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Three Arguments Against Menger's Suggested Aristotelianism

Ricardo F. Crespo

Abstract

Specialists often maintain that Menger has been strongly influenced by Aristotle's thought ideas.

This paper shows that although using Aristotle's categories and general framework there are some issues in which Menger's conclusions differs from Aristotle's.

This hint out that Menger's knowledge of Aristotle's ideas was not sufficiently deep and precise so as to completely capture its very spirit.

Section two lays out the differences between Menger's conception of theoretical science applied to economics and Aristotle's conception of economics as a practical science.

Section three maintains that the Mengerian claim about the methodological absurdity of empirically testing the conclusions of exact research is not genuinely Aristotelian.

Section four deals with the issue of Menger's concept of organic social institutions showing its differences visà- vis an Aristotelian position.

Les spécialistes soutiennent souvent que Menger a été fortement influencé par la pensée d'Aristote.

Cet article montre que, bien qu'empruntant les catégories et la structure générale d'Aristote, certaines des conclusions de Menger diffèrent de celles d'Aristote.

L'article suggère que la connaissance qu'avait Menger des idées d'Aristote n'était pas suffisamment approfondie et précise pour en appréhender le sens plein.

La section deux présente les différences entre la conception de la science théorique présente dans l'économique de Menger et la conception aristotélicienne de l'économie comme une science pratique.

La troisième section soutient que l'argument de Menger au sujet de l'absurdité méthodologique des tests empiriques des conclusions de la recherche exacte n'est pas réellement aristotélicien. La section quatre aborde la question des institutions sociales organiques chez Menger et montre ses différences vis-à-vis de la position aristotélicienne.

KEYWORDS: Menger, Aristotle, economic methodology

Author Notes: I acknowledge the comments of Jack Birner, Neelkant Chamilall, Uskali Mäki, Miguel Alfonso Martínez Echevarría, Barry Smith and Gabriel Zanotti. The usual caveat applies. A previous version of this paper was presented at the II Jornadas Aristotélicas, Faculty of Philosophy, UNC, Mendoza, June 22, 2001 and at the II Simposio de la Sociedad Iberoamericana de Metodología Económica, Buenos Aires, October 3-5, 2001.

THREE ARGUMENTS AGAINST MENGER'S SUGGESTED ARISTOTELIANISM*

Ricardo F. Crespo°

1. Introduction

Several scholars have acknowledged Aristotle's influence on Carl Menger's epistemological, social, and economic ideas. Indeed, Menger often expresses himself in an Aristotelian fashion. In his writings, he states that he is looking for the essence or the nature of economic phenomena; he develops a price theory based on Aristotelian concepts; he proposes an epistemological framework inspired in part by Aristotelian ideas; and, finally, he sometimes quotes Aristotle directly. All this supports the view that *Menger was an Aristotelian*. However, as Max Alter does, questions can be raised regarding the precise nature of Menger's Aristotelianism and the degree to which Aristotle's thought penetrates to the very heart of Menger's economic thinking.

In this paper, I raise three objections against the thesis that Menger embraced a unique orthodox Aristotelian position affecting all aspects of his thought in equal degree.⁷ First, according to Aristotle, economics is a practical and

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¹ Cf., for example, Kauder-1953 and 1957, Rothbard-1976, pp. 68ff., Bostaph-1978, p. 14ŏ, Chamilall-2000, Cubeddu-1985 and 1993, Mäki-1990a, pp. 295ff., Smith-1986, Smith-1990, Smith-1994a, and Smith-1994b, *passim*.

² See, for example, Menger-1871 [1950], pp. 5-8.

³ See, for example, Menger-1871 [1950], pp. 295-6, 305-6.

⁴ See, for example, Menger-1883 [1985], pp. 148-9, 220-2, Cubeddu-1985 and 1993, Alter-1990.

⁵ See, for example, Menger-1871 [1950], pp. 53n., 277n., 286, 295-6, 296n., 305-6, 315-7, Menger-1892, p. 241, and Menger-1883 [1985], pp. 57, 88, 148, 149n., 151, 153, 163, 165-6, 169, 184, 189n., 220-2. Cf. Alter-1990, pp. 112ff..

⁷ I would like to stress that I base this paper on nowadays-edited works of Menger. New investigations into Menger's unpublished works could confirm or infirm my conclusions. Chamilall/Krecké-2002 is a real attempt to investigate Menger's unpublished notes.

not a theoretical science as Menger maintains. Menger's exact orientation of theoretical research is, however, much more of a *Naturwissenchaft* (natural science) than a practical science (Section 2). Second, even if we adopt as our starting point the conception of economics as a theoretical rather than a practical science, Menger's thesis that it is a 'methodological absurdity' to suppose that we can test conclusions derived from exact laws by means of empirical evidence is not Aristotelian (Section 3). Finally, while Menger's explanation of the origin of so-called 'organic institutions' can be considered Aristotelian, the way these organic institutions function cannot (Section 4).

2. Economics: A Practical or a Theoretical Science?

A presentation of the first objection raised above must be preceded by an analysis of Aristotle and Menger's classification of sciences as well as an examination of the epistemological status of economics within them.

2.1. Sciences according to Aristotle

Aristotle distinguishes between speculative or theoretical, practical, and technical sciences. Each of these sciences has a different subject-matter. The object of theoretical sciences is the study of separated beings, unchangeable beings, and beings that bear the principle of their movement within themselves. The subject-matter of the practical sciences is free human action whose principle of movement is *election (proairesis)*. Finally, technical sciences deal with beings whose principle of movement is the mind and hability of the craftsman. In Aristotle's words,

"For in the case of productive science the principle of production is in the producer and not in the product, and is either an art or some other capacity. And similarly in practical science the movement is not in the thing done, but rather in the doers. But the science of the natural philosopher deals with the things that have in themselves a principle of movement. It is clear from these facts, then, that natural science must be neither practical nor productive, but theoretical (for it must fall into some one of these classes)."9

Aristotle also deals with sciences in his *Posterior Analytics*, a book pertaining to the Aristotelian "*Organon*" (*Logic*). In the *Posterior Analytics*, he writes that science is an infallible, true, and certain knowledge of a necessary object. ¹⁰ It is

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⁸ *Metaphysics*, VI (E), 1, 1025b.

