



Austrian Economics as a Progressive Paradigm: Explaining More Complex Economic Phenomena

ÁNGEL RODRÍGUEZ GARCÍA-BRAZALES

argb@wanadoo.es

Departamento de Análisis Económico, Universidad Autónoma de Madrid, Spain

Abstract. This article examines two major issues of Austrian economics. The first is the alleged superiority of Austrian over neoclassical economics. The second is the capacity of Austrian economics to support new theoretical research. The analysis shows that Austrian economics has the widest domain of validity for explaining economic phenomena. It is also shown that Austrian economics has a progressive theoretical character due to the fact that there exist a number of analytical phenomena that Austrian economics cannot explain in its present state but that may be explained by means of a “leap with continuity” from Austrian anthropological presuppositions.

Key Words: Austrian economics, infeasible action plans, non-monetized ends and means

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Although Austrian economics is one of the three central schools of economic thought, its scientific status is the most controversial. Nobody could say that Austrian thought is irrelevant from a historical standpoint; but it has been repeatedly questioned in its methods and theories. In order to clarify these, a systematic exploration of the kind of economic phenomena that Austrian economics can explain seems to be necessary. Once we have identified what Austrian economics can explain in its present state, we may also identify what it *cannot* explain. This is the crucial point of any scientific theory because if we know its limits, we can, *a priori*, improve that theory. And if it can be shown that the theory could be improved and thus be able to explain more phenomena, it is also possible to demonstrate the *progressive character of the theory*.

Here we are going to deal with this issue by showing that Austrian economics is a *progressive paradigm* within economic theory. And this is so thanks to its correct understanding of the place of economic behavior within human action. As neoclassical and Keynesian economics fail to recognize this fact, Austrian economics emerges not only as a truly *progressive paradigm* but also as the *most progressive* of them all. But in order to show that, we have to identify the kind of problem that Austrian economics cannot explain. In particular, it will be shown that, in its present state, Austrian economics cannot explain economic processes arising from the existence of intrinsically infeasible action plans and action plans that contain ends and means whose value cannot be expressed in terms of a general equivalent of value. But, and this is the proof of its *progressive character*, Austrian economics will be able to explain these phenomena if a “leap with continuity” is made from its basic anthropological assumptions.

In order to do that, we will need a general framework for analysis of the foundations of a more general theory of human action in regard to economic phenomena. This framework

has been developed by Rafael Rubio de Urquía and is in itself a generalized exposition of the concept of the *domain of validity of an economic theory*. According to this framework, it can easily be shown why Austrian economics explains more than neoclassical economics, why it cannot explain some other phenomena, and how it could explain them. This framework must not be understood as an economic theory in itself, but as a theoretical appraisal of the central problem of economic theory, and therefore it will be useful in supporting new theoretical research even in the sphere of Austrian economics.

Our argumentation will proceed as follows: first, we will introduce a brief outline of the present positions held by Austrian and neoclassical economists with regard to the competing paradigm. This outline will allow us to establish what I have called the Central Proposition of Austrian economics in regard to Neoclassical economics. Second, we will introduce Rubio de Urquía's concepts of allocative process, type of allocative process and global anthropological conception, which will serve as a basis for the following sections. Building on these concepts, the third section will be devoted to demonstrating the superiority of Austrian economics over Neoclassical economics, a demonstration that will rely not on the numerical superiority of the phenomena explained by either one but on the accuracy of the explanation provided. In the fourth section, we will show why Austrian economics cannot explain economic processes due to the existence of intrinsically infeasible action plans and of action plans containing ends/means whose value cannot be expressed in terms of a general equivalent of value. However, this inability is not absolute. The theory of human action will provide not only the basis for further theoretical progress but also an accurate explanation of the economic processes mentioned above.

1. Austrian Economics as a Progressive Paradigm

Anyone who has followed the "Austrian revival" over the past two decades will have noticed the existence of two ultimate concerns in its literature. The first and most widely stated is the *need* to demonstrate the superiority of Austrian economics over the competing paradigms, i.e. Neoclassical and Keynesian, but fundamentally over neoclassical economics. Second, the less explicit need for a more thorough investigation of Austrian themes in order to demonstrate their progressive character, as is required of a future central paradigm of economic theory.

The first question, the supposed superiority over neoclassical economics, can be found in all modern Austrian economic literature, whatever its subject matter. From Menger¹ to the most recently published works,² Austrian economists insist on their more general comprehension of economic phenomena relative to that of their neoclassical colleagues. It would be useless to give an exhaustive account of the articles, books and working papers in which this idea appears. But it would be very useful to include a wide (though necessarily incomplete) sample of quotations in which this question is posed, to look at the nature of the charges made.

While the neoclassical mainstream continues to spin its wheels, "Austrians" (meaning the broad subjectivist and market-process school of thought) are asking and

answering deep questions at the frontier of social-scientific knowledge. They understand that application of the mechanistic model of nineteenth-century physics may well have reached the limits of its useful contributions (O'Driscoll and Rizzo 1996:xiii).

Some Neoclassical economics may be able to make improvements in their analyses by formalizing (and thus transforming) the insights of Menger, Hayek or others. But this is not the essence of the Austrian contribution to knowledge about the social world. Austrians ask different kinds of questions and provide different kinds of answers. This is not to say that they may not sometimes ask the same or similar questions or that their vocabulary might not be at least superficially similar to that of the neoclassical mainstream. It is to say, however, that Austrian Economics is a different enterprise from neoclassical social physics (O'Driscoll and Rizzo 1996:xiv).

Those committed to the Austrian paradigm do firmly believe that the analysis offered is both more realistic and more relevant than any of the alternative theoretical systems of inquiry in economics (Boettke 1996:23).

At the basis of this approach (the Austrian Mises-Hayek) is the conviction that standard neoclassical microeconomics, for which the Walrasian general equilibrium model (in its modern Arrow-Debreu incarnation) is the analytical core, fails to offer a satisfying theoretical framework for understanding what happens in market economics. This conviction is rooted in (a) in criticisms of the lack of relevance in models which seek to explain market phenomena as if they were, at each and every instant, strictly equilibrium phenomena, and (b) in the belief that it is a methodologically legitimate demand to be made of a theory of the market, that it not merely begin with the instrumentalist assumption of already-attained equilibrium, but also realistically offer a plausible explanation of how, from any given initial set of non-equilibrium conditions, equilibrating tendencies may be expected to be set into motion in the first place (Kirzner 1997:61).

What the Austrians really object to in the neoclassicals is not that their assumptions are simplified but, precisely, that they are contrary to the empirical reality of how the human beings reveals himself to be and acts (dynamically and creatively). It is, therefore, the essential unreality (not the simplification) of the neoclassical assumption which tends, from the Austrian point of view, to endanger the validity of theoretical conclusions that the neoclassicals believe they reach in the different applied economics problems they study (Huerta de Soto 1998:99–100).

Nevertheless, I stand by my basic contention that modern economics developed in a manner that ignored many essential characteristics of real-world economic and political life because of the systemic biases of formalism, and that this has had a detrimental effect on the progress of economic thought (Boettke 1998:174).

It is evident that the limited conception of the economic agent held by neoclassical economists constitutes the basis of the Austrian “accusation” against neoclassical economics. Once this “analytical fact” is accepted, the deductive nature of the economics propounded by Austrians immediately leads to the conclusion not only that Austrian economics can explain a larger number of economic phenomena but that it can do so in a more accurate way.

As far as neoclassical economics is concerned, the defense appears to be based on the claim that Austrian economics is not a “school” of thought but a group of economists who reject the use of mathematics or do not accept the simplified assumptions made by economic theory in order to understand reality. In fact, many neoclassical economists agree with several Austrian assertions, viewing the two schools as complementary. Indeed, for most of them, there seem to be fewer differences than Austrians think.

