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ARTICLES

Apriorism, Introspection, and the Axiom of Action: A Realist Solution

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The neo-Kantian *apriorism* of Mises and the Aristotelian *apriorism* of Rothbard hold that economic science can be entirely built on what Rothbard (1957) called the axiom of action. This axiom is a true a priori. This means that the starting point of economic science does not have to be tested. It is enough to use deductive reasoning to produce discursive knowledge. This position escapes positivism (Lachmann 1982, p. 36) and fights it. It is also a nonskeptical (Hoppe 1991, p. 245) and dogmatic vision of economic science. It ensures that human action is understandable.

To justify this position, the Austrian school points out empiricism's weaknesses. The assertion according to which nothing can be known without an experimental proof is baseless; it is founded on a branch of metaphysics (Mises 1962, p. vi). It is obvious that any attempt to deny the principle that man acts would be self-contradictory, since the denial itself is an action (Hoppe 1991). To deny the axiom of action is implicitly to admit its truth. Kirzner (1976) employs Mises's introspection argument to defend *apriorism*:

> What we know about our own actions and about those of other people is conditioned by our familiarity with the category of action that we owe to a process of self-examination and introspection as well as understanding of other peoples' conduct. (Mises 1962, p. 71)

The economist is a man. He has, in this sense, a mind that is structured in the same manner as all other men. Under these conditions it is impossible that what is deductively certain for him should not be certain for others (Hoppe 1995, p. 19).

Contrary to the natural sciences, the economist is not in the situation of an extraterrestrial who, by observing the Earth, might note that there is a perpetual motion between squares (cars) and points (men), the squares absorbing and rejecting the points according to a given periodicity. The economist knows immediately that

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they are cars and men (Kirzner 1976, pp. 45–46). For this reason the economist is not in the same situation as the physicist. He knows his object of study from the inside. For this reason, he does not have to test the assumption of an action's intentionality. To explain social phenomena such as currency, prices, or trade, he can appeal to his own reason and intentions to know why other men act in a certain way. From this point of view man can have an a priori knowledge of what exists independent of all the formulations of the mind because certain structures of the world have in them a degree of intelligibility. The conscious subject and the objects of knowledge are, to a degree, predestined for one another. Therefore an a priori knowledge of reality is possible. If this proposal is debatable for natural sciences, it is perfectly acceptable for social sciences. Price, currency, exchange, the state, etc., are formed by the human mind. They are in one way or another its creation.

All these arguments forget the unintended consequences of human action. They provide a basis for a simple kind of methodological individualism but they have each given way to many debates and controversies. The use of introspection in particular was the object of an epistemological schism in the contemporary Austrian-American School. The story of the Martian researcher, proposed by Kirzner, is based on introspective self-evidence. The self-evidence of introspection, however, does not befit everyone. If it is a more or less elaborate form of empathy (Koppl 1994a, p. 72), as Weber maintains, the knowledge that results from it will likely be inductive, singular, and dependent on each individual's personal history. If it is singular, it will not have the status of scientific knowledge (Aron 1987, p. 126), which requires repeated tests. This requirement, however, faces the traditional problems of induction (Witt 1990, p. 56). In practice it is impossible to know how many cases one needs to observe to accept the hypotheses of the original introspection. If it is historical, the question of self-evidence changes with our self-perception. Not one immutable law would then be possible. Knowledge of these phenomena would be limited to a form of historical understanding.

The criticism of introspection thus finds the two pillars of *Methodenstreit*, i.e., the role of induction, and the historicity mental categories. The hermeneutic turn, then, is the proposal to return to the interpretive sociology of Max Weber, and to reinterpret introspection in terms of ideal type. It is a question of defining the conditions under which a particular act of introspection can lead to general knowledge. The construction of the ideal type is only one stage in the search for truth, since the act of interpretation built on the ideal type is always historically relative (Raynaud 1996, pp. 50 and 45). True a priori knowledge gradually gives way to a true interpretative knowledge relative to the ideality or the historicity of the ideal type. By criticizing Kirzner's introspective defense, the interpretive turn also seeks to reestablish *apriorism* on Weberian foundations. It risks approaching the positions of the German Historical School, even if—as with Alfred Schütz—its ambition is to establish a place for universal knowledge. This article attempts (1) to highlight the reasons for this historicist drift and (2) to show that realism is the most capable philosophy on which to found a priori knowledge and reconcile the historicity of the categories of action (their *becoming*) with their immutability (*being*).

The Interpretive Turn and the Historicity of the Ideal Type *Homo Oeconomicus*

Part of the Austrian-American School uses the Weberian critique and posits that the old Austrian account of understanding fell into the same romantic-intuitionist trap as its archenemy, historicism. The solution is to mobilize the concept of ideal type to save *apriorism.* The act of interpretation is "not achieved through a special faculty of intuition that allows us to obtain knowledge by entering into the life stream of another person" (Koppl 1994a, p. 72). This Weberian critique bases its interpretation and the new definition of the axiom of action on an ideal type. The discussion is centered in the nature of this ideal type, in other words, in the different concepts of human knowledge. For this reason, the discussion on ideal type is a pure discussion about philosophy of knowledge where Thomas Aquinas has his place because, contrary to the neo-Kantian perspective, he does not build barriers between the mind and reality (Maritain 1924, p. 33). Nevertheless, Thomas Aquinas's contribution has been forgotten by the Kantian tradition of modern philosophy of knowledge. The Weberian perspective makes the same mistake.

