the use of mathematics or any other formal language?) has no simple answer. On our first point (“realism” or “complexity” of the assumptions) it is a question of how we define the problem we deal with and what kind of assumptions we advance. On the second level it is a yes or no answer, in relation to the conception we have of our discipline.

- Third, some maintain that the propositions the AE obtains are too “ideology-laden” and are thus less justified than value-free propositions. This argument is not convincing. Some Austrians insist on the idea of *Wertfrei*. This Rothbardian<sup>9</sup> idea assumes that AE needs to be free from values. In this way the distinction between positive and normative aspects of economics becomes irrelevant. The *Wertfrei* assumption, however, is not accepted by the Austrians. As an example, it can be defended that there is a discrepancy (i.e. a discontinuity) between the positive contributions of Hayek and his normative ones, even if some Austrians believe that the optimality of the liberalism can be deduced from very positive Hayekian assumptions. Whatever conception we have, this is not an argument against the possibility of the existence of an AAE. Either the *Wertfrei* assumption is true and the argument falls or it is not and it is possible to discuss the applicability of the results of AE on the basis of the distinction between positive and normative hypothesis as “standard” economics does.

On the basis of the very short discussion above, the idea that there is no possibility for an AAE to exist can be challenged. The contributions of this volume provide concrete answers to this end. For instance, one contribution uses statistical data (Koppl and Mramor) in order to test theoretical Austrian developments. The Amendola, Gaffard and Musso contribution simulates the behavior of a neo-Austrian model. The Dulbecco paper shows that an Austrian conception of institutions is able to explain some stylized facts. Mougeot’s historical reconstruction applies Hayek’s conception of social evolution to the role of a “corporation” in the transition to an open society.

Thomas J. McQuade and William N. Butos apply the Austrian conception of order and evolution to the scientific world. They start with the idea that “the mechanisms involved in the

production and transmission of scientific knowledge are, as we have stressed, different from those that explain the functioning of the cattaaxy". Their paper emphasizes the importance of reputation as a motivation for scientists. The citations are considered as indicators of reputation even if it is not sufficient to reduce the problem to a "simple compilation of data published in citation indices". The paper then analyzes issues related to the author's signal (i.e. "The positive effect of prior reputation at the margin"), competition between authors, citation measurement and issues relating to the effects knowledge generation regarding the stability and evolution of order.

Abel François proposes an application of the Austrian analysis of the entrepreneur to the political process. He defines the political counterparts of the main concept of Austrian entrepreneur. He shows, for example, that even if the political and economics markets are different, it is possible to translate what is motivating the economic entrepreneur, monetary profit, into some political incentives, the electoral outcome. As a consequence, it is possible to say that political entrepreneurs are innovators. Abel François shows that such a parallel is useful as far as institutional mutations are concerned.

Christelle Mougeot starts with the fact that Hayek stresses that the Open Society emerges from the Archaic one. An evolutionary process based on the fact that abstract rules take the place of concrete ones explains this phenomenon. Christelle Mougeot tries to apply this Hayekian way of thinking to an historical case, the role of the medieval Craft Guilds.

Mario Amendola, Jean-Luc Gaffard and Philippe Musso propose a neo-Austrian paper. Its aim is to deal with the relations between competition and innovation. In a neo-Hicksian fashion it focusses on the idea that capacities need to be built up before they can be used. It stresses the idea that competition is a process. The idea is then to combine these two sides of the same coin and to show with a model that there is a kind of trade-off between competition and innovation. The financial constraints are shown to be able to stabilize the whole process and to avoid over-investment. They use numerical simulations in order to analyze the behavior of their model.

The Augier and Augier paper is also neo-Hicksian and can be considered as a borderline case in the Austrian "orthodox" tradition. Using the Austrian concept of production period, it compares different models both in line with and outside the Austrian tradition that use this concept. The basis of this comparison is the exogenous versus endogenous definition of the production period. One of the main interests of this paper is that in using formal models it finds results that are very close to non formalized Austrain ones.

The Philippe Dulbecco paper is theoretical as well as empirical. Indeed it first develops a Lachmannian conception of the dynamics of institutions as rooted in an economics of time and ignorance. The idea is that there is a necessary coherence between institutions and market process. The problem is then to analyse institutional changes in terms of their compatibilities with market process. On an empirical level Dulbecco applies this theoretical framework both to the financial crises of emerging countries and to the decentralisation process taking place in China.

Roger Koppl and Dusan Mramor's paper is very innovative. It uses the Theory of Big Players, which is based on the idea that a player is discretionary orienting the course of economic events. This theory seeks to explain some phenomenon such as the "persistent dependence" (positive as well as negative). It provides an interesting way of explaining

“irrational” bubbles, “bandwagon effects” or “herding”. Koppl and Mramor apply this theory to the evolution of the Slovenia stock market and the role of the central bank (as a Big Player) in this evolution. The statistical analysis presented in the paper corroborates their approach.

Michel Quéré and Jacques-Laurent Ravix’ paper also deals with an empirical application of the Austrian conception of institutions. It tries to combine Menger and Hayek’s conceptions of institutions in order to analyze the relations between science and industry. They propose a typology of those relations which enables them to explain two of the main empirical characteristics of innovative institutions: the production of knowledge and the process of interactive learning.

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### Notes

1. In 1999, in Paris too, the first AHTEA meeting dealt with “Hayek as a Political Economist: Economic Analysis and values”. Some of the contributions are published in Birner, Garrouste and Aimar (2002).
2. Mises (1978).
3. For a more developed analysis of the comparison between Menger, Mises and Hayek on methodology, see Dufourt and Garrouste (1993).
4. Hayek (1937).
5. The idea that it is not possible to use mathematics to deal with the assumption of subjectivism is well developed in Lachmann (1986). It is interesting to see that some recent works in economics are taking into account the heterogeneity of individuals (for example, Kirman 1999).
6. Boettke (2002) also shows the difficulty to use traditional tools to deal with the distinction between information and knowledge.
7. One needs not to forget that mathematics as well as formalized tools are evolving, and then are not fixed.
8. See for example, Garrouste (1994).
9. I say Rothbardian because he seems to be the one who defends the idea with the most strength.

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**Guest Editor**  
**Pierre Garrouste**