This similarity is not surprising, since both the Austrian and mainstream neoclassical models share many of the same fundamental axioms (Davidson 1989:467).

Despite the claim of the “most original” challenge to neoclassical analysis, in reality the Austrians have neither logically differentiated themselves from the neoclassical approach, nor raised major problems in it (Davidson 1990:469).

However, by not spelling out any potential empirical criteria for assessing the performance of the economy as a whole (no one can know it), it is not entirely clear what Austrian economics has to say about the workings of the economic system (Rosen 1997:143).

The neoclassical and Austrian schools, each stripped of excrescencies, are complementary. Aspiring Austrian economists should indeed take the standard Ph.D. courses. Austrian economics is ready again to contribute, as it once did, to the mainstream (Yeager 1997:164).

As a substitute for mainstream economics, Austrian economics is not likely to be successful, and for good reason. Mainstream economics does have many shortcomings—particularly the version I have called formalist economics. But it also has many successes, especially when accompanied by an empirical mindset, as it is in the work of economists such as Anthony Atkinson, George Akerlof, Friedman, Franco Modigliani, Robert Solow, and James Tobin, to mention just a few modern masters (Mayer 1998:163).

Not all Austrians share this ambitious project. F.A. Hayek, the best-known member of the Austrian school, expressed unease with certain aspects of modern economics, but in large part he viewed his work as a complement to, rather than a substitute for, the neoclassical approach. He offered a bundle of insights on information economics, the theory of the firm, monetary economics, and comparative systems (Hayek 1984), not new and better foundations for economic analysis (Caplan 1999:823).

The second question that appears recurrently in the literature of Austrian economics is the need for a huge effort in developing the main ideas of the Austrian masters. Let me provide some quotations on this matter:

If Austrian economics is really the progressive research programme it claims to be, does it have the potential of replacing the stagnating neoclassical paradigm, or will the appeal of mathematical rigour also prove too strong for future generations of economists? Will the role of the Austrian approach remain confined to playing the devil’s advocate to a mainstream science which continues to build on neoclassical

foundations. The onus lies on the Austrian economists (Tieben and Keizer 1997:15).

Austrian economists must convince the profession of the actual and potential fruitfulness of their distinctive approach. Speculating on the future of Austrian Economics, Boettke and Prychitko (1994:290) state that it can only survive as a vital tradition by increasing the number of economists doing both theoretical and applied research along Austrian lines (Tieben and Keizer 1997:16).

In the past, the best way for Austrians to gain attention was to criticize the neoclassical approach. In recent years little constructive work along the Austrian lines has been published in the major journals, perhaps because of the school's reluctance or inability to formulate its theories in mathematical language. The Austrian papers that were published mostly criticized the lack of realism or the failing methodology, rather than developing their own theories. In this way they provide a useful source of economic "intuition" for the neoclassical economics analysis, making their formalized theories understandable in terms of real-life human action... However, it is clear that to sustain its revival Austrian Economics must go beyond its traditional role as gadfly, interpreter or even conscience of the neoclassical mainstream (Vaughn 1994:167, Boettke 1994, 1994). Its own constructive work must demonstrate its superiority, regardless of which criteria one should apply to measure that (Tieben and Keizer 1997:16).

What Austrian economists need is more historical and applied work and fewer methodological exposés and theoretical treatises. This is not to say that methodological and theoretical developments are not needed; they certainly are, because the basic approach of economics will sometimes have to be changed if we are going to tackle the lost problems and the forgotten questions (Boettke 1998:182).

From the Austrian standpoint, these criticisms can be read as follows: Austrians have a more accurate understanding of economic phenomena than neoclassicals; but the massive theoretical output of neoclassical economists over the past fifty years has left them in the background. And this is true in a very specific sense. The scant theoretical production of Austrian economics compared with that of neoclassical economics in so many fields does not conceal the fact that the "Austrian" economic agent is conceptually superior and better founded (on a theory of human action) than the "neoclassical" economic agent. It is in this sense that we can say Austrian economics is superior to neoclassical economics. With the "Austrian" economic agent we are able to explain phenomena such as exchange at disequilibrium prices, the working of the market without invoking the Walrasian auctioneer, the working of the price system within long-term economic growth or differences in rates of GDP growth in alternative institutional frameworks. On the other hand, neoclassical economics could never explain the working of the market at disequilibrium prices because the "neoclassical" economic agent could not make mistakes and then correct them.³ Of course, one can not ignore the historical and theoretical relevance of neoclassical thought. But when basic assumptions about economic agents are compared, it is hard to say that the "neoclassical" economic agent is more relevant, from a strictly theoretical standpoint, than the "Austrian" economic agent. Nevertheless, neoclassical economists defend themselves from Austrian critics by arguing that, quantitatively, the Austrian theoretical production is of little significance:

Other Austrians, such as O'Driscoll and Rizzo (1996) make no claim to have a new, well-developed alternative to neoclassical economics, although they hope to ultimately develop one. Exploration of uncharted alternatives may be a useful form of intellectual diversification, but it is a shaky basis for a paradigm shift. The reasonable intellectual course for Austrian economists to take is to make specific, substantive contributions to economics as Hayek did, and as both Rosen (1997) and Yeager (1997) recommend, and wait to see if the sum of these specific contributions adds up to a novel alternative to the neoclassical approach (Caplan 1999:837).

For the purposes of this essay, these two fundamental questions may be formulated in a stricter way. We can call these questions *the Central Proposition (CP) of modern Austrian economics with regard to neoclassical economics*. It may be stated as follows:

- a. The superiority of Austrian economics over neoclassical economics lies in its capacity to explain a kind of phenomena that are not liable to be explained in terms of neoclassical economic laws, and
- b. This greater capacity is attributed to a better characterization of the economic agent.

As we shall see later, this CP can be also stated as follows: *the main difference between the economic laws of these schools lies in their different anthropological statements*. Broadly speaking, the greater analytical power of Austrian economics lies in the concepts of *human action*, *entrepreneurship* and *knowledge*, which set it apart from neoclassical anthropology. Moreover, as Austrian economics locates economic behavior within human action, it provides a “better” understanding of categories of economic thought. Neoclassical economics does not have a general theory of human action as Austrian economics does, the neoclassical concept of entrepreneurship hardly exists and the information problem of the economy is not posed in the correct terms by the imperfect neoclassical information models. To sum up: the anthropological statements of Austrian economics have a greater informational content about human beings.⁴ So the advocates of Austrian economics consider it superior to neoclassical economics because Austrian economics explains economic phenomena *better* than neoclassical economics and, more importantly, Austrian economics shows *why* its economic laws explain more. This view contrasts with the so-called *Austrian Middle Ground* (Garrison 1982, Kirzner 1992). In fact, Austrian economics is not situated between neoclassical and Keynesian⁵ economics. Austrian economics is *more* than neoclassical economics. However, if Austrian economics is better than neoclassical economics, we can ask ourselves: could there be a certain kind of phenomena not liable to be expressed in terms of Austrian economics in its present state? We will come back to this question later.

In order to deal with these issues, I will first present an *analytical* demonstration of statement (a) of the Central Proposition of Austrian economics. This demonstration will enable us to outline the theoretical scope of Austrian economics and the kind of phenomena that are outside the scope of Austrian economics in its present state. The demonstration of statement (b) will be enable us to analyze the potential of Austrian economics to provide insights about phenomena that lie outside its proper scope. This will highlight the progressive nature of Austrian economics. But first we need a systematic explanation of the

actual connection between anthropological conceptions and theoretical models and of what may be understood as theoretical progress from these connections. We will explain these fundamental issues in the next section.