Weber's Concrete Ideal Type

Weberian epistemology (Weber 1968) is based on Kantian categories and the opposition between the formal description of reality (ideal type) and observation. The aim of Weberian sociology is

> to interpret the actions of individuals in the social world and the way in which individuals give meaning to social phenomena. But to attain this aim, it does not suffice either to observe the behavior of groups of single individuals, as a crude empiricism would have us believe. Rather the special aim of sociology demands a special method in order to select the materials relevant to the peculiar questions it raises. This selection is made possible through the formulation of certain theoretical constructs known as "ideal types." (Schütz 1967, pp. 6–7)

Ideal type is, therefore, a means of escaping the romantic-intuitionist definition of introspection and of introducing logic in *Verstehen.*

Weber defines ideal type as a tableau of different thoughts that exists only in its purely conceptual form. It is an instrument through which the economist can compare a fact to an ideal and thereby understand the ways in which actual action is influenced by irrational factors of all sorts. The rational ideal type is an authentic generalized theoretical concept based on value judgments and is defined as a utopia obtained by analytically accentuating certain elements of reality that one never encounters empirically (Raynaud 1996, p. 49). Like Utopia, the ideal type does not teach anything about the world. Through the ideal type, the economist constructs imaginary causes that allow us to untangle real causal relationships to improve our interpretation of historical events. It is a formal model that remains fixed in an ever-changing world. It is a means to introduce unity into a world of diversity. "Ideal types cannot be found empirically anywhere in reality. ... Weber says about an ideal typical concept that it 'is not a *description* of reality' ... [but] is a conceptual construct which is neither historical reality nor even a 'true' reality" (Mäki 1997,

p. 483). Therefore, the construction of an ideal type is not an end in itself, but a means to understanding (Weber 1968, p. 90).

To this extent, it is unscientific to put forward norms of action based solely on a deductive model (Weber 1968, p. 92). Seeking to reduce economic science to a simple deductive exercise renders the economist wary of exercising criticism and constantly focused on the past. The need to confront the ideal type with reality enables Max Weber to criticize the speculative theories of history directly. "The significance of a configuration of cultural phenomena and the basis of this significance cannot, however, be derived and rendered intelligible by a system of analytical laws" (Weber 1968, p. 76).

It is because ideal types are artificially invariant that human sciences will continue to renew themselves as they will always be confronted with a flow of new problems (Weber 1968, p. 105). A system of analytical laws has only a heuristic value. No single scientific explanation is eternal, as the future constantly sheds light on the past, thus modifying the understanding of history (Weber 1992, pp. 105, 242). Progress in the cultural sciences is therefore to be found in interpretations of the past as new facts come to light, facts unknown to the original actors of the historical events in question. The truth of human sciences is no longer a temporal truth but a truth located within a chain of representations (Weber 1992, pp. 214 and 199). The economist looks at the world objectively; he debates on the basis of clearly defined value judgments and validates procedures that force him to confront these concepts (ideal types) with precise observations. The scientific attitude consists in the abandonment of the illusion of an axiologically neutral approach and the attainment of perfect knowledge.

Weberianism then explains the epistemological evolution of the Austrian-American School because of its equivocal conception of ideal type.[1] It is a logical utopia and a historical type used as an instrument by economists for comparative reasons. But being a utopia, it lacks sufficient historical background. As a type, it is useless for building an a priori economic theory. Schütz (1967, pp. 241–247) agrees with Mises on this last point and turns to Husserl to give an atemporal and universal level to the axiom of action. Lavoie's perspective is a logical consequence of Schütz's solution because he uses Heidegger and Gadamer against Husserl. Schütz's solution to the riddle of the meeting between reality and the a priori necessary to thought explains why social phenomenology finds a solution in hermeneutic "lived experience" (Schütz). In fine, the Austrian-American School does not oppose history and economic theory because the act of interpretation is historically and culturally situated (Lavoie 1994, p. 60). This part of the Austrian-American School agrees with the German Historical School (Mises 1962, p. 77; Selgin 1987) in rejecting the possibility of attaining a universal and atemporal truth.

Eidetic Schützian Ideal Type

The social phenomenology of Alfred Schütz (1967) attempts to preserve Austrian *apriorism* in a Weberian perspective.

[1] Schütz (1967, p. 244) maintains that the Weberian concept of ideal type is ambivalent, that it is not just a historical concept.

Schütz dehistoricizes "Weber by eliminating value relevance as a principle of concept formation in the social sciences and salvages the a priori character of economics by formalizing its basic concepts and premises" (Prendergast 1986, p. 19). He rejects historicism's attempt to base economics on statistical concepts derived from observed variations in existing economic systems (Prendergast 1986, p. 13). He does not use the historical aspect of the ideal type and reconciles Mises and Weber via Husserl. For him the ideal type is a means to describe the a priori concepts of pure law in economics (Prendergast 1986, p. 15). Ideal types are neither a utopia, nor a singular experience.