⁹ *Metaphysics*, XI (K), 7, 1064a 12-ss.

¹⁰ Cf. Posterior Analytics 4, 73a 23-4; 6, 74b 14; 8, 75b 24; see also Nicomachean Ethics VI, 3, 1139b 23-4.

knowledge of the universal, not of the particular, that is, of "whatever belongs to something both of every case and in itself and as such." ¹¹ Universals show the causes. ¹² Thus, for Aristotle, science is the knowledge of things by their causes.

It should be noted, however, that this definition of science only includes the characteristics of theoretical sciences. For Aristotle, practical science is a science not in the former 'strict' sense but in an analogical or wider sense, a science 'by similarity' (kath'omoitesin), in which different characteristics apply. 13 On the one hand, human acts are not necessary but contingent. On the other hand, practical sciences are not intrinsically unconcerned as theoretical sciences are. Aristotle opposes a strict notion of science to this 'weaker' one. This is a middle ground between strict science about necessary things, and practical wisdom and action. For Aristotle, "science" is an analogical concept. 'Analogy' is the term currently used to mean what Aristotle called 'homonymous pròs bén concepts.' These are concepts that have different however related meanings, one of which is the 'focal' or primary meaning to which the other, derivative meanings, refer and are connected. The example habitually provided from Aristotle to our days is 'healthy': while the focal meaning of healthy refers to human body, medicines, foods, sports, go for a walk and so on, may also be, derivatively, healthy which is a common feature belonging to all of them. 14 For Aristotle, this common feature of those knowledge consider as sciences is a "state of capacity to demonstrate (béxis apodeiktiké), "15 that is, a demonstrative process. Thus, practical sciences are sciences in spite of not having a necessary subject-matter and, consequently, of not being exact in their conclusions. The following are the main characteristics of practical sciences: First, because of the contingency of human actions which stems from man's freedom and singularity, practical sciences acknowledge the inexact character of their conclusions. In his Nicomachean Ethics Aristotle asserts:

"Now our treatment of this science will be adequate, if it achieves that amount of precision which belongs to its subject matter. The same exactness must not be expected in all departments of philosophy alike, any more than in all the products of arts and crafts. (...) We must therefore be content if, in dealing with subjects and starting from premises thus uncertain, we succeed in presenting a broad outline of the truth: when our subjects and our premises are merely generalities, it is enough if we arrive at generally valid conclusions." 16

¹¹ Analytics II, I, 4, 73b 26 and also cf. id., I, 31, 87b 28-35; De Anima, II, 5, 417b 23; Metaphysics E, 2, 1026b 24 - 1027a 20 and K, 8, 1064b 27 - 1065a 5.

¹² Cf. Analytics III, 31 88a 5.

¹³ This solution is proposed by Gauthier and Jolif (*Éthique à Nicomaque* avec Commentaires, Publications Universitaires Louvain, Béatrice-Nauwelaerts, París, 1970), II, pp. 23-5 and pp. 453-5, relying on *Nicomachean Ethics*, VI, 3.

¹⁴ Cf. *Metaphysics*, IV, 2, 1003a 32 and ff..

¹⁵ Cf. Nicomachean Ethics, VI, 3, 1139b 32. I developed further on this topic in Crespo-1997, Chapter 2. 16 Nicomachean Ethics I, 3, 1094b 11-27.

Being given the nature of its subject-matter, we should not ask for more from science than what it can give. One should not blame science for this limitation, since it does not testify to a lack of scientific character but is in "the nature of the case: the material of conduct is essentially irregular." That is, uncertainty has an ontological nature which reflects, ultimately, human freedom, an essential and ubiquitous feature of human actions.

Second, practical sciences must be closely related to the concrete cases. This feature is a direct consequence of the previous characteristic. "Now, no doubt," Aristotle says, "it is proper to start from the known. But 'the known' has two meanings -'what is known to us,' which is one thing, and 'what is knowable in itself,' which is another. Perhaps, then, for us at all events, it is proper to start from what is known to us." Adjustments to the particular case with its cultural and historical environment are necessary.

Third, practical sciences have an ethical commitment which arises from the moral aspect of each human action. This does not imply that economics is Ethics. Ethics studies the ethical problem in itself, while Political Economy, Politics and Law, examples of practical sciences, study their corresponding subjects. Nevertheless, in the Aristotelian conception, these subjects cannot be isolated from their ethical aspects because, no matter what the analyzed action is, it always has an immanent or practical aspect embedded that makes it always essentially ethical; the corresponding sciences ought to take care of this aspect.

Fourth, another distinctive feature of practical sciences is their pragmatic end. Aristotle states that "the end of this kind of study [Politics] is not knowledge but action" ¹⁹ and that "we are not conducting this inquiry in order to know what virtue is, but in order to become good." ²⁰ He adds in his *Metaphysics* that "the end of theoretical knowledge is truth, while that of practical knowledge is action." ²¹ Nowadays, social sciences are theoretical studies of practical subjects. One can then ask: what is their epistemological status? Aquinas completes Aristotle on this point: he distinguishes three principles to decide whether a science is theoretical or practical. These are the subject-matter, the end and the method. This threefold classification leaves room for "mixed" cases such as those theoretical studies of practical subjects mentioned above. Aquinas asserts in *De Veritate*:

"Knowledge is said to be practical by its order to act. This can happen in two ways. Sometimes *in actu* (*in the very action*), that is, when it is actually ordered to perform something (...) Other times, when knowledge can be ordered to act but it is not now ordered to act (...); in this way knowledge is virtually practical, but not *in actu* (*in the very action*)."²²

¹⁷ Nicomachean Ethics V, 10, 1137b 17-9.

¹⁸ Nicomachean Ethics I, 4, 1095b 2-4.

¹⁹ Nicomachean Ethics I, 3, 1095a 6.

²⁰ Nicomachean Ethics II, 2 1103b 27-28.

²¹ *Metaphysics* II, 1, 993b 21-22.

²² De Veritate, q. 3, a. 3. I am indebted to Carlos I. Massini for this quotation.

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This is an important point because contemporary social sciences are virtually ordered towards action. Thus, although a particular science may be theoretical *secundum finem* (according to the end), or may have both theoretical and practical aspects, it is their implicit ordination towards action that determines its epistemological framework.