2. Anthropological Foundations of Economic Science

The connections between anthropologies⁶ and economic laws within theoretical models in economics and between anthropologies and progress in theoretical economics have been thoroughly analyzed in the writings of Rafael Rubio de Urquía.⁷ In this section we are going to introduce a very brief outline of these works, focusing on the concept of *type of allocative process*.

As a matter of fact, all models of modern economic theory are structures based upon systems of *anthropological statements*. These systems of anthropological statements may be classified in two types of sub-system: S_1 statements, characterizing “agents and their world” and S_2 statements, characterizing a special property of every agent, the “economic principle” or “optimization behavior” principle, *relative* to S_1 . Once S_1 and S_2 have been set, we can deduce “economic laws” as logical “implications” of both systems of statements. But in so far as S_1 and S_2 —relative to S_1 —are of a theoretical nature, they are like imaginary worlds constructed by the theorist in order to grasp some—necessarily partial—aspects of the factual world. Thus the “economic laws” deduced as logical implications of S_1 and S_2 are “economic laws” of that “imaginary” world. In fact, these “economic laws” are propositions about the plans devised by agents and the results of attempts to carry out those plans. But they are plans of imaginary agents that are, strictly speaking, products of the theorist’s mind.

S_1 and S_2 are anthropological and sociological propositions about economic agents and the operational environment of those agents, and, more specifically, they are statements about the following elements: the contents and structure of sets of ends and means, the ethical and cognitive dynamics of agents and the type of operational environment.⁸ By the structure of sets of ends/means, Rubio de Urquía means the formal properties of these sets within a particular human action. We could find that a particular set of ends contains sharp inconsistencies between its elements, or on the contrary, that the ends belonging to this set are all consistent with each other. By ethical dynamics, Rubio de Urquía means that ethics orders the sets of alternative ends present in the deployment of a particular human action. In addition, this ethic can undergo changes; these changes are ethical dynamics. By cognitive dynamics he means the learning and knowledge transmission processes about agents’ environment; they are particularly important in the process of constructing sets of scarce means, a process intrinsically linked to the set of alternative ends. Finally, the operational environment is the structure of social relationships applicable to the agents concerned. Statements relating to this element are therefore of a sociological nature.

As S_1 and S_2 are *a priori* statements about these elements, different sets of anthropological statements produce different *analytical allocative processes*. As “economic laws” are logical *implications* of S_1 and S_2 , different specifications of these statements produce different logical *implications*. Thus it follows that we can group together all the allocative processes that share the same systems of anthropological statements. This set of systems— S_1 plus

S₂—constitutes a *Global Anthropological Conception* of a *type of allocative process*. This *type of allocative process* produces a system of “economic laws” that is deduced from the statements corresponding to the Global Anthropological Conception. The types of economic phenomena that can be explained by these “economic laws” therefore depend on the Global Anthropological Conception from which they were deduced.

Each type of allocative process has a specific domain of validity. Obviously there are some analytical and actual—or empirical—phenomena that can be explained within a specific type of allocative process, and other phenomena that cannot be explained within this type. The laws deduced from a type of allocative process can explain only the kind of phenomena encompassed by that type of process. Consequently none of these types are false or incorrect in any logical or absolute sense. They are valid *inside* their specific domain of validity, that is, the sets of analytical or empirical phenomena that can be explained by their Global Anthropological Conception. Outside this domain, they are unable to explain any other phenomena. With this established, we can easily understand the matter we are dealing with in this section: the connections between anthropological conceptions and theoretical models and what may be understood as theoretical progress.

The central analytical tool of the modern conception of economic science is the *allocative process*. According to Rafael Rubio de Urquía, an allocative process:

...[Is] a process, defined *within* the general production process of a person, by means of which (analytically) given scarce “means” are allocated to the attainment of (analytically) given “ends” (Rubio de Urquía 1998:165).

The general structure of the *allocative process* is stated as follows:

(a) certain processes, taking place “within” the general production process of the person, generate the expressed in the standard language of contemporary economics—sets of scarce “means” and alternative “ends”, that is, the set of alternative plans, (b) a specially identified process, taking place “within” the general production process of the person, the allocative operation, “selects” the plan effectively adopted by the person among the plans belonging to the set of alternative plans, (c) any theoretical explanation—analytical determination—of the selected plan must necessarily consist of an organic set of theoretical statements about both the processes generating the set of alternative plans and the nature of the allocative operation taking place “once” this set of plans is defined, (d) allocative theory, as such, can only provide statements about the nature of the allocative operation; modern theoretical thought in economics has provided a special explanatory principle of this kind, “the economic principle”—or “optimization behavior” principle, etc. (Rubio de Urquía 1998:166).

The product of the allocative process is a plan, i.e. a mental representation of the sequential arrangement of the means to the ends that agents pursue. The allocative operation is just the *selection of one plan* among the set of alternative plans, which will be the plan adopted by the agent. But the source of these plans lies in the anthropological statements that define the agent or social aggregate of agents. Strictly speaking, the “allocative” or “economic”

sphere begins and ends with the process of selecting an action plan. Only when we have taken account of the extra-allocative origin of the set of alternative plans and the intimate relationship between allocative operations and human action, does the need for a theoretical explanation of how this set is constructed become evident.

Let us now look at how an analytical allocative process works. Let t be an instant of time and $S_1(t)$ a ‘system of statements characterizing the sets of scarce “means” and alternative “ends” analytically attributed (by the theoretician) as being those (subjectively) “conceived” by an analytical person as being its own at time t ’ (Rubio de Urquía 1998:166). Let $P(t)$ be the set of alternative plans defined by $S_1(t)$. Obviously, every plan belonging to $P(t)$ is an instantaneous plan formed by ‘a specific structure of projective linkages of specific “means” and “ends” spanning a certain *subjective* time horizon’ (Rubio de Urquía 1998:166). Let $S_2(t)$ be a set of statements characterizing the “economic principle” in such a way that one and only one of the plans of $P(t)$ satisfies what is implied by $S_2(t)$. The outcome of the presence of $S_1(t)$ and $S_2(t)$ is an instantaneous allocative process, that is, a plan selected according to $S_2(t)$. Whether the selected plan is feasible or infeasible (in varying degrees) depends on the particular nature of $S_1(t)$ and therefore the operation of $S_2(t)$ statements—the principle of economic behavior—does not ensure the feasibility of the plan.

The problem could also be seen from a dynamic standpoint. Let there be two different sets of statements: S_1 , which characterizes the dynamics of the agent’s sets of ends/means, and S_2 , which refers to the “economic principle” from S_1 . We find ourselves in a dynamic situation in which S_1 contains statements about the dynamics of sets of scarce “means” and alternative “ends”—i.e. ethical and cognitive dynamics. Here we must take account of the specific development of the structure of sets of ends and means, because the sequential deployment of the P sets will be important to their feasibility or infeasibility. In any event, in both cases the properties of the selected plan are properties of a plan contained in $P(t)$, which verifies S_1 or S_2 . In this way, these properties are deduced as *logical implications* of S_1 and S_2 and ‘the co-implied statements are “economic laws” of allocative process, characterizing properties of the selected plan’ (Rubio de Urquía 1998:167).

Although the principle of economic behavior has a universal character, we should note the impossibility of thinking about a Global Anthropological Conception of universal validity,⁹ i.e. a set of S_1 and S_2 statements absolutely valid for all human beings and societies in every place and time. It is impossible to characterize all the conceivable past, present, and future deployments of human action in a system of statements. But it is possible to characterize very meaningful types of allocative process *relative* to a specific set of S_1 and S_2 statements, that is, to a Global Anthropological Conception. An economic model’s anthropological system of statements will never be fully descriptive, so the “implied” economic laws have a restricted validity, confined to the specific allocative process defined by S_1 and S_2 . That is to say, each allocative process—defined by its specific sets S_1 and S_2 —only explains a particular class of allocative phenomena. So there will be certain allocative phenomena that cannot be explained by the “economic laws” of a specific allocative process because the specific anthropology of this process cannot generate these phenomena analytically.