> Ideal types are constructed by postulating certain motives as fixed and invariant within the range of variation of the actual self-interpretation in which the Ego interprets its own action as it acts. To be sure, this postulation of certain motives as invariant does refer back to previous "experience" (*Efahrung*). But this is not the experience of shallow empiricism. It is rather the immediate prepredicative encounter which we have with any direct object of intuitions (Husserl). The ideal types may, therefore, be derived from many kinds of "experiences" and by means of more than one kind of constituting process. Both "empirical" and eidetic ideal types may be constructed. By empirical we mean "derived from the senses," and by eidetic we mean "derived from essential insight." (Schütz 1967, p. 244)

Therefore, ideal types have universal validity. They do not refer to any individual or spatial–temporal collection of individuals. They do not just mean a person who is expressing or has expressed himself in a certain way; they are also a sign of the expressive process (Schütz 1967, p. 187). *Homo agens* of Misesian praxeology and *Homo oeconomicus* of price theory are ideal types. They are ideal types of the highest "anonymity" (Schütz 1967, pp. 241–42) and will be of very little use for the analysis of any specific decision because they are completely empty of historical references (Kurrild-Klitgaard 2001, p. 135). *Homo oeconomicus* is not a real person, but "*only a shadow person*" (Schütz 1967, p. 190; emphasis added). He is the result of the process of ideal type construction where subjective meaning-contexts that can be directly experienced are successively replaced by a series of objective meaning-contexts. *Homo oeconomicus* is a means to have an objective meaning context. It is for this reason that it obtains the highest "anonymity" and creates the basic concepts of the deductive disciplines. Anonymity maintains the universal validity of the axiom of action and abstract law in economics.

Schütz thus reconciles history and economic theory (1967, p. 212). "No doubt Mises's criticism is valid against Weber's earliest formulations of the concept of ideal type" (Schütz 1967, p. 243). But Mises is wrong when he rejects anonymous ideal types as a means to translate the subjective meaning-contexts into the objective meaning-context of scientific knowledge (Schütz 1967, p. 246). Nevertheless, anonymity is not at the base of the objectivity of ideal type, but rather of the objectivity of *Verstehen*. The ultimate basis of ideal type objectivity is the schemes of experience. These schemes "consist of material that has already been organized under categories. … Schemes of experience are interpretive schemes" (Schütz 1967, p. 84). These schemes organize lived experience in "*a synthesis of recognition*" (Schütz 1967, p. 83; emphasis added). The schemes of experience preorganize our experience and are based upon lived experience (Isambert 1989, p. 308). Human

behavior is thus already meaningful and intelligible. Language explains this as it instills in the human mind schemes of experience and explains in fine anonymity and the "ideality" of subjective experience (Schütz and Luckman 1973, p. 233). Language makes it possible for different types to be intersubjective; it makes possible a generalization of these types because it is the principal meaning-context (*Sinnzusammenhang*) of the human mind.

The phenomenological turn initiated by Schütz explains why the Austrian-American School dismissed the naïve rationalism that tried to deduce all knowledge by only one axiom and to develop a transcendental rationalism, whereas interpretive sociology is based on a series of tacit presuppositions (Bréhier 1994, p. 1012). Eidetic ideal types are invariant and have an autonomy vis-à-vis experiences, but they can only exist in the purposeful act of observation. Schütz does not succeed in breaking with the equivocation of Weberian ideal types because of his own contradictions. If he bases the objective meaning of action upon a pre-phenomenal and logical plan, he forgets lived experience and life itself. If he bases the objective meaning of action upon intersubjectivity, he bases the ideal type in transcendental terms (Isambert 1989, p. 316). In this scenario, Husserl's philosophy is useless because his goal was to grasp essences outside of their concrete context and to exclude the spatial, temporal, and social environment of *Verstehen* (Jeanrond 1995, p. 85).[2] The fate of eidetic ideal types is to be surpassed by historical hermeneutic economic ideal types defined by Gadamer and initiated by Don Lavoie.

Historical Ideal Type and Hermeneutics

Lavoie follows this road. He radicalized the historicity of *Verstehen* and developed a hermeneutic reading of the Misesian dichotomy between theory and history (Lavoie 1986, p. 195). Lavoie (1986, p. 196) argues that Mises's *apriorism* has been too easily dismissed for its Euclidean vices without any recognition of its hermeneutic virtues.

> Euclideanism and hermeneutics are two contrasting views of the relationship between methodology and science. ... Euclideanism is a more prescriptive methodology while hermeneutics is a more descriptive one. Euclideanism is represented as a fixed deductive structure. ... Hermeneutics is rather a network model. (Lavoie 1986, p. 197)

Text interpretation is the prototype of *Verstehen* but the most important moment is not when the reader conceptualizes his anonymous ideal type. This is because at the beginning of this act of understanding there is the presupposition or prejudgment that makes understanding possible (Rector 1990, p. 216). "These prejudgements are essential inputs to the process of forming true beliefs. They include the tacit assumptions that lie behind the way we frame problems and ask questions" (Rector 1990, p. 216). Prejudgments make up common sense and persuasive argumentation, and are based on a linguistic community. In this way, *Verstehen* is an act. What is important is to understand this act and to describe the hermeneutic circle. *Verstehen*

[2]See also Gadamer (1987, pp. 105–46).

participates in the development of meaning: a fact has a meaning because it is understood as having a meaning. The ultimate end of understanding is not to grasp the purpose of an action, but to come to agree with it—in other words, to understand in one's own context the actions of others (Jeanrond 1995, p. 93).

From this perspective, the ideal type *Homo oeconomicus* accurately translates the prejudgment of observers. It offers greater objectivity because it exposes a particular vision of the world and creates a new event.

The interpretive critique of Austrian objectivism focuses on the "getting at" process itself, and argues that understanding is not a merely reproductive, but rather a creative, productive process. Hermeneutics argues that economics (and science in general) does not supply us with an objective reproduction of economic reality as it is in itself, it creatively produces an interpretation from a particular perspective (Lavoie 1994, p. 59). A good understanding implies that one does not passively receive the text's or the event's message, but rather appropriates that message for oneself. "It is only understood through the active participation of interpreters" (Lavoie 1990, p. 2; Prychitko 1994, p. 308). Ideal type is not an exterior referent. It is both prejudgment and the freedom to believe. The economist (observer) is persuasive because he is in agreement with the prejudgment of his audience, and not because he described the reality or the true purpose of action. Ideal type becomes an instrument for knowing the prejudgment of actors situated in time and space. The question is not whether the axiom of action represents the world as it is (because reality is ontologically perceived). Reality is perceived as rational because it is experienced that way. The axiom of action is a prejudgment that exists prior to understanding. It is because the observer perceives a rational human order that he understands it in this way.