Finally, a reference should be made to the methodical procedures characteristic of practical sciences. This can be summarized as the advocacy of methodological pluralism. In his *Politics* and *Nicomachean Ethics*, Aristotle admirably combines axiomatic deduction, inductive inference, dialectic arguments, rhetoric, imagination, examples, and topics.

Given these characteristics, we can then ask: What are examples of practical sciences for Aristotle? Is economics one of them? Aristotle's answer is:

"For it [Politics] determines which science ought to exist in states, what kind of sciences each group of citizens must learn, and what degree of proficiency each must attain. We observe further that the most honored capacities, such as strategy, *oikonomike*, and oratory, are contained in politics." ²³

Thus, according to Aristotle, economic science is one of the practical sciences. For him economic activity is the act, the habit and the ability to use what is [subjectively] necessary for the Good Life, and economic science is the corresponding practical science.²⁴

2.2. Sciences according to Menger

Menger first divides research into two main orientations, the historical sciences and theoretical sciences, 25 which have as their end the cognition of the individual and general aspects of phenomena respectively. 26 The theoretical orientation looks for typical forms and typical relationships between these forms. 27 Without this second knowledge we would be unable to develop a deep understanding of the real world, to predict it and control it: "the purpose of the theoretical sciences is understanding of the real world, knowledge of it beyond experience and control of it." 28 Menger identifies a third kind of knowledge which he calls practical sciences or technologies. Menger applies this classification to economics, resulting in historical sciences and statistics dealing with individual

²³ Nicomaquean Ethics 1094a 26 -b 6.

²⁴ It is significant to stress that, for Aristotle, *oikonomike* is household management and its aim is subordinated to the aim of Politics. The Aristotelian equivalent of contemporary economics would be a branch of chrematistics subordinated to *oikonomike* and Politics. I have analyzed the Aristotelian concept of economics in Crespo-1997, Chapters 3 and 4.

²⁵ Cf. Menger-1883 [1985], p. 38.

²⁶ Cf. Menger-1883 [1985], p. 35.

²⁷ Cf. Menger-1883 [1985], p. 36.

²⁸ Menger-1883 [1985], p. 36.

aspects of economic phenomena, theoretical economics which focuses on general aspects of economic phenomena, and economic policy and finance that are the practical branches of economics.²⁹ Menger gathers the theoretical and practical branches of economics under the heading of "political economy." 30 But to understand the implications of this characterization of economics as a science, it is important to familiarize ourselves with Menger's conception of the functions of science. In a frequently quoted passage he states that:

"The goal of scholarly research is not only the cognition [Erkenntnis] but also the understanding [Verständnis] of phenomena. We have gained cognition of a phenomenon when we have attained a mental image of it. We understand it when we have recognized the reason for its existence and for its characteristic quality (the reason for its being and for its being as it is)."31

The words in italics are essential for a correct understanding of Menger's thought. Mäki states that understanding (Verständis) refers "to a kind of explanatory redescription of objects of cognition (Erkenntnis) which makes assertions about the 'deeper' nature of those objects."32 I consider that Mäki is right. Yet, it would be easier and more precise to assert that to understand is to know scientifically, in the Aristotelian sense of knowing the causes. Menger says that "when we understand a concrete phenomenon in a theoretical way we become aware of the basis of the existence and the peculiarity of the nature of [it](...)":33 hence, understanding is science in the classical sense.34

Menger also holds that we may understand a phenomenon both historically and theoretically. 35 This conception is Aristotelian as well. In fact, speaking of theoretical research, Menger states that

"Theoretical economics has the task of investigating the general nature and the general connection of economic phenomena (...) The phenomena, or certain aspects of them, and not their linguistic image, the concepts, are the object of theoretical research in the field of economy."36

This statement shows that Menger does not intend to build concepts and models that copy or resemble reality, but to grasp reality itself. For him, as Kauder

²⁹ Cf. Menger-1883 [1985], p. 39.

³⁰ Cf. Menger-1883 [1985], pp. 39-40.

³¹ Menger-1883 [1985] p. 43, italics in Menger's text. 32 Mäki-1990b, pp. 320 ff., italics in Mäki's text.

³³ Menger-1883 [1985], p. 45, italics in Menger's text.

³⁴ Max Alter thinks that *Verständis* (understanding) is connected with the German concept of *Verstehen* (to understand) which is in turn linked to Geisteswissenschaften (Sciences of the Spirit) (Alter-1990, p. 105). Mäki (Mäki-1997, p. 478, nt. 7) explicitly disagrees with him. Max Alter's thesis, in my opinion and also in Mäki's- does not hold. 35 Cf. Menger-1883 [1985], pp. 43-5.

³⁶ Menger-1883 [1985], p. 37, footnote 4, italics in Menger's text.

suggests, "laws are not constructions of our mind but descriptions of the eternal configurations in economic life."37

Within theoretical research Menger considers two orientations, the realistic-empirical and the exact. The realistic-empirical theoretical research "arranges the totality of the real phenomena in definite empirical forms and in an empirical way to determine the regularities in their coexistence and succession."38 To do so, it uses induction, which cannot provide scientific certainty, as Aristotle recognizes.³⁹ In this regard, it is clear that Menger is referring to empirical induction (not essential induction or 'abstraction'). This is confirmed when he quotes Bacon. 40 Thus, the realistic-empirical orientation, as Menger understands it, leads to real types and empirical laws in their "full empirical reality". 41 Consequently, its conclusions cannot be infallible. 42 The realistic-empirical orientation does not abstract universal concepts and laws from accidental features. Menger clarifies this point by applying it to the economic sphere: according to him, in real economic acts, we do not have only economically pure reasons but also "error, ignorance, and external compulsion." 43

On the other hand, the aim of the exact orientation of theoretical research is to determine the exact (in the sense of infallibility) laws of phenomena. Its method is to seek "to ascertain the simplest elements of everything real." 44 In this way, it arrives at *qualitatively* strict typical empirical forms and typical relationships that are *laws* of phenomena. 45 These "bear within themselves the guarantee of absoluteness"46 and they hold independently of spatial and temporal conditions.47 We grasp them by "abstraction." 48 It seems then that Menger is referring to universals expressing essences. Mäki seems to be right in suggesting that Menger is referring to Aristotelian abstraction that leads to universal concepts and universal relations through them (first and second-order universals).49

These explanations help to show the homology between Menger's theoretical exact research and Aristotle's theoretical science. However, as I shall argue below, when Menger applies this scheme to economics, he slides into a different epistemological framework. The Aristotelian theoretical science starts by axioms and continues by drawing necessary conclusions from them -this is so because the subject is necessary and the deductions made in order to reach these

 $^{^{37}}$ Kauder-1957, p. 416. In a letter to Walras, Menger states that "We do not simply study quantitative relationships but also the NATURE (das WESEN) of economic phenomena." Quoted by Hutchison-1973 p. 17, footnote 5. 38 Menger-1883 [1985], p. 56.