Several interesting conclusions can be drawn from this. Two of them will be very useful for our analysis:

- a. Each allocative process is defined by a variable system S_1 , specific to each particular process, and by S_2 , expressing the “economic principle”. The variable system is anthropology, which is a key element for it defines the allocative phenomena the process can explain;
- b. An unlimited number of allocative processes may be constructed, with their own “economic laws”. These “economic laws” are “true” within the domain of validity of the type of allocative process.

From these conclusions, we can deduce two additional implications:

- a. Two different or special analytical allocative processes belonging to the same type of allocative process differ in the class of economic phenomena they explain—growth, inflation, interest rates—but the fundamental anthropology is the same.
- b. There are some economic phenomena that can be explained in terms of a certain type of allocative process but not in terms of another. It depends on their domain of validity.

And from these implications we may identify two kinds of theoretical progress:

- a. Progress in the global anthropological conception, constructing new types of allocative process, or
- b. Progress within a type of allocative process, constructing new analytical allocative processes from the same global anthropological conception.

Now that we have established the connection between anthropological statements and economic models and the means of theoretical progress, it is possible to ascertain the class of processes belonging to the domain of validity of the “economic laws” of a certain type of allocative process.

3. The Superiority of Austrian Economics: Statement (a) of the Central Proposition

In this section we are going to present a very short summary of the global anthropological conceptions of the three main types of allocative processes, in order to demonstrate statement (a) of the CP of Austrian economics. We will thereby get a clear idea of what can be explained by each type of process or, more precisely, the analytical domain of each type.

We are going to summarize the statements of the three Global Anthropological Conceptions in Table 1 showing, on one hand, the different S_1 and S_2 statements relative to the elements of allocative process and, on the other, the three main types of allocative process, i.e. neoclassical, Austrian and Keynesian. Let us first clarify some points about the table. S_1 and S_2 have the same nature, i.e. both are anthropological and sociological statements in which S_2 is related to S_1 . From S_1 statements, the economic agent and the social medium—the economic agent’s operational environment—are defined in a broad sense; the other inputs are notes about the type of knowledge needed in order to operate in society, the presence or absence of money—as a general equivalent of value—and finally the results of the plans and social economic process deduced as “economic laws” from S_1 and S_2 .

Table 1. Summary of the anthropological statements of neoclassical, Keynesian and Austrian economics.

	Neoclassical	Keynesian	Austrian
S ₁ : Anthropological conception.	Consumer and producer as a mechanical optant	Consumer as a mechanical device. Producer with ability to make expectations	Human action with cultural (rules) and cognitive dynamics (entrepreneurship)
Operational environment	Pseudo-market	Market with “central authority” ^a	Society/market
S ₂ : Principle of economic behavior	Economic principle	Economic principle	Economic principle
Type of knowledge	Objective	Subjective: expectations Objective: output	Subjective: preferences and knowledge.
Presence of a general equivalent of value	Yes	Yes	Yes; but not all ends and means may be expressed in this equivalent
Structure of the agent’s set of plans	All the plans are compatible	All the plans are compatible	Consumers’ plans are all compatible but producers’ plans may contain some kind of incompatibility ^b
Agent’s allocative process outcome (“economic law 1”)	Always efficient	Depends on the calculation of the marginal efficiency of capital	Depends on the operation of entrepreneurship
Social process outcome (“economic law 2”)	General equilibrium	Process of discoordination with possibility of equilibrium in goods market and disequilibrium in labor market	Process of coordination toward general equilibrium of plans, but this state is never attained

^aKeynes explicitly refers to the work of a central authority—which may also be called government—in several passages of the *General Theory*. For instance: “I expect to see the State, which is in a position to calculate the marginal efficiency of capital-goods on long views and on the basis of the general social advantage, taking an ever greater responsibility for directly organising investment; since it seems likely that the fluctuations in the market estimation of the marginal efficiency of different types of capital, calculated on the principles I have described above, will be too great to be offset by any practicable changes in the rate of interest.” [Keynes 1964 (1936):164]; also: “Our final task might be to select those variables which can be deliberately controlled or managed by central authority in the kind of system in which we actually live” [Keynes 1964 (1936):247].

^bDue to the presence of long-term expectations, it may be that Keynesian producers hold a set of intrinsically incompatible action plans.

Lets us clarify and comment on the contents of the table, beginning with the neoclassical school.

The neoclassical agent is a mere optant whose pattern of economic behavior is, of course, the principle of economic behavior in its modern sense. But apart from this general pattern that we can find in all kinds of economic agent, the neoclassical “agent” is not an “agent” in the etymological sense of this word—i.e. somebody who acts—but just somebody who chooses. The choice between given options that cannot be generated by the decision-maker is not an action but a part of the process of an action; to act means planning the uses of means over a *subjective future*. The neoclassical characterization of the

economic agent does not provide an accurate explanation of this process. The reason is that the neoclassical agent has no projective character and so he/she is of course unable to make plans. Moreover, to solve the optimization program—statement S_2 —three additional properties are required. First, the value of the means and ends must be expressed in terms of a general equivalent of value, so it cannot explain any choice that involves plans containing means/ends whose value cannot be expressed in terms of this general equivalent.¹⁰ Second, perfect knowledge of market circumstances is required in order to solve the optimization problem. The hypothesis of perfect and objective knowledge of all prices excludes the most elementary mental processes or anything like a cognitive dynamic.¹¹ Third, the structure of sets of ends and means allows the construction only of alternative plans that are wholly feasible, both from an external perspective—perfect appreciation of market conditions—and from an intrinsic one—consistency of the person or agent's subjectivity.

The operational environment in which the interaction of action plans occurs is the competitive market. But this *competitive* character is not in the sense of the French or Spanish term *compétitif* or *competitivo*, which is different from *concurrentiel* or *concurrencial*. The second term, in whose sense neoclassical economists understand the competitive market, means firms and consumers enter the market freely but there is no real competition. This shows in part why the operational environment of the general equilibrium theory is explained by the parable of the Walrasian auctioneer. In fact there is no explanation of the way the competitive market works.

We can conclude that the neoclassical anthropological conception is extraordinarily restrictive and therefore completely alien to human nature: the neoclassical agent does not make *plans*, the essential activity of human beings. Moreover, the neoclassical agent does not allow for elemental patterns of human behavior such as processes of learning-by-doing or cognitive expectations schemes, which are vital to a projective horizon. In fact, human beings design their own future; they do not merely react to changes in stimuli. Human beings are not mere optants.

Austrian economics' anthropological conception is intrinsically associated with the concept of human action. For Mises or Hayek, it is impossible to understand economic behavior outside human action. So the "Austrian" agent is an *actor* who can make plans and design his/her own future. The "Austrian" agent reflects more aspects of human beings than the "neoclassical" one, including several processes of constructing sets of ends/means and of alternative plans. These processes include entrepreneurship, a cognitive dynamic consisting basically of a process of learning by doing, and the inherited system of rules (Vaughn 1999), which can be understood as a cultural dynamic. These two dynamics do not exclude other kinds of cognitive or ethical dynamic but Austrian economists do not explicitly consider other dynamics than these. So the Austrian agent can be summed up as an actor whose main mental processes are entrepreneurship and an inherited system of rules. There is also another important element that makes Austrian economics part of modern economic thinking: the presence of the principle of economic behavior. As Mises pointed out (though not using this term), the principle of economic behavior is the only constant in economics,¹² that is, the principle according to which the economic agent always selects the action plan that is subjectively understood to be the best. But Austrian S_2 statements referring

to the economic principle are clearly different from neoclassical ones: the principle is purely subjective whereas the neoclassical one is objective, i.e. a well-defined maximization program.