The return to a Weberian analysis has three consequences. It breaks the continuity between the old and the modern Austrian schools. It accepts a part of the German Historical School thesis (Koppl 1994b, p. 297), and it defines economic science as an interpretive science and not as a social ontology.

> Austrian economics emerged in rebellion against skepticism ... that rejected the idea of an economic science devoted to the explanation of market phenomena in terms of exact and universal laws. ... Today, Austrian economics is challenged by skepticism once again. (Selgin 1987, pp. 19–20)

The interpretive turn then leads to qualifying the truth as relative, nonuniversal, equivocal, and temporal, and the category of mind as historical (Lavoie 1994, p. 60). The hermeneutic perspective radicalizes the Weberian analysis to define human knowledge as concrete and ever-changing depending on the prejudgments on time and space. "The harmony of all the details with the whole is the criterion of correct understanding" (Rector 1990, p. 220). In that regard, knowledge is relative to the context in which it is being interpreted and the experience of each individual to interpret that specific event.

Lachmann (1976) used this theory of knowledge in his own theory of human coordination. "In our kaleidic society the obsolescence of old knowledge is a fact of fundamental importance" (Lachmann 1978, p. 7). Knowledge is always affected by

the passing of time. In such a world, it would appear difficult for the individual to coordinate his plans (Lachmann 1976, p. 131). In line with Bergson's criticism, he argues that reality is in continuous movement. Man is nothing. Hence, intelligence via ideas cannot apprehend what is real because its job is to define, to distinguish, and to immobilize things within a concept. Human knowledge is useless because it is only aware of past events that will not be reproduced; it is imperfect because it offers temporal knowledge of a world in perpetual motion. The individual is reduced to knowing the future via his imagination. Lachmann and the Austrian-American School doubt that humans are capable of anticipating and coordinating. They maintain that action (entrepreneurship) is always a cause of a lack of coordination and focus instead on the role of institutions (artificially invariant) in the coordination process (Lachmann 1971).

The use of introspection under the control of an ideal type historicized economic science and cast doubt on the capacity of the human mind to know an always-changing world. It does not answer, in this sense, criticisms addressed to the romantic definition of introspection. Interpretive knowledge is not singular, but it is only valid for the group that shares the same interpretation. It is not immutable since it is historical. It is not general since it is shared only by one group. The hermeneutic solution thus fails to achieve the objective of the Austrian School at the time of *Methodenstreit*.

To give historical coherence to the Austrian School, we propose a Thomist or realist solution. This solution is not original. It has been proposed by Rothbard (1957)[3] and has since been developed by Uskali Mäki. The originality lies in the way in which we tackle the problem via introspection and in the consequences we draw for the practice of economic science.

Thomas Aquinas's Realism and Social Ontology

The realist philosophy of knowledge generally argues that truth is neither identical to the objectivity of thought nor to the objectivity of understanding. Truth is one, immutable, and universal.

First, truth is one. "Contradictions cannot be true at the same time" (Aquinas 1961, p. 247).

Second, truth is immutable (unchangeable). "Not that truth itself is the subject of change, but that our intellect changes from truth to falsehoods; in that sense, forms may be said to be changeable" (Aquinas 1964, 1.16.8).

[3]Rothbard (1957, p. 318):

> Professor Mises, in the neo-Kantian tradition, considers this axiom a law of thought and therefore a categorical truth a priori to all experience. My own epistemological position rests on Aristotle and St. Thomas rather than Kant, and hence I would consider the axiom a law of reality rather than a law of thought, and hence "empirical" rather than "a priori." But it should be obvious that this type of "empiricism" is so out of step with modern empiricism that I may just as well continue to call it a priori for present purposes.

Third, truth is a linkage between mind and being.

> Truth is in its primary significance, in the intellect. Now, since a thing is true as having the form proper to its own nature, it must follow that the mind, in the act of knowing, is true as having the likeness of the thing known, which form is the intellect in the act of knowing. Accordingly truth is defined as conformity between intellect and thing. ... When the intellect judges that the thing corresponds to the form of the thing which it apprehends, then for the first time it knows and affirms truth. (Aquinas 1964, 1.16.2)

But truth and being are not convertible terms.

> Plato's opinion was false because he believed that the mode of being which the thing known has in reality is the same as the one which it has in the act of being known. ... It is not necessary that a form should have the same mode of being in the intellect that it has in the thing known. (Aquinas 1961, p. 65)

The mind is not passive; it abstracts the intelligible in things, as it does in the act of joining or separating concepts in judgment.

Intelligence through abstraction attains the essence of things but not their existence. "The truth is the conformity of the action of the mind uniting two concepts in one judgment with the existence (present or possible) of one and the same thing in which these two concepts come into being" (Maritain 1924, p. 25).[4] Man attains the truth via judgment, which is the only discourse capable of being true or false.

The debate on introspection takes, then, a new departure. It does not deny, however, Schütz's contribution, which sought to solve (via Husserl and the ideal type) the enigma of the intersection of the a priori and the transcendental. Introspection does concern induction, but not Baconian induction. For this reason, it is not affected by criticisms of the contemporary epistemology of induction. It is possible, then, to conceive the existence of true knowledge produced by an act of introspection or by qualitative induction ("Qualitative Induction and Introspection" section). On this basis, one can then rebuild a true economic science, in the Thomist sense ("Judgment and the Axiom of Action" section), which reconciles the mutable and immutable ("Social Ontology and Evolution" section) and thus answers Lachman's theses.