³⁹ Menger-1883 [1985], p. 57.

⁴⁰ Cf. Menger-1883 [1985], pp. 57 and 60.

⁴¹ Cf. Menger-1883 [1985], pp. 56-7, italics in Menger's text.

⁴² As E. Kauder suggests, the formulation used in a letter to Walras - "des lois fixes" - is more adequate, because more than exactness, Menger is meaning infallibility; Cf. Kauder-1957, p. 103.

⁴³ Menger-1883 [1985], p. 64.

⁴⁴ Menger-1883 [1985], p. 60, italics in Menger's text.

⁴⁵ Cf. Menger-1883 [1985], p. 61, italics in Menger's text.

⁴⁶ Menger-1883 [1985], p. 59.

⁴⁷ Cf. Menger-1883 [1985], p. 112.

⁴⁸ Menger-1883 [1985], pp. 62, 65 and 218.

⁴⁹ Cf. Mäki-1990a, p. 295, italics in Mäki's text. This position is also held by Smith (Smith-1990, pp. 266-7 and Smith-1994, pp. 34-5). Max Alter also agrees that we are facing essential induction (Alter-1990, p. 107).

conclusions are logically correct. In fact, referring to this exact orientation, Menger uses the Aristotelian adagio "Scire est per causas scire" ("to know is to causally know")⁵⁰, and he states that:

"The great theoreticians in the realm of ethical phenomena have from the beginning started out with these methodological points of view. With this view Plato and Aristotle also approached the task of constructing theories of social phenomena."⁵¹

2.3. Economics according to Menger

For Menger, the matching of human needs with goods able to satisfy them is at the root of economic activity. ⁵² He states that "by *economy* we understand the precautionary activity of humans directed toward covering their material needs; by *national economy*, the social form of this activity "⁵³ and then goes on to specify that "in truth only the premeditative activity of humans aimed at the indirect satisfaction of their material needs is to be considered as economics, while the acts of the actual consumption of goods do not in themselves come under this concept." ⁵⁴ As far as these goods are concerned, not all of them originate economic activities. *Imaginary* goods satisfy merely imaginary needs. Summing up, economic action is a kind of human intentional action. This type of understanding is a modern and open conception.

Yet, when Menger specifies the characteristics of economic action, tension seems to arise between its intentional and exact character, between its reality and its theory, and between the realistic and the exact orientation of research. In effect, the exact orientation calls for a reductive vision which puts freedom into brackets. "The most original factors of human economy are the needs, the goods offered directly to humans by nature (...), and the desire for the most complete satisfaction of needs possible (...) All these factors are ultimately given by the particular situation, independent of human choice." 55 Menger develops this idea in Appendix VI, entitled "The Starting Point and the Goal of All Human Economy Are Strictly Determined". Here he states that "economy is really nothing else than the way which we travel from the previously indicated starting point of human activity to the previously indicated goal." 56 Therefore, he concludes that the best way of studying it is the exact orientation:

"The *exact* orientation of theoretical research in the above field (...) examines the phenomena of *abstract economic reality*, phenomena which are strictly determined, as we saw. It thus, to be

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50 Menger-1883 [1985], p. 93.
51 Menger-1883 [1985], p. 87.
52 Menger-1871 [1950], pp. 94ff..
53 Menger-1883 [1985], p. 63, italics in Menger's text.
54 Menger-1883 [1985], p. 193, footnote 128. Cf. also p. 217.
55 Menger-1883 [1985], p. 63.
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⁵⁶ Menger-1883 [1985], p. 217.

sure, does not arrive at exact laws of the *real*, in part extremely uneconomic, phenomena of human economy but it does arrive at exact laws of economic reality."⁵⁷

That is to say, the only way to reach exact conclusions is to accept that they are unreal. This is an epistemological point. Science is about universals and cannot deal with accidents. However, one may wonder if this abstraction does not imply abstracting from the essential characteristics of economy. "The results of exact research (...) are true only with certain presuppositions, with presuppositions which in reality do not always apply."58 Some of these assumptions are that people are governed by egoism, that they are uninfluenced by error, ignorance, as well as by external compulsion,⁵⁹ and that they have perfect knowledge.⁶⁰ Menger identifies freedom of the human will as one of the elements that makes a difference between the economic theory and the real world. 61 Menger is disregarding freedom - which is of course an essential feature of economic actionand other features of real economic actions. Thus, in his writings economics becomes a technique of a deterministic abstraction. This position is clearly present in the description of the conditions of his price theory, where he sets perfect knowledge as an assumption. 62 This constitutes a shift in his methodological frame and with this shift he is no longer within the Aristotelian axiomatic-deductive method but rather within a hypothetical-deductive model à la Mill, with clearly stated unreal assumptions. In this sense, Menger anticipated the economic methodology as it developed in the twentieth century. 63

2.4. Menger's philosophy of economics: A non Aristotelian solution with Aristotelian tools

From the previous analysis, one can draw the following conclusion: for Aristotle economics was a practical science while, for Menger, economics has a relevant core which is the exact theoretical orientation. This last orientation resembles, at least in its intention, to Aristotle's theoretical science. Consequently, Menger transforms an Aristotleian practical science into a theoretical science. I agree with Alter when he sates that:

"Menger has altered Aristotle's conception of the classification of sciences which covers the field of inquiry of the first philosophy

 $^{^{57}}$ Menger-1883 [1985], p. 218, italics in Menger's text.

⁵⁸ Menger-1883 [1985], p. 69.

⁵⁹ Menger-1883 [1985], p. 64.

⁶⁰ Cf. Menger-1883 [1985], p. 71.

⁶¹ Cf. Menger-1883 [1985], p. 214.