The formation of sets of ends/means is brought about by a special kind of cognitive and cultural dynamics. These dynamics, the system of rules and entrepreneurship, operate under the hypothesis of imperfect knowledge or, more precisely, uncertainty. Hayek (1948) pointed out that the main problem with these processes is the nature of the type of knowledge that the agent needs to carry out his/her plans. Huerta de Soto (1992) has given one of the best descriptions of the nature of this type of knowledge. Its main features are that: (a) it is subjective and practical, not scientific, i.e. it cannot reflect all the particular circumstances of time and space in the whole social process; (b) it is private and dispersed, generated by the process of learning by doing; (c) consequently, it is tacit, not organized, and (d) it is created *ex nihilo* by entrepreneurship. These features make the interaction process between agents a problem of knowledge transmission, as Hayek pointed out. However, and this is something we must not forget, the knowledge acquired by the agent-entrepreneur is meaningful in the process of forming sets of ends/means.

But in spite of the absence of perfect knowledge, the nature of the sets of end/means is only slightly different from that of neoclassical economics. Indeed the value of all ends and means is expressed in terms of a general equivalent of value. In the true concept of human action this does not have to be the case, but this is in fact the Austrian view. We will discuss this matter later. Nonetheless, unlike neoclassical plans, Austrian plans may be externally infeasible, that is, involving erroneous perceptions of the environment in which the agent acts. A lack of specific knowledge of time and place and errors in the processing of information lead to the formulation of externally infeasible action plans. This is a real step forward, because it allows us to explain more economic phenomena than neoclassical economics.

Finally, the process of interaction between plans is quite different from the neoclassical model. Austrians understand the market as a truly competitive process (in the Spanish or French sense of the term). Markets are always in a state of disequilibrium but have a strong tendency toward equilibrium, driven by entrepreneurship. Error and ignorance, the result of uncertainty and imperfect knowledge, are the sources of market disequilibrium. The competitive process consists of a continuous obtaining of information by agents in order to take advantage of business opportunities arising from error and ignorance. Huerta de Soto (1992, 1998) calls this result the “social big bang”:

My Austrian School colleagues usually refer to the fact that entrepreneurial processes tend to lead the system towards equilibrium, although they acknowledge that this is never reached. I prefer to talk about a different model, which I have described as the “social big bang”, that allows unlimited growth of knowledge and civilization in a way that is as well-adjusted and harmonious (i.e. coordinated) as is humanly possible in each historical situation (Huerta de Soto 1998:81 n. 14).

So these anthropological statements put Austrian economics in a better position within economic theory because: (1) they reflect true elements of human action and particularly the

most essential one, its projective character, and (2) they locate economic behavior within the deployment of this projective character, that is, within human action. From these facts we can conclude that the range of economic processes encompassed by the Austrian domain of validity is wider than those encompassed by the neoclassical one. Or, in other words, Austrian economics explains more economic phenomena and explains them better.

Finally we must analyze Keynesian economics' anthropological conception. Due to the widespread use of the label "Keynesian", it would be best to begin with the *General Theory*. In his main work, Keynes attempted to grasp the work of modern economies and found a tempting explanation of a state of disequilibrium not envisaged by neoclassical economists: the existence of a kind of state of non-coordination as a consequence of the nature of the plans carried out by agents. According to Keynes, the problem is that these states can be spontaneously produced and can become semi-permanent. In particular, Keynes focused on situations of involuntary and permanent unemployment along with states of equilibrium in goods markets. In order to explain this, Keynes introduced the hypothesis that changes in the structure of agents' action plans may be induced by changes in their ideas about their future. That is, the nature of the formation of expectations has a strong influence on the real economic situation. Chapters 11 and 12 of *General Theory* are the product of this new anthropological statement and, at the same time, constitute the cornerstone of the Keynesian model. But let us take a brief look at the development of Keynesian economics from Keynes' thought.

The first step in the evolution of Keynesian thought was the so-called "Neoclassical Synthesis" which combines elements of the *General Theory* with elements of neoclassical thinking. The result was a set of models that recognized Keynesian disequilibrium situations in the short run but that predicted neoclassical equilibrium in the long run. These models were the basis of the "fine tuning" economic policies of aggregate demand in the 50s and 60s. The subsequent development of Keynesianism is too complicated to deal with in this brief work Pascal Benassy's economics of equilibrium with rationing or Robert Clower's concept of notional demand are very interesting developments of Keynesianism, but unfortunately we cannot discuss them here. It seems more useful to focus on the economists who have worked on the main Keynesian anthropological statement, that is, the formation of expectations: G.L.S. Shackle, who studied both Keynes and Hayek although his work is clearly "Keynesian"—if the term can be applied meaningfully—and Ludwig Lachmann, who came from the Austrian school and then became—along with Shackle—the main proponent of what Austrians call "radical subjectivism".

Lachmann (1976) himself presents us with the main features of this Keynesianism. First, these authors consider that both sets of means and ends and the formation of expectations itself are of a subjective nature. In an exhaustive analysis of the Keynesian characterization of this process, Shackle (1972) demonstrated the impossibility of using the axiomatic probability theory to explain expectations and maintained the genuine concept of expectation as Keynes stated it: in situations involving uncertainty the agent assigns degrees of rational belief to the alternative states of the world he/she expects to exist in the future, choosing the one they think best. This type of cognitive dynamic will plainly have major consequences for the market process. However, in spite of this interesting insight, Keynesianism does not explicitly link economic behavior to human action. And this lack is crucial to its ability to explain economic phenomena of greater complexity.

Second, Lachmann argues that the market spreads these expectations in the same way as the type of knowledge that Hayek highlighted. If this is so, and it is reasonable to think so, the problem is that expectations would be corroborated or refuted by a superior kind of knowledge, that is, future reality. However, while Hayekian knowledge can be improved with the repeated exercise of entrepreneurship, expectations can not. In fact, markets cannot correct erroneous expectations until the future to which they refer arrives. Here we have a continuous source of error and a continuous trend toward the discoordination of plans in the market process. The final outcome is that the market process *never tends toward a state of coordination*.

However, if we try to express these ideas as anthropological statements, we obtain a very similar result to the Austrian one. In fact, the only difference lies in the more complex process of forming expectations. As McCann (1994:81–88, 128) argues, Hayek is nearer to Keynes than Friedman or Lucas. True uncertainty, epistemic uncertainty, is present in the works of Hayek, Mises, and Keynes. The uncertainty of Friedman or Lucas is systemic, and can be approached by risk. This puts Keynesian economics in a very special position in relation to neoclassical and Austrian thought.

The foregoing analysis showed that Austrian economics can explain more phenomena than neoclassical economics. Furthermore, the Keynesian economics of Shackle and Lachmann can explain more phenomena than neoclassical economics. Both Austrian and Keynesian economics are *analytically* superior to neoclassical economics. But in so far as neither Keynes nor Shackle explicitly locates economic behavior within real human action, Keynesian-Shackelian economics are inferior to Austrian economics. So statement (a) of the Austrian Central Proposition is true although Austrians are not in the middle ground. They represent a step beyond neoclassical economics.

Next we are going to demonstrate the progressive character of Austrian economics by showing the types of phenomena it can explain and those it can not.

4. More Complex Economic Phenomena: The Domain of Validity of Austrian Economics

Now that we have shown the *analytical* superiority of Austrian economics over neoclassical economics, we have to demonstrate the former's "progressive character" (Vaughn 1994:176–177, Tieben and Keizer 1997:15) that is, its potential for new theoretical production. The question can be posed as follows: Are there any economic phenomena that Austrian economics cannot explain? And if so, why not?