Qualitative Induction and Introspection

The realistic reinterpretation of the problem of introspection is based on the theory of essence. Judgment combines two essences. Thomism defines introspection through the problem of knowledge in terms of universals (Mäki 1997, p. 478). If the human mind can grasp the essence of money, price, exchange, or action, it is not necessary to generalize. Being is the one thing that is common to all things. In each thing—action, exchange, price, money, etc.—we can discover the nature of being, in other words, that which never changes. Human knowledge is, for this reason, founded on the identity

[4] All translations of Maritain are my own.

principle. Realist philosophy asks after the objectivity of mental concepts (Verneaux 1959, p. 144) and about the relations that universal judgments maintain.

The Thomist solution argues that the human mind discovers that it is universal in the "things" mentioned above. It defines qualitative induction as a form of abstraction. "Abstraction is the means by which intelligence can identify itself immaterially vis-à-vis an object yet remain independent of that object" (Maritain 1924, p. 109). In introspection, the human mind becomes one with the object. In abstraction, the human mind becomes the object (as other). It does not know its particular and concrete existence but "detaches itself from its own existence to attract something into itself and thus know it from within itself" (Maritain 1924, p. 125). The human mind has, in this perspective, the biological ability to exclude the singularity of each existence and to grasp what is universal. Abstraction reveals an unknown wealth, just as a fisherman catches a rare fish in the sea (Daujat 1974, p. 142). He reels in the fish without having been aware of its existence, just as abstraction is able to bring to light the intelligible essence within things. Thomas Aquinas distinguishes three degrees of abstraction.

- The formal object[5] of the first degree of abstraction (experimental science) is the sensible. It is the study of the universal nature of physical and sensory phenomena. It abstracts the essence of movement, pressure, light, sound, heat, life, etc.
- The formal object of the second degree of abstraction (mathematics) is quantity. It is the study of the universal nature of things from their quantitative angle. It abstracts the essence of things by using the mathematical relations between quantities.
- The formal object of the third degree of abstraction is being as being. It abstracts the essence of being not in its sensory or quantitative form, but ontologically—reality as it really is. It is the highest degree of abstraction and is based on simple observations requiring neither equipment nor technique but only common experience (being, change, diversity, etc.). The aim of social ontology is "being as being" and not the sensible or measurable side of reality.

Knowledge is a process where the human mind has a creative role in discovery. Contrary to the inductive method, human knowledge is not a process of impoverishment (Moreau 1976, p. 59) or an attempt to reduce things to the measurable (p. 135). The abstraction of essence lays the foundation for the ability to discover the universality hidden in things.

The universal is not a form of a priori knowledge, and intelligence alone will not produce universal truths. The development of ideas is an activity of the mind, which discovers that which is intelligible from the data of experience via the senses.

Abstraction must not be confused with Baconian induction (Philippe 1991, pp. 56 and 186), which focuses its attention on statistical regularities: what is true is normal; what is normal is regular. The human mind classifies similar objects together and

[5]To grasp the idea of a formal object, we must remember that hearing, for instance, only knows things via the sound they make upon the ears. An object emitting no sound or whose sound does not reach the ears can in no way be known by our hearing. The object of hearing is formal as hearing only explores one of its sensory qualities. In the same way, the object of mathematics is formal as it only explores its quantitative dimension.

generalizes. Human knowledge is a generalization. Baconian induction, however, is not complete because (1) it is not possible to classify sensations without a hypothesis concerning the manner in which they are related to one another, (2) it is impossible to found induction on itself, that is, without resorting to universal propositions that depend on induction (Popper 1968, p. 25), and (3) it is impossible to say how many observations are necessary to make a fact normal or regular. The normal becomes, under these conditions, arbitrary. Qualitative induction, on the contrary, does not need to account for all the facts in order to create a universal judgment. The human mind discovers the essence in the singular, which is not necessarily a generalization.

"It suffices, for example, to see a pie cut into several pieces to understand what is a whole, a part of this whole, and to understand the necessity of the principle that the whole is bigger than its parts" (Aristotle, *Posterior Analytics*, Book 1, Part 30, cited in Verneaux 1959, p. 172; my translation).

Induction and generalization should not be confused. Qualitative induction is an intuition and intuition is a form of abstraction. Thus, qualitative induction is neither an effective form of introspection (because the human mind does not know the reality of its existence and singularity) nor is it a generalization. Intelligence through abstraction attains the essence of things, but not their existence (Maritain 1924). It captures reality, but still does not know what it is. It says we are speaking of a dog, but does not know exactly what this dog is (Philippe 1990, p. 13) because it abstracts the dog in its spiritual being. Hence, abstraction remains a very imperfect mode of knowledge because it allows the particularities of things to escape (Verneaux 1959, p. 155). It is judgment that reduces the gap between essence and existence (Daujat 1974, p. 50).

Judgment and the Axiom of Action

Judgment has a double function. First, it combines essences. Second, it makes intelligence conform to reality. "Judgment is the act via which intelligence is bound to what is real" (Verneaux 1959, p. 158). The law of demand, for instance, does not exist outside the instantaneity of the two universals of price and demand. It is a real aspect of the specific relations between specific prices and demands. Exact laws as relations between universals take the form N(F,G) where F and G are the universals and N is the relation between F and G. They expose the necessary relationships between F and G (Mäki 1997, p. 487).