⁶² In Menger-1883 [1985], p. 71 and Menger-1871 [1950], Chapter V. Kirzner-1979 points out the role of time, ignorance and error, and, consequently, of uncertainty, in Menger's thought. Basing himself on Menger's texts he shows the relevant presence of these factors. However, he then points out how Menger looses these achievements in the price theory: "either we have here a curious inconsistency in Menger, or else there is some subtlety here that has yet to be plumbed." (Kirzner-1979, p. 62).

⁶³ It is clearly pointed out by Zanotti-1996, pp. 165-7.

[Metaphysics], ethics and poetics [technique]. These three different domains with their own epistemological and methodological foundations and their individual aims –knowledge for its own sake, knowledge for the sake of control and knowledge for the acquisition of skill, respectively- have been collapsed in Menger's system into the domain of theory only, a shift that is paralleled by his transposition of economics from the epistemological and methodological realm of Aristotle's ethics to that of the first philosophy."64

In fact, for Menger the exact theory of economics is a kind of philosophy of economics, or a set of economic principles belonging to philosophic anthropology. We acknowledge this as a genuine, valid, and even a praiseworthy, intent but cannot fail from stressing that it is one of a narrow scope. Menger states that he is looking for the "laws of economicity" (*Gesetze der Wirtschaftlichkeit*). 65 However, when one starts with philosophic anthropology, one can only state very little about economics. Besides, this is not really economics but the philosophy of economics.

According to Menger, there is no more than a difference of degree between natural and human sciences.66 The real difference is between theoretical and historical research, and between realistic and exact orientations, but not between natural and social sciences. The difference in accuracy between one field and the other is only a matter of degree. The ontological difference, on the other hand, is between orientations. The fact that social phenomena give rise to less strict laws than natural phenomena does not lead theoretical science to become either practical or historical.⁶⁷ The title of Appendix V states that "in the Realm of Human Phenomena Exact Laws (So-Called 'Laws of Nature') Can Be Established Under the Same Formal Presuppositions as in the Realm of Natural Phenomena."68 Likewise, Menger explains that the fact that abstract economics analyzes only some aspects of any phenomenon does not imply that it is a partial science which should therefore be subordinated to a general theory of social phenomena. 69 As long as the exact orientation prevails, economics becomes practically assimilated to a Naturwissenschaft (Natural Science), something precisely alien to the Austrian school, but in which both Mises and Hayek probably fall. 70

From an Aristotelian point of view, the exact orientation gives rise to a theoretical science in its proposal, but not in its application to price theory, as stated before. The empirical-realistic orientation, on the other hand, may include some aspects of practical sciences for Aristotle. Menger's practical or technical sciences are not Aristotelian practical sciences but Aristotelian technical sciences.

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64 Alter-1990, p. 107.
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⁶⁵ Menger-1883 [1985], p. 73. Cf. also the footnote of the translator.

⁶⁶ Cf. Menger-1883 [1985], pp. 52, 58-9, 214-5, 219.

⁶⁷ Cf. Menger-1883 [1985], p. 51.

⁶⁸ Menger-1883 [1985], p. 214.

⁶⁹ Cf. Menger-1883 [1985], p. 79.

⁷⁰ On this topic, cf. my book Crespo-2000, Chaps. 5-6.

As Alter rightly states,

"Only the first philosophy, mathematics and physics constitute speculative science for Aristotle. Economics is merely a subdiscipline of politics, which in turn, is one of the objects of practical science. Hence, for him, the results of economic investigations are incapable of strict demonstration since practical science generates only contingent knowledge. Aristotle's economic theory is, therefore, not 'exact' in Menger's sense of the term."71

Menger's chooses the end as the criterion established for the classification of sciences. For Aristotle the classification criterion is, as we said before, the subjectmatter. Practical sciences are practical for him in so far as their subject is human action, regardless of the perspective from which the subject is studied. For Menger, on the other hand, theoretical science is theoretical if the end and its method are theoretical, independent of the subject-matter. In addition, the word practical for Menger does not have the same meaning as the one it has for Aristotle. For Menger it implies technique while for Aristotle it implies human science.

It becomes clear then that, in spite of using Aristotelian devices, Menger's conception of science is very different from Aristotle's. One may think that he is adapting Aristotle's thought in his efforts to fight against the Historical School. This leads him to move within an epistemological framework which, while building upon Aristotelian concepts, is radically different from Aristotelian epistemology. In fact, his economic theory does not share any of the characteristics of Aristotle's practical sciences above mentioned: inexactness, practical goal, morality, closeness to experience, and methodological plurality.

3. The infallibility of the exact orientation is not an Aristotelian proposition

The empirical-realistic orientation of theoretical research is the first necessary step in research.⁷² However, for Menger, the conclusions of the exact orientation cannot be corrected following the evidence produced by the empirical approach. He considers that trying to do so implies a misunderstanding of the exact orientation of theoretical research: 73 "It [the exact orientation] arrives at results of theoretical research which, to be sure, must not be tested by full empirical reality."74 And he adds:

⁷¹ Alter-1990, p. 119. 72 Cf. Menger-1883 [1985], pp. 66-7. 73 Cf. Menger-1883 [1985], p. 69.

⁷⁴ Menger-1883 [1985], p. 61.

"Testing the exact theory of economy by the full empirical method is simply a methodological absurdity, a failure to recognize the bases and presuppositions of exact research." ⁷⁵

This view clearly moves Menger away from Aristotle as far as being a 'real' scientist is concerned since Aristotle does not have any problem in testing theories. However Menger's methodological position here coincides with Aristotle's in his *Posterior Analytics*. Let me explain further.

Aristotle's views regarding the testing of theories do not present themselves as a clear and easy topic. If we read *Posterior Analytics* we do not encounter the idea of empirical testing. This book, as we said in section 2.1., deals with theoretical sciences. Science is demonstrative and is an axiomatic-deductive syllogistic system. Sciences go from principles to conclusions in an infallible way, namely, categorical syllogism. In this book, Aristotle deals with what would nowadays be called the context of justification. He points out that the conclusions reached are right and scientific because they follow the rules of justification as he defined them. He does not deal with the context of discovery. In classical terms, we have a demonstrative process (an *ars demonstrandi*) as opposed to a discovery one (an *ars inveniendi*). The Aristotelian syllogistic method seeks to justify conclusions by looking for their corresponding premises rather than by inferring these conclusions from these premises. Justification is deductive; deduction inserts a proposition in a context of grounding and thereby lends a scientific character to the proposition.