I have selected two kinds of analytical economic phenomena in order to ascertain whether Austrian economics can explain them. These analytical phenomena are more complex than those that can be explained by current economic theory. They include two types of allocative processes:

- a. allocative processes that involve intrinsically infeasible action plans, and
- b. allocative processes that involve ends / means whose value cannot be expressed in terms of a general equivalent of value.

Austrian economics cannot explain these two phenomena for two reasons. To begin with, Austrian economics lacks anthropological statements to explain type (a) processes because all plans produced within its anthropology are intrinsically feasible, as we shall see later. Moreover, although Austrian economics does not explain type (b) processes, this is because it tacitly declines to deal with these phenomena. This is what we are going to discuss in this section. Let us begin with the Austrian treatment of type (a) phenomena.

Austrian economics is able to explain economic processes of disequilibrium or discoordination when they are due to the presence of externally infeasible action plans. External infeasibility means that plans are intrinsically well constructed but that there are mistakes in the interpretation of information provided by the environment. Hayek pointed out that due to the limited nature of the human mind, economic agents cannot grasp all of the relevant information provided by processes of social interaction. Hence the economic agent makes plans with incomplete or erroneous information about market conditions. These conditions consist mainly of other agents' action plans. Interrelated plans are therefore disordinated because *most of them are infeasible for this state of the market*, or in other words, *they are mutually incompatible*. If we focus only on this type of infeasibility, we may regard the Austrian analysis as absolutely correct.

But if we are concerned about type (a) phenomena, the Austrian analysis is clearly insufficient. This type of infeasibility is due to *defective internal construction of the action plan*. Certain structures of an agent's subjectivity can bring about defective action plan structures even though the agent has a correct perception of market conditions. More specifically, the source of this infeasibility lies in the internal structure of sets of means and ends and/or the logical structure of the action plan. To deal with these phenomena we need a specific characterization of this intrinsic infeasibility. And here is the crux of the matter: in its present state, Austrian economics cannot deal with these phenomena because of its lack of anthropological statements to deal with them. This is where Austrian economics has to demonstrate its progressive character.

Let us review the anthropological-sociological statements of Austrian economics. Mises and Hayek proposed the following statements about the structure of human action:

Statement A1: A set of ends always involves structures with compatible ends. All the ends pursued by an agent are *a priori* feasible in the sense that no one of them *a priori* prevents the attainment of another.¹³

Statement A2: A set of means is constructed to fulfill the ends being pursued by the agent. This is the external source of infeasibility. The set of means does not always fit the set of ends owing to erroneous interpretations of the market conditions in which these means are generally acquired.¹⁴

Statement A3: The plan never contains internal problems due to incorrect construction. If the errors are like those of A2, the plan changes when the new information is rightly understood.

From these three statements we can infer that the intrinsic infeasibility of action plans cannot be explained within Austrian economics' global anthropological conception. However, owing to its correct comprehension of the place of "the economic sphere" within the general process of human action, Austrian economics *can support a more*

general global anthropological conception. This is why its character is progressive. We will come back to this question; first we have to deal with the second type of phenomena.

Type (b) phenomena are a very common aspect of real human actions. The value of ends like education, one's health and that of relatives, self-respect and the practice of a profession cannot be expressed in monetary units nor be acquired in markets. This does not mean it is not possible to buy a medicine or pay school fees. It means it is impossible to buy recovery from a heart attack in exchange for an objective amount of money, in the same way that it is not possible to acquire the ability to write or speak a foreign language. It is possible to hire the services of another person, but not a knowledge of the Russian language in exchange for an amount of money. This kind of ends is normally present in people's sets of ends. Of course, the attainment of those ends may involve the use of means that can be acquired in markets and other means that can not. But if the value of some ends and some means cannot be expressed in terms of a general equivalent of value, we are dealing with plans that are not guided by monetary calculation. That is to say, the *actual expression of the principle of economic behavior is not a monetary one*. In the Austrian tradition, as in the neoclassical one, all the ends present in human action have a value expressed in terms of a general equivalent of value. If this were really so, it would mean that all the ends present in human action could be attained by means of money. Obviously, as we have seen, this is not the case. Mises was fully aware of this, although he refused to deal with it in *Human Action*.¹⁵ For him, the most important tool of human action was *economic calculation as monetary calculation*. And this is an *anthropological statement*: *Statement A4*: The value of all the ends and means present in human actions can be expressed in terms of a general equivalent of value.

But this statement is in no way crucial to the Austrian tradition. In fact, the concept of human action can explain the presence of values that cannot be expressed in terms of a general equivalent. Accordingly in type (b) phenomena we have another analytical phenomenon that Austrian economics cannot deal with in its present state, but that could be explained by eliminating A4. Thus Austrian economics demonstrates its progressive character once again.

So the kinds of action plan that we have to deal with are:

- a. Action plans involving incompatible ends, owing to the presence of conflicting dynamics within the agent's subjectivity. This general type of plan is what we have called intrinsically infeasible action plans.
- b. Action plans that involve ends or means whose value cannot be expressed in terms of a general equivalent of value. However, the fulfillment of some of those ends may require the participation of certain means that can be expressed in these terms and acquired against money on the market.

These two properties may be present in the same plan. Or only one of them may be present. In any case, with these new elements we will be able to explain the situations of discoordination in which these two types of economic phenomena are present. Let us look at the way in which we have to change the global anthropological conception of Austrian economics in order to deal with those phenomena.

Let us introduce the following statements:

Statement C1: The concept of *assemblage of beliefs, attitudes, values and theoretical and technical representations of reality* (Rubio de Urquía 1991). Rubio de Urquía formulated this concept in order to explain the substantive elements from which the economic agent constructs sets of ends/means. Note that these elements may come from very different sources and that we cannot say they will always be compatible. On the contrary, in their most usual state there will be internal conflicts between them.

Statement C2: The second statement we need to introduce is the concept of *life trajectory*. A person's trajectory or trajectories are *views of him/herself in the future*. These views have a historical dimension because human beings cannot conceive themselves outside their present reality. This *historical dimension* constitutes *their installation in reality*. From this "installation" a person projects him/herself into the future. However, this trajectory can only be set from a person's specific "installation". We decide our own future, but we do so from our historical reality.

Statement C3: Rubio de Urquía points to the presence of *cognitive and ethical dynamics*. These dynamics contribute essentially to the sequential construction of sets of ends/means from the elements of the agent's "assemblage". *Cognitive dynamics* involve all processes of learning and knowledge acquisition. Entrepreneurship is one of these processes. *Ethical dynamics* involve all processes of organizing ends and means; ethical dynamics are crucial, because they are the ultimate guide in a life trajectory.

Statement C4: The concept of *project*. We understand projects as sequential representations of the ends human beings have to fulfill in accordance with their "assemblage" of beliefs, attitudes, etc., their life trajectory, and cognitive, ethical and cultural dynamics. A person projects him/herself into the future from the elements of that "assemblage" and their "installation" in reality. This projection takes the specific form of a project. A person may have several current projects and so he/she may project sequential sets of ends of a very complex nature. Cognitive and ethical dynamics operate in this process of constructing sets. It is very important to focus on the sequential nature of the generation of ends. *This sequential nature implies that a change in a set of ends has an intrinsic rationale and that it is not at all a random process.*

Statement C5: Action plans may involve some ends and some means whose value cannot be expressed in terms of a general equivalent of value nor be acquired in markets.

Statement C4 is deduced from statements C1, C2 and C3. These three statements can be regarded as global anthropological statements referring to human action, while C4 and C5 are specific statements referring to the analysis of type (a) and (b) phenomena.