The pure theory of action is not based on a romantic-intuitionist form of introspection or Baconian induction (enumeration), but on the capability of the human mind to capture the universal. The economist does not need to observe every man to know that men are intelligent. A sole case is sufficient for him to create a universal judgment on the condition that he can discern within this single case its essence or law (Verneaux 1959, p. 172). The universal goes beyond all the particular cases known through experience. It is valid for all beings that possess this essence. Nobody, when answering the question "What is a man?" will reply that it is a thing with two arms, a head, etc. One answers by defining the essence of man, saying that man is a being endowed with intelligence. It is not that the axiom of action is true because one has observed many men, but because the mind immediately apprehends

the essence of things. Introspection should not be defined as a generalization (induction in the sense of Hume) but as a qualitative induction (induction in the sense of Aristotle and Thomas Aquinas), which creates the semantic intersubjectivity (Simon 1944, p. 8) of the a priori sciences (as opposed to the pragmatic intersubjectivity of the positive sciences). It is incorrect to maintain that only pragmatic judgments are liable to produce knowledge. A thinker, even if he has not been able to observe every man on earth, can express a universal judgment of the type "man is free" or "man is intelligent" by virtue of the qualities of abstraction of his intelligence. His judgment is true because he can conceive the subject, *man*, in such a way as to perceive the predicate that is universally appropriate, *is free*. This type of judgment can be affirmed through experience. He says what must be by virtue of the very nature of things. This is a semantic judgment. Economic theory is therefore a general knowledge of the universals of economics that has no need to resort to observation because it is founded on evident first principles and deductive reasoning that, if used correctly, will lead the economist to the correct results.

Realism thus leads us to distinguish between two types of judgment.

- Semantic judgments (*jugement intersubjectif de droit*) are a priori and make available certain knowledge about the essence of price, money, action, production, work, needs, market, etc. They can claim a semantic intersubjectivity.
- Pragmatic judgments (*jugement intersubjectif de fait*) are a posteriori and always more uncertain, for they are confronted with the accidental and with the problems of Baconian induction (Hume's critique). They claim a pragmatic intersubjectivity.

Thomism legitimizes semantic judgment and defines economic science as a social ontology. "We may specify that theoretical economics represents economic universals as real objects" (Mäki 1990, p. 296) or as social ontology that does not deny the need for a positive science expressing pragmatic judgments. On this basis, social ontology can justify its objective of proposing exact laws; in other words, defining the relations between universals. "The simple idea will be that exact economic laws in Menger's sense are best understood as relations between economic universals" (Mäki 1997, p. 487).

This ontological knowledge of universal economics does not suffice because knowledge of the essences is not the same as knowledge of concrete realities (that is, the difference between essence and existence). Economic science must descend to the level of existence. By exploring the singularity of each particular act or fact one moves away from universals and develops experimental work. When a thinker expresses a singular judgment such as *this man is black* he must necessarily observe this man to evidence the fact that the attribute *black*, which is of an accidental nature, corresponds to the man in question. The further the economist enters into the singularity of facts, the more uncertain his knowledge becomes, for he moves away from the certainty of that which is immediately evident. He knows man through the idea of man, and black through the idea of black. A pragmatic judgment of the type *this man is black* concerns only one characteristic of this man. This characteristic relates to the fact that he is black like any other black man, but is nevertheless not the same. The unknowable is always present in a concrete being (Daujat 1974, p. 222). The concrete being remains a mystery for objective knowledge. The further

the economist moves away from first principles and sense data, the more he is subjected to the contingency of human decisions and their mystery. Objective knowledge is possible in these conditions, but it is more capable of correcting subjective semantic judgments than pragmatic judgments because the faculties of human intelligence remain limited. As the economist descends the scale of generalities, he is obliged to resort to a growing number of observations in order to distinguish between the accidental and the essential character of phenomena. In this sense, it is correct to affirm that only experience can tell us whether the results obtained through an observation based on introspection (intuition) makes it possible to better understand the behavior of this particular individual (Witt 1990, p. 44) because the object of the research is a singular man.

Economics is not only a science of generality (Baconian induction); it is also a social ontology that combines universals and defines abstract law by reasoning.

Social Ontology and Evolution

Thomism defines the axiom of action as a judgment, but analyzes the knowledge problem with universal theory. This is criticized by the evolutionists and, in particular, Hayek who thinks that "Aristotle was opposed to evolution of any kind" (Hayek 1994, p. 45). Thomism does not account for historicity and changes occurring over time.

Such criticism is incorrect, however, in that Aristotle is not hostile to evolution, and pragmatic judgments are based on contingencies and history. Indeed, we have just come to understand how the human mind discovers reality: it apprehends reality, i.e., the only thing common to all things. "Beyond the diversities between beings, there is only being which belongs to everyone" (Daujat 1974, p. 37). That common, underlying reality is, in fact, stable. It is therefore unreasonable to claim that reality is unknowable because the sense data are constantly changing (Moreau 1976, p. 8).

What comes first in the act of knowledge is the recognition of the identity of something with itself. Each thing is what it is (the principle of identity) and a thing is not what it is not (the principle of contradiction). To understand why the identity of a thing does not negate change, it is important to introduce the distinction between the actual and the potential (Aquinas 1961, p. 654). The actuality of a thing is the thing as it exists. If only the actuality existed, there would be no change. The potential is a thing as it could be, but is not yet. It is becoming. The potential of a thing, that which it can be, marks the point of departure. Change comes neither from what already is, nor from what is not, but from what is potential but not yet actualized (Daujat 1974, p. 62).