Instead, I previously explained in section 2.1. that method in practical sciences is plural: it is not only deductive. Aristotle develops this methodological plurality in both his *Politics* and his *Nicomachean Ethics*. This caveat, however, also applies to the cases of Physics and Biology. Every deduction is based on principles that are not all obtained by deduction. The way toward principles begins with induction. First, we have essential induction, that is, an abstraction of a universal concept or relation. That supposes contact with experience because "it is consequently impossible to come to grasp universals except through induction." ⁷⁶ But this is only a first step for, in actual science, the way toward principles includes experience, dialectic testing of arguments, and authoritative opinions.

In sum, Aristotle emphasized not only the relevance but also the limits of deduction: deduction requires a discovery context in which principles are not relevant. The universal premises from which sciences start cannot be obtained by deduction, except in the case of mathematics and formal logic. Indeed, in most scientific disciplines, generalization requires empirical evidence as well as inductive and dialectical processes.

In fact, Aristotle deals with science in the way detailed in *Posterior Analytics* only exceptionally. J. M. Le Blond maintains that "the books composing the *Organon*, are more concerned with exposing science in a rigorous way than with doing science. His scientific books, on the other hand, focus on research and they are the ones that reveal the method."⁷⁷ In fact, in his studies –especially

⁷⁷ Le Blond-1939, p. 191.

⁷⁵ Menger-1883 [1985], p. 69. 76 *Posterior Analytics*, I, 18, 81b 2.

biological (On the Part of Animals, The History of Animals), 78 physical (Meteorology), and, practical (Ethics and Politics)-, Aristotle gives ample room to experience and he does this in order to discover scientific principles and also to verify them. He says in Generation of Animals that "credit must be given rather to observation than to theories, and to theories only if what they affirm agrees with the observed facts." 79 Le Blond shows how Aristotle uses experience in detailed observation as well as in an experiment: "flux and reflux of the research going from facts to theories and from theories to facts."80 This clearly explains why Aristotle states in Nicomachean Ethics that "a boy may become a mathematician but not a philosopher or a natural scientist."81 The reason, he adds, is that the philosopher and the natural scientist have recourse to experience while the mathematician does not. As he states in On Generation and Corruption, "Lack of experience diminishes our power of taking a comprehensive view of admitted fact. Hence those who dwell in intimate association with nature and its phenomena are more able to lay down principles such as to of a wide and coherent development."82 Furthermore, in *Physics* he explains why something cannot be contained in itself starting by an empirical argument: "Thus if we look at the matter inductively (epaktikôs) we do not find anything to be 'in' itself in any of the senses that have been distinguished; and it can be seen by argument that it is impossible."83 He then goes on to develop a theoretical argument based on this point.84

Summing up, the Mengerian claim about the methodological absurdity about empirically testing conclusions of exact research is consistent with the epistemological framework of Posterior Analytics. But, Menger does not fully capture and understand Aristotle as real scientist, whether as a social scientist or a natural scientist. The Aristotelian theoretical science framework does not refrain from testing conclusions by experience, since abstraction comes from and goes back to reality and actually Aristotle does test these conclusions.

4. The organically created social structures and their method of study

Menger elaborates on his understanding of organic structures in Book Three of the Investigations entitled "The Organic Understanding of Social Phenomena".85 According to Menger, two kinds of social phenomena can be distinguished: those that have an intentional origin and those that originate spontaneously and in an

 $^{^{78}}$ On this works, Durant-1943 affirms: "Surely, despite the errors that mar these biological works, they form the greatest monument ever raised to the science by any one man." (p. 56)

⁷⁹ Generation of Animals, III 10, 760b 31.

⁸⁰ Le Blond-1939, p. 242.

⁸¹ Nicomachean Ethics, VI, 8.

⁸² On Generation and Corruption, I 2 316a 6.

⁸³ *Physics*, IV, 3, 210b 8-9.

⁸⁴ This line of thinking is developed by Aristotelians as M. Mansion, J. M. Le Blond, W. Wieland, and J. Barnes. I'm indebted to Héctor Padrón and Alejandro Vigo for useful suggestions on this topic. ⁸⁵ Cf. Menger-1883 [1985], pp. 127-159.

unintended way. Menger draws an analogy between social phenomena that result from human calculations and mechanism. Examples of such institutions are those that stem from "positive legislation", and sometimes, laws. "We interpret these phenomena *pragmatically* by investigating the aims which in the concrete case have guided the social unions, or their rulers, in the establishment and advancement of the social phenomena under discussion here."

Phenomena belonging to the second kind are spontaneously created and are to be interpreted 'organically'. Examples of such phenomena in Menger's view are money, language, law, morality, cities and states. They are all "the unintended social result of individually teleological factors."87 Furthermore, he includes among them some economic institutions such as market, wages, prices, division of work, interest rates, which "are not the result of socially teleological causes, but the unintended result of innumerable efforts of economic subjects pursuing *individual* interests."88

What is the link between pragmatic social institutions or phenomena and mechanisms? Further, what is the link between unintendedly originated institutions or phenomena and organisms? What is the meaning of mechanism and organism for Menger and what is the difference between these two analogies? Let me begin by the latter. Menger states:

"Natural organisms almost without exception exhibit, when closely observed, a really admirable functionally which is not, however, the result of human *calculation*, but of a *natural* process. Similarly we can observe in numerous social institutions a strikingly apparent functionality with respect to the whole. But with closer consideration they still do not prove to be the result of an *intention aimed at this purpose*, i.e., the result of an agreement of members of society or of positive legislation. They, too, present themselves to us rather as "natural" products (in a certain sense), as *unintended results of bistorical development*."89

The organic explanation explains the origin and the function of this kind of social institutions. However, note the expression "in a certain sense": Menger uses this analogy carefully: "it is an inexact one," it is not strict. ⁹⁰ Justification lies on the fact that, firstly, there is not a mutual causation between parts and the whole. ⁹¹ Secondly, social organisms are not the product of natural forces, but of human efforts. ⁹² Then, because Menger wants to preserve the individual: "the acknowledgment of a number of social phenomena as 'organisms' is in no way in

⁸⁶ Menger-1883 [1985], p. 145, italics in Menger's text.