With all these elements we can draw up a new map of the economic agent. A map in which the fundamental process is a process of generating ends that involves a logical sequence of ends from the agent's point of view. This sequence—and its rationale—springs from the current projects in which the agent is involved. The complex nature of the source of these projects, and the likely existence of internal conflicts between the elements of the agent's "assemblage" and/or "installations", may generate sets of ends that are very difficult to achieve as a whole. There is a wide range of possible problems; here is a sample:

- P₁: Conflicts between ethical and cognitive dynamics. Some ends perceived as attainable from a logical-technical point of view may be frustrated by specific ethical dynamics. This situation may give rise to unstable projects if no single dynamic is clearly predominant.
- P₂: Mutually exclusive life trajectories. Some people may have several life trajectories that cannot be lived simultaneously. In these situations, the sequential structures of ends will be very unstable and may make action absolutely ineffective.
- P₃: Blurred frontiers between the monetary and non-monetary character of some ends and/or means. Some elements of the agent's "assemblage"—values or attitudes—may induce major mistakes about the monetary or non-monetary character of the ends and/or means. Plans may be oriented toward ends that are perceived as having a monetary character, but which are not of that kind.

Of course, it is also possible to find conflicts in the formal structure of the set of means, which induce problems in the relationship with the ends. But the most interesting problems arise from P₁, P₂ and P₃ conflicts.

The next step must be a study of the way in which the agent tackles the construction of an alternative set of plans when faced by situations like P₁, P₂ and P₃. This is where ethical and cognitive dynamics operate. The plans devised are mental representations of sequential arrangements of sets of ends and means. But they are *sequential arrangements* because of the *projective nature of the deployment of human action*. Plans are arrangements of means toward the attainment of ends inserted in *projects with a sequential rationale*. This sequential rationale implies that ends change according to the logical structure of the project and, in general, C¹–C³. If there are no conflicts between these elements, plans are *intrinsically feasible*. If there are conflicts such as P₁ and P₂, they are *intrinsically infeasible*. Plans are intrinsically infeasible because of the conflicts between the internal elements that constitute what the agent *is*. This infeasibility arises irrespective of the structure and relative shortage of means. Ethical and cognitive dynamics *cannot remedy this infeasibility unless these dynamics change the internal elements of the agent's "assemblage"*. *In so far as these changes are painful, hard and slow, the presence of P₁ and P₂ problems may systematically generate intrinsically infeasible action plans. The persistence of this situation and a resistance to change define a disequilibrium situation, not only for the economy but also for the agent. This disequilibrium is due to the impossibility of carrying on personal actions. In this situation, the market process cannot correct the tendency toward discoordination because the problem lies not in the interactive structure of relationships but in agents themselves.*¹⁶

The second type of complex phenomena does not require specific anthropological statements apart from C⁵. The economic implication of this statement is easy to deduce: in these situations, we have to study the allocative process in terms of opportunity cost. This is not new in economic theory. Here we have only to realize that the principle of economic behavior is not necessarily expressed in monetary terms. All human action has an economic component—the process of plan selection—but not necessarily a monetary component. In so far as we realize this, we can properly understand the economic problems of education, the family or non-profit organizations. Moreover, we can make an economic analysis of these matters with no need for *ad hoc* hypotheses about economic calculation in the absence of monetary measurement.

It is more difficult to analyze the effects on the market process. In fact, most human actions do not involve markets. And this is not only because of the high costs of transactions. Most of them do not involve markets because *they are unlikely to have a monetary character*. Yet action plans may involve means that can be obtained in markets. Such plans are very common. Most government actions correspond to this kind of plan. The value of a legal or national defense system cannot be expressed in terms of a general equivalent of value or acquired in markets. But they involve specific action plans and a huge amount of means that are acquired in markets and people versed in jurisprudence or military tactics whom the government has to educate. If we take account of C^5 , our understanding of such actions will be more accurate than if we try to “translate” them into monetary or quantitative terms. This would be a real theoretical advance, setting out from Austrian economics.

We have delimited the domain of validity of Austrian economics in its present state. The economic phenomena explained are those produced by action plans that may be fully feasible or externally infeasible, and those containing ends and means whose value cannot be expressed in terms of a general equivalent of value. Economic phenomena produced by intrinsically infeasible action plans or that contain ends or means whose value cannot be expressed in terms of that equivalent do not belong to its domain of validity. But thanks to its correct apprehension of the place of economic behavior in human action, Austrian economics can support changes in its global anthropological conception so as to deal with these phenomena. This is proof of its progressive character.

5. Concluding Remarks: A “Leap with Continuity”

We have summed up the present theoretical status of Austrian economics in the Central Proposition of Austrian economics:

- a. The greater depth of Austrian analysis lies in its ability to explain a kind of relevant phenomena that is not liable to be explained in terms of neoclassical economic laws, and
- b. This greater capacity is attributed to a better comprehension of and deeper insight into human beings and the deployment of human action.

We have seen that statements (a) and (b) are both true. First, an analysis of economic theory’s global anthropological conceptions shows that Austrian economics has the most precise understanding of the true nature of human beings. With this anthropological conception, Austrian economics can explain more phenomena than neoclassical economics. Second, Austrian economics has a clear perception of the place of economic behavior within human action and can support more complex anthropologies. In this sense it is more progressive than the neoclassical or Keynesian traditions. We should note that these results were obtained by using the concept of type of allocative process for which we are indebted to Rubio de Urquía. In addition, this concept leads to a better understanding of true theoretical progress: having established the intimate relationship between economic plans and human actions we can move on to more complex theories by drawing ever more meaningful maps of the intrinsic structure of economic agents. We will thereby be able to explain more complex phenomena than previous theories.

In this context, we also introduced some new anthropological statements: chiefly, ethical and cognitive dynamics, life trajectories and assemblages of beliefs, attitudes, values and representations of reality. The complex relationships between these elements are transferred to the structure of sets of ends. The existence of internal conflicts between these elements persistently generates intrinsically infeasible action plans. A wide presence of a system of plans of this type may explain the existence of situations of personal disequilibrium, which the market process cannot solve unless the source of the intrinsic infeasibility disappears. In addition, we have widened the scope of economic theory to those plans that cannot be fully expressed in terms of money and shown that all human action has an economic component but not necessarily a monetary one.

In doing so, we have made a “leap with continuity” from the springboard of Austrian economics that opens up a productive view of the economic problem and shows the way toward attaining the *progressive character* of a mainstream paradigm. This “leap with continuity” is a result of statement (b) of the Central Proposition. It is the clear perception of the place of “the economic sphere” within the general process of human action that enables theoretical progress. More complex characterization of human action will lead to economic theories that explain more analytical and empirical phenomena. Indeed, by introducing C^1 – C^3 we can explain analytical phenomena of intrinsically infeasible action plans and those of a non-monetary character. The introduction of these phenomena in a market process theory will allow us to explain tendencies toward discoordination whose source is not government intervention or error and ignorance of market conditions but the intrinsic structure of the systems of action plans generated by agents. Therefore the “leap with continuity” entails a change in Austrian economics’ Global Anthropological Conception. But this change does not involve a break with its existing anthropological conception. It may be understood as evolution toward acquiring greater explanatory power, that is to say, toward a really progressive paradigm.

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Notes

1. In 1884, Menger wrote to Walras: “How can we attain a knowledge of this essence, for example, the essence of value, the essence of land rent, the essence of entrepreneurs’ profits, the division of labor, bimetallism, etc., by mathematical methods?” (Walras 1965).
2. See, for example, Kirzner (1997) and Tieben and Keizer (1997).
3. Kirzner explains this in the following terms: “In the neoclassical context a decision can never be *corrected*—because no decision can ever be *truly* mistaken. The reason for a *change* in a decision thus can be found only in an exogenously generated change in the relevant decision framework. But in the Austrian context a decision can be *corrected* as a result of the decision maker’s discovery of an earlier *error* in his view of the world.” (Kirzner 1997:71).
4. From the methodological tradition of Austrian economics, it is easy to deduce that the more information we have about the economic agent, the better laws will be obtained.