> For potency and actuality are referred in most cases to things in motion, because motion is the actuality of a being in potency. But the principle aim of this branch of science is to consider potency and actuality, not insofar as they are found in mobile beings, but insofar as the[y] accompany being in general. Hence potency and actuality are also found in immobile beings, for instance, in intellectual ones. (Aquinas 1961, p. 654)

On this basis we can reconcile two facts: that the human being is not perceived as an actor and that human rationality is an essence. History discovers human

rationality (magic) and individualism (holism). The history of human societies does not change the nature of human beings but increases the knowledge that men and women have of themselves. Knowledge is not, pace hermeneutic philosophy, merely "a history of problems" (Foucault). It is about familiarity with the particulars of time and place, as they relate to universal categories. Thomist philosophy thus reconciles the historicity of the categories of action with their universality.

Conclusion

Thomism creates a place for social ontology without denying the importance of hypothetico-deductive economics, which is not only an instrument of forecast, as argued by instrumentalism (Mäki 1990, p. 331), but also a means of knowing the qualitative relations between economic phenomena. Economics has an ontological dimension that seeks to find the relationship between the essence of prices, money, exchange, etc., in order to highlight economic universals, not just the quantitative dimension of economic facts.

An explanation is not limited to forecasting and describing economic phenomena in quantitative form (Mäki 1990, pp. 331–335). Economic science consists in saying what is, by describing the relations between the universals of economics and by approaching as closely as possible the mysteries of the singular reality or action. Austrian subjectivism would thus be prepared to position its reasoning on the highest level of abstraction, taking the risk of universality and sacrificing the singularity of specific and contingent situations. Consequently it links methodological subjectivism and ontological objectivism (Mäki 1990, p. 295) and gives us the means to rectify our beliefs. It is ontological objectivism that enables us to affirm that we can have knowledge of economic phenomena that transcends our prejudices, opinions, and preconceptions about the world.

Thomism also gives an epistemological foundation to support the "middle ground" position (Garrison 1986; Kirzner 1992). Sustained by Thomas Aquinas's philosophy, we may think that the Austrian-American School (like Bergson's philosophy, which inspired it) has considerably underestimated the capabilities of the human mind. For this reason, it is unable to understand how an individual knows the future because it does not understand that he apprehends reality as a future (actual and potential) via his knowledge of essences. Human beings can improve their knowledge of the world and pre-coordinate their expectations by conceiving coordination in a world where being is in the process of becoming, but incapable of becoming contrary to its essence. We must reformulate Lachmann's thesis of the unknowability of the future, insisting more on the diversity of judgments than on the diversity of perceptions, to construct a theory of coordination that gives a place to actors' ontological knowledge.

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References

Aquinas, Thomas. 1961. *Commentary on the Metaphysics of Aristotle.* Trans. John P. Rowan. Library of Living Catholic Thought. Vol. 1. Chicago: Henry Regnery Company.

Aquinas, Thomas. 1964a. *Existence and Nature of God.* Vol. 2 of *Summa Theologiae.* New York: McGraw-Hill.

Aquinas, Thomas. 1964b. *Knowledge in God.* Vol. 4 of *Summa Theologiae.* New York: McGraw-Hill.

Aron, Raymond. [1938] 1987. *La philosophie critique de l'histoire.* Ed. Sylvie Mesure. Paris: Julliard.

Bréhier, Emile. [1964] 1994. *Histoire de la philosophie. III/XIX–XX siècle.* Coll. Quadridge. Paris: PUF.

Daujat, Jean. 1974. *Y a-t-il une vérité ? Les grandes réponses de la philosophie.* Paris: Tequi.

Gadamer, Hans-Goerg. [1963] 1987. "Die phänomenologische Bewegung." In *Gesammelte Werke.* Vol. 3, *Neuere Philosophie I: Hegel-Husserl-Heidegger.* Tübingen: J.C.B. Mohr (Paul Siebeck).

Garrison, Roger. 1986. "From Lachmann to Lucas: On Institutions, Expectations and Equilibrating Tendencies." In *Subjectivism, Intelligibility and Economic Understanding: Essays in Honor of Ludwig M. Lachmann on his Eightieth Birthday.* Ed. I. Kirzner. New York: New York University Press. Pp. 87–101.

Hayek, Friedrich A. 1994. *La présomption fatale. Les erreurs du socialisme.* Trad. Raoul Audouin and Guy Millière. Coll. Libre échange. Paris: PUF.

Hoppe, Hans-Hermann. 1995. *Economic Science and the Austrian Method.* Auburn, Ala.: Ludwig von Mises Institute.

Hoppe, Hans-Hermann. 1991. "Austrian Rationalism in the Age of the Decline of Positivism." *Journal des Economistes et des Etudes Humaines* 2 (2/3): 243–67.

Isambert, F-A. 1989. "Alfred Schütz, entre Weber et Husserl.:" *Revue Française de Sociologie* 30 (2): 299–319.

Jeanrond, Werner G. 1995. *Introduction à l'herméneutique théologique. Développement et signification.* Trans. Pierre-Loup Lesaffre. Collection Cogitato fidei. Paris: Les Editions du cerf.

Kirzner, Israel. 1992. *The Meaning of Market Process: Essays in the Development of Modern Austrian Economics.* London and New York: Routledge.

Kirzner, Israel. 1976. "On the Method of Austrian Economics." In *The Foundations of Modern Austrian Economics.* Ed. Edwin G. Dolan. Kansas City, Mo.: Sheed and Ward. Pp. 40–51.

Koppl, Roger. 1994a. "Ideal Type Methodology in Economics." In *The Elgar Companion to Austrian Economics.* Ed. Peter J. Boettke. Aldershot, U.K.; Brookfield, Vt.: Edward Elgar.