⁸⁷ Menger-1883 [1985], p. 158.

⁸⁸ Menger-1883 [1985], p. 158, italics in Menger's text. Cf. also Menger-1892, p. 255 about money:

[&]quot;Money has not been generated by law. In its origin it is a social, and not a state-institution."

⁸⁹ Menger-1883 [1985], p. 130, italics in Menger's text.

⁹⁰ Menger-1883 [1985], p. 132 and cf. p. 133.

⁹¹ Menger-1883 [1985], pp. 132-3.

⁹² Cf. Menger-1883 [1985], p. 133.

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contradiction to the aspiration for exact (atomistic!) understanding of them."93 Thus, what Menger is essentially trying to stress through this analogy is that these social phenomena are unintended results of individual human efforts pursuing individual interests, not results from a common will directed toward the design and establishment of those institutions.⁹⁴ Let me move on to pragmatic social institutions and phenomena and mechanisms, by hearing from Menger once again:

> "A large number of social structures are not the result of a natural process, in whatever sense this may be thought of. They are the result of a purposeful activity of humans directed toward their establishment and development (the result if the agreement of the members of society or of positive legislation). Social phenomena of this type, too, usually exhibit a purposefulness of their parts with respect to the whole. But this is not the consequence of a natural "organic" process, but the result of human calculation which makes a multiplicity of means serve one end. Thus we cannot properly speak of an "organic" nature or origin of these social phenomena which, even if an analogy come into question, are not analogous to organisms but to mechanisms."95

Finally, what is the difference between organism and mechanism according to Menger? Let me once more quote him:

> "The organism is distinguished from the mechanism by the fact that on the one hand it is not, like the latter, a product of human calculation but of a natural process. On the other hand its individual part (each organ) is conditioned not only in its normal function, but also in its normal nature by the connection of the parts to form a higher unit (the organism in its totality) and by the normal nature of the other parts (the organs). This is by no means the case with a mechanism."96

Probably, both analogies are not the most felicitous. Menger himself states that natural organisms are composed of parts that function in a mechanical way.97 While for pragmatic social phenomena he uses the analogy of mechanisms as different from unintendedly originated social phenomena where he uses organisms, components of natural organisms function in a mechanical way: he uses organism as different from mechanism but organisms function mechanically.

Menger subsumes the problem raised by organic institutions for the social scientist in his famous question:

⁹³ Menger-1883 [1985], p. 141: the whole text in italics in Menger's text.

⁹⁴ Cf. Menger-1883 [1985], p. 133.

⁹⁵ Menger-1883 [1985], p. 132, italics in Menger's text. 96 Menger-1883 [1985], p. 132, footnote 46, italics in Menger's text.

⁹⁷ Cf. Menger-1883 [1985], p. 133.

"How can it be that institutions which serve the common welfare and are extremely significant for its development come into being without a common will directed toward establishing them?" 98

In Menger's view, the historicists provide a wrong answer to this question because they confuse the study of organic institutions with institutions having a pragmatic origin. Menger thinks this is a consequence of a failure to understand the nature of social phenomena a methodological confusion on the part of historicists.

If we are to understand the functioning of organic institutions, then, we must achieve a theoretical understanding of the origin and change of such institutions: 99

"The methods for the exact understanding of the origin of the 'organically' created social structures and those for the solution of the main problems of exact economics are by nature identical." 100

"The origin of a phenomenon is by no means explained by the assertion that it was present from the very beginning or that it developed originally." 101 Nor is contractualism a satisfactory explanation. 102 Instead, we should use the exact method. By using the exact method — which Menger also calls sometimes the "atomistic" method, 103 at others the "genetic" method, 104 or still again, the "compositive" method in some of his hand-written notes-, 105 we strive to reduce human phenomena to the expressions of the most original and the most general forces and impulses of human nature. We examine what tendencies of general human nature and what external conditions are apt to lead to those phenomena. 106 This analysis reveals the motivating forces leading to the genesis of organically created institutions. This is why his research strategy, as formulated in the Preface to *Principles*, is:

"(...) to reduce the complex phenomena of human economic activity to the simplest elements that can still be subjected to accurate observation, to apply to these elements the measure corresponding to their nature, and constantly adhering to this measure, to investigate the manner in which the more complex economic phenomena evolve from their elements according to definite principles." ¹⁰⁷

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98 Menger-1883 [1985], p. 146.
99 Cf. Menger-1883 [1985], p. 147.
100 Menger-1883 [1985], p. 159.
101 Menger-1883 [1985], p. 149.
102 As A. Smith: cf. id.: p. 172 and p. 176.
103 Menger-1883 [1985], pp. 139, 141, 145, 151.
104 Menger-1883 [1985], p. 94.
105 Cf. Hayek-1973, p. 8 and Hutchison-1973, p. 24.
106 Cf. Menger-1883 [1985], p. 224.
107 Menger-1871 [1950], pp. 46-7.
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Menger relates the analogy he draws between natural organisms and social phenomena to Plato and Aristotle. This is where I raise my third objection which can be summarized as follows: first, this analogy is not Aristotelian and, second, except for the explanation he gives of the origin of organic institutions, what he tries to explain through the analogy is not Aristotelian neither.

Organicism is a group of philosophical currents that applies the analogy of natural organisms –on their whole and on their relationship to their parts- to different fields: biology, a world-view, a conception of society and state. In fact, this conception comes from the Medieval era, and its sources are mainly Christian thought, in particular the latter's understanding of the Mystical Body of Christ. This relation is discussed by Otto von Gierke's *Das deutsche Genossenschaftsrecht*. The organicist analogy, explains von Gierke, is present both in the very idea of society as organism and in the explanation of the origin and growth of social institutions. ¹⁰⁹ Organicism as a conception about society evolves as a theory which maintains that society works as a biological organism. ¹¹⁰ Within this organism parts "naturally" operate for the benefit of the whole which, conversely, affects the parts. This analogy may lead to a loss of individuality and survival of the parts independently from the whole, which is not the case for Menger, as explained.