5. At least Shackelian Keynesianism.
6. By anthropology we mean here a set of statements about the economic agent and his/her world, that is to say, the system of hypotheses we make about the agent's behavior. Of course, this anthropology may involve cultural/anthropological or ethnological issues as well as philosophical/anthropological issues.
7. See Rubio de Urquía, R. (1991, 1993, 1994, 1996 and 1998).
8. Further elements, such as the structure of the dynamics of cultural interaction "social transport of information flows" should be considered (see Rubio de Urquía 1998); but they will not be required for the purposes of this article.
9. A global anthropological conception of universal validity would involve a set of statements that could *all* be applied to every single man in any time and place. Obviously this is impossible. S_2 Statements characterize the principle of economic behavior *relative* to S_1 . In this sense, there is no global anthropological conception of universal validity.
10. Even according to the ordinal utility function a person can achieve a certain degree of "welfare" only by acquiring various kinds of goods against money, which is not always true. Actually, neoclassical ordinal utility functions imply that ends can be fulfilled through indirect exchange against money.
11. This cognitive dynamic is very irregular because of the hypothesis of perfect knowledge or, what is the same, the hypothesis of rational expectations. Only in adaptive expectations or bounded rationality can we find some extraordinarily simple models of learning.
12. "Only in one respect can acting be constant: in preferring the more valuable to the less valuable." (Mises 1966:103)
13. This follows from the way Mises conceived the attainment of ends: "On the basis of such scale [of value] he satisfies what is of higher value, i.e. his more urgent wants, and leaves unsatisfied what is of lower value, i.e. what is a less urgent want." If this is so, all wants are compatible. Nevertheless, it is possible to find some trace of that in his writings. It has been suggested to me that Mises dealt with incompatible ends in his analysis of interventionism (Mises, 1966, chapter XXVII), which is quite true. But there is no trace of that issue in his analysis of human action, so strictly speaking we can not assume that Mises deliberately worked on it.
14. "... since equilibrium relations exist between the successive actions of a person only in so far as they are part of the execution of the same plan, any change in the relevant knowledge of the person, that is, any change which leads him to alter his plan, disrupts the equilibrium relation between his actions taken before and those taken after the change in his knowledge" (Hayek 1948:38); and "It is a fact that human reason is not infallible and that a man can often err in selecting and applying means." (Mises 1966:20)
15. "Economic calculation can comprehend everything that is exchanged against money." (Mises 1966:213). But, "there are things which cannot at all be evaluated in money, and there are other things which can be appraised in money only with regard to a fraction of the value assigned to them." (Mises 1966:215). Although Mises was fully aware of this matter, his concern was almost exclusively with monetary calculation.
16. Of course, agents can realize their problems and solve them. But this may be not the case when conflicting visions of the world and/or themselves exist at the same time. One may be aware of a conflict but be unable to solve it.

References

- Boettke, P. (1996) "What is Wrong with Neoclassical Economics (and What is Still Wrong with Austrian Economics)?" In: Foldvary, F. E. (Ed.) *Beyond Neoclassical Economics. Heterodox Approaches to Economic Theory*, pp. 22–40. Aldershot, England: Edward Elgar Publishing.
- Boettke, P. (1998) "Formalism and Contemporary Economics: A Reply to Hausman, Heilbroner, and Mayer." *Critical Review*, 12: 173–186.
- Caplan, B. (1999) "The Austrian Search for Realistic Foundations." *Southern Economic Journal*, 65(4): 823–838.
- Davidson, P. (1989) "The Economics of Ignorance or Ignorance of Economics?" *Critical Review*, 3: 467–487.
- Garrison, R. (1982) "Austrian Economics as the Middle Ground: Comment on Loasby." In: Kirzner, I. (Ed.) *Method, Process and Austrian Economics*, pp. 131–138. Lexington: D.C. Heath.

- Hayek, F. A. (1948) "Economics and Knowledge." In: Hayek, F. A. (Ed.) *Individualism and Economic Order*, pp. 33–56. Chicago: The University of Chicago Press.
- Huerta de Soto, J. (1992) *Socialismo, Cálculo Económico y Función Empresarial*. Madrid: Unión Editorial.
- Huerta de Soto, J. (1998) "The Ongoing Methodenstreit of the Austrian School." *Journal des Economistes et des Etudes Humaines*, 8: 75–113.
- Keynes, J. M. [1964 (1936)] *The General Theory of Employment, Interest, and Money*. San Diego and New York: Harcourt Brace and Company.
- Kirzner, I. (1992) *The Meaning of Market Process. Essays in the Development of Modern Austrian Economics*. London and New York: Routledge.
- Kirzner, I. (1997) "Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach." *Journal of Economic Literature*, 35: 60–85.
- Mayer, T. (1998) "Boettke's Austrian Critique of Mainstream Economics: An Empiricist's Response." *Critical Review*, 12: 151–171.
- McCann, C. (1994) *Probability Foundations of Economic Theory*. London and New York: Routledge.
- Mises, L. [1966 (1949)] *Human Action: A Treatise on Economics*. Chicago: Henry Regnery.
- Lachmann, L. M. (1976) "From Mises to Shackle: An Essay on Austrian Economics and the Kaleidic Society." *Journal of Economic Literature*, 14: 54–62.
- O'Driscoll, G. and Rizzo, M. [1994 (1985)] *The Economics of Time and Ignorance*. London and New York: Routledge.
- Rosen, S. (1997) "Austrian and Neoclassical Economics: Any Gains from Trade?" *Journal of Economic Perspectives*, 4: 139–152.
- Rubio de Urquía, R. (1991) "Ética y procesos de asignación de los recursos." *Información Comercial Española*.
- Rubio de Urquía, R. (1993) "Los procesos de producción de la acción humana, la teoría neoclásica de los procesos de asignación de los recursos y la "economía de la familia." *Revista Española de Pedagogía*: Sept.-Dec.
- Rubio de Urquía, R. (1994) "Ética, eficiencia y mercado," In: Melé, D. (Ed.) *Ética, Mercado y Negocios*. Pamplona: EUNSA.
- Rubio de Urquía, R. (1996) "Amor de Preferencia por los pobres y dinámica económica del Cristiano." In: Fernández, F. (Ed.) *Estudios Sobre el Catecismo de la Iglesia Católica*. Madrid: AEDOS/Unión Editorial.
- Rubio de Urquía, R. (1998) "A Short Note on the Anthropological Foundations of Economic Science." In: Pham, John-Peter (Ed.) *Centessimus Annus. Assessment and Perspectives for the Future of Catholic Social Doctrine*, pp. 165–173. Vatican: Librería Editrice Vaticana.
- Shackle, G. (1972) *Epistemic and Economics. A Critique of Economic Doctrines*. Cambridge: Cambridge University Press.
- Tieben, B. and Keizer, W. (1997) "Introduction." In: Tieben, B., Keizer, W., and van Zijp, R. (Eds.) *Austrian Economics in Debate*, pp. 1–13. London and New York: Routledge.
- Vaughn, K. (1994) *Austrian Economics in America. The Migration of a Tradition*. Cambridge: Cambridge University Press.
- Vaughn, K. (1999) "Hayek's Implicit Economics: Rules and the Problem of Order." *The Review of Austrian Economics*, 11: 128–144.
- Walras, L. (1965) In: Jaffé, W. (Ed.) *Correspondence of Leon Walras and Related Papers*, Vol. II, Amsterdam: North Holland.
- Yeager, L. (1997) "Austrian Economics, Neoclassicism, and the Market Test." *Journal of Economic Perspectives*, 11: 153–165.