Koppl, Roger. 1994b. "Lachmann on Schütz and Shackle." In *Advances in Austrian Economics.* Vol 1. Ed. Peter J. Boettke, Israel M. Kirzner, and Mario J. Rizzo. Greenwich, Conn.: JAI Press. Pp. 289–301.

Kurrild-Klitgaard, Peter. 2001. "On Rationality, Ideal Types and Economics: Alfred Schütz and the Austrian School." *Review of Austrian Economics* 14 (2/3): 119–44.

Lachmann, Ludwig. 1982. "Ludwig von Mises and the Extension of Subjectivism." In *Method, Process and Austrian Economics: Essays in Honor of Ludwig von Mises.* Ed. Israel M. Kirzner. Lexington, Mass.: Lexington Books. Pp. 31–40.

Lachmann, Ludwig. 1978. "An Austrian Stocktaking Unsettled Questions and Tentative Answers." In *New Directions in Austrian Economics.* Ed. Louis M. Spadaro. Kansas City, Mo.: Sheed Andrews and McMeel. Pp. 1–18.

Lachmann, Ludwig. 1976. "On the Central Concept of Austrian Economics: Market Process." In *The Foundations of Modern Austrian Economics.* Ed. Edwin G. Dolan. Kansas City, Mo.: Sheed and Ward. Pp. 126–32.

Lachmann, Ludwig. 1971. *The Legacy of Karl Weber.* Berkeley, Calif.: Glendessary Press.

Lavoie, Don. 1994. "The Interpretive Turn." In *The Elgar Companion to Austrian Economics.* Ed. Peter J. Boettke. Aldershot, U.K.: Brookfield, Vt.: Edward Elgar.

Lavoie, Don, ed. 1990. *Economics and Hermeneutics.* London and New York: Routledge.

Lavoie, Don. 1986. "Euclideanism versus Hermeneutics: A Reinterpretation of Misesian Apriorism." In *Subjectivism, Intelligibility and Economic Understanding.* Ed. Israel M. Kirzner. London: Macmillan. Pp. 192–210.

Mäki, Uskali. 1997. "Universals and the Methodenstreit: A Reexamination of Carl Menger's Conception of Economics as an Exact Science." *Studies in History and Philosophy of Science* 28 (3): 475–95.

Mäki, Uskali. 1990. "Mengerian Economics in Realist Perspective." In *Carl Menger and His Legacy in Economics.* Ed. Bruce Caldwell. Annual Supplement to *History of Political Economy* 20: 289–310.

Maritain, Jacques 1924. *Réflexions sur l'intelligence et sur sa vie propre.* Paris: Nouvelle Librairie Nationale.

Mises, Ludwig von. 1962. *The Ultimate Foundation of Economic Science.* Princeton, N.J.: D. Van Nostrand.

Moreau, Joseph. 1976. *De la connaissance selon S. Thomas d'Aquin.* Paris: Beauchesne.

Philippe, D. 1991. *Lettre à un ami. Itinéraire philosophique.* Paris: Éditions Universitaires.

Philippe, M.D. 1990. *Lettre à un ami: Itinéraire philosophique.* Paris: Editions Universitaires.

Popper, Karl Raimund. 1968. *The logic of scientific discovery.* London: Hutchinson. French translation by Nicole Thyssen-Rutten and Philippe Devaux. *La logique de la découverte scientifique* Paris: Payot édition, 1985.

Prendergast, Christopher. 1986. "Alfred Schütz and the Austrian School of Economics." *American Journal of Sociology* 92 (1): 1–26.

Prychitko, David L. 1994. "Ludwig von Lachmann and the Interpretative Turn in Economics: A Critical Inquiry into the Hermeneutics of the Plan." In *Advances in Austrian Economics.* Vol 1. Ed. Peter J. Boettke, Israel M. Kirzner, and Mario J. Rizzo. Greenwich, Conn.: JAI Press. Pp. 303–19.

Raynaud, Philippe. [1987] 1996. *Max Weber et les dilemmes de la raison moderne.* Paris: PUF.

Rector, R.A. 1990. "The Economics of Rationality and the Rationality of Economics." In *Economics and Hermeneutics.* Ed. D. Lavoie. London and New York: Routledge.

Rothbard, Murray N. 1957. "In Defense of 'Extreme A priorism'." *Southern Economic Journal* 23(3): 314–19.

Schütz, Alfred. 1967. *The Phenomenology of the Social World.* Evanston Ill.: Northwestern University Press.

Schütz, Alfred, and T. Luckman. 1973. *The Structures of the Life World.* Evanston, Ill.: Northwestern University Press.

Selgin, George A. 1987. "Praxeology and Understanding: An Analysis of the Controversy in Austrian Economics." *Review of Austrian Economics* 2: 19–58.

Simon, Yves. 1944. *Prévoir et savoir: études sur l'idée de la nécessité dans la pensée scientifique et en philosophie.* Montréal: Editions de l'Arbre.

Verneaux, Roger. 1959. *Epistémologie générale ou critique de la connaissance.* Paris: Beauchesne.

Weber, Max. [1949] 1968. *The Methodology of the Social Sciences.* Ed. and trans. by Edward A. Shils and Henry A. Finch. New York: New York Free Press.

Weber, Max. 1992. *Essais sur la théorie de la science.* Trad. Julien Freund. Collection Agora 116. Paris: Presses Pocket. First published 1965 by Plon.

Witt, Ulrich. 1990. "Le subjectivisme en sciences économiques, proposition de réorientation." *Journal des économistes et des études humaines* 1 (2): 41–60.