Aristotle used analogies when referring to the relation of the whole to the parts in the case of the *polis*. In this instance, the parts of the polis survive substantially separated from the whole: the choir and the singers; the ship and its captain and crew; the gymnasts; the physician and his patients. These analogies are adequate, as for Aristotle, the city *–polis*- is a whole whose parts are subsistent and have different functions oriented toward the end of the whole. The organic analogy used by Menger is not adequate for its parts do not survive outside the whole. Aristotle, uses the organic analogy only on a few occasions and he uses it together with examples where the wholes have substantial parts. For instance: "The polis is composed of unlike elements. Just as a living being is composed of soul and body, or the soul of the different elements of reason and appetite, or the household of man and wife, or property of master and slave, so the polis too is composed of different and unlike elements." 111

Therefore, it is not proper to attribute the organic analogy to Aristotle, as Menger does, for, first, Aristotle does not use it predominantly and, second, it may be misleading: while substantial parts do not survive in the organic analogy, Aristotle defend this survival. Neither is the way in which Menger uses this organic analogy Aristotleian. According to Aristotle, the fact that some institutions like the house, the village, and the *polis*, have a natural character does not exclude the possibility or the need of a teleological orientation that is part of the very natural

¹⁰⁸ Cf. Menger-1883 [1985], p. 131.

¹⁰⁹ Cf. Von Gierke-1868 [1934, 1963] pp. 110 and ff. and pp. 118 and ff..

¹¹⁰ Webster's Encyclopedic Unabridged Dictionary (New York, Random House, 1994) defines organicism as "a view of society as an autonomous entity analogous to and following the same developmental pattern as a biological organism" (p. 1364).

¹¹¹ *Politics*, III, 4, 1277a 7ss.

process of the relevant institution. From an Aristotelian point of view, it would be only by chance that individual interests not sharing a common end lead to this end. Individual actions do not automatically guarantee an ordination to a general end. In the Aristotelian conception, the natural orientation has to be discovered and achieved with effort: it is not reached spontaneously, unintendedly. For Aristotle order in the human realm is not a fact but a task. This does not mean that these processes are not free. However, according to him, within society there are authorities that have the task of promoting, facilitating, and even making the necessary corrections to obtain the common goals.

This point of view differs from Menger's. He actually argues that social phenomena are

"the unintended social result of individually teleological factors. (...) For they, too, as a rule are not the result of socially teleological causes, but the unintended result of innumerable efforts of economic subjects pursuing *individual* interests." 112

Aristotle, on the other hand, would say that social phenomena are the result of innumerable individual efforts that take care of the general end of a given society. In fact, justice as a general virtue, consists in taking care of the end of society as a whole. ¹¹³ Furthermore, there is a coincidence between what the individual has to do and the general end: the end of politics is simultaneously the good for each man. ¹¹⁴

As regards the origin and development of some social institutions, Menger follows Aristotle more faithfully. He explains that social institutions are phenomena that have not always existed but that they follow a process of birth. However, Menger's loyalty to Aristotle is not complete for, from an Aristotelian point of view, it is not correct to say, as Menger does, that instincts impel man to associate with others and to form a state. Rather, Aristotle says that house, village and *polis* have a natural origin. But natural does not mean instinctive since instincts are as natural to man as are voluntary acts. Acts concerning the *polis* are voluntary from an Aristotelian point of view. In addition, for Menger *polis* is the state, an identification with which Aristotle would strongly disagree. The modern state has little resemblance, it is openly different from the Aristotelian *polis*.

Given the fact that Menger's organism is not exactly Aristotelian, where could it come from? Menger clarifies this point in the Preface to *Investigations*:

"In the field of linguistic research, of political science, and of jurisprudence new orientations of research had come to prevail (...)

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¹¹² Menger-1883 [1985], p. 158, italics in Menger's text.

¹¹³ Nicomachean Ethics, V, 1-2.

¹¹⁴ Nicomachean Ethics, I, 2.

¹¹⁵ Cf. Menger-1883 [1985], p. 149 and Appendix VII.

¹¹⁶ Cf. Menger-1883 [1985], p. 222.

How obvious was the notion of applying these efforts to our field of knowledge!" 117

Summing up, we can conclude that although the understanding of their origin has similarities with Aristotle's position, Menger's conception of organic social institutions is not entirely Aristotelian. Actually, Aristotle only links the organic analogy to society a few times. Besides, even by disregarding this analogy, Menger's very idea of some institutions being originated as unintended consequences of individual actions does not properly correspond to Aristotle's conception about the same institutions.

5. Conclusion

Among historians of economic thought it is generally assumed, with good reasons, that Menger was an Aristotelian. This paper has raised doubts about the purity of his Aristotelianism. Three arguments against Menger's suggested Aristotelianism have been analysed. The first is that while for Aristotle economics is a practical science, for Menger it is a theoretical science. The second is that the Mengerian idea about the 'untestability' of the conclusions of theoretical research is not a tenet employed by Aristotle both in practical and natural theoretical science. Third, Menger explains some social institutions or phenomena in a way that, although making use of some Aristotelian concepts, is not fully Aristotelian.

The three objections against Menger's Aristotelianism here presented suggest that caution is needed when making such claims. Menger uses Aristotle's concepts; he knows Aristotle's philosophy, and he applies it to the social field. However, his knowledge does not have the precision of a professional philosopher. Although he commands Aristotle's language, he does not completely capture his spirit. This is evident in that Menger's failure to understand and interpret Aristotle does not stem from a deficient general knowledge of his thought, but from his ignorance of specific issues which an expert would know. Nevertheless, these shortcomings are important for they lead him to conclusions that are diametrically opposed to those of his philosophical mentor.

¹¹⁷ Menger-1883 [1985], p. 29. Here, he refers to authors he will quote in the rest of the books. Wilhelm von Humboldt on linguistics; E. Burke on Politics, Herbert Spencer, on the topic of ethics; and Fr. C. von Savigny, K. F. Eichhorn, B. G. Niebuhr and –before- G. Hugo and Justus Möser, on Law, Albert E. F. Schäffle, on the conception of society (for a thorough relation of authors quoted by Menger in *Investigations*, cf. Cubeddu-1985). They are all authors who belong to a new organicism. Alter-1982 and Alter-1990, points out the clear influence they exercised on Menger in this regard. Lawrence White indicates the same in the Introduction to the English version of Investigations used in this article (p. 8ff.). Yagi-1997, Meyer-1990 and Hutchison-1973 also agree.

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