Aristotle's Teachings for Contemporary Economics

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As I was educated in a Department of Economics with philosophical concerns and in a Department of Philosophy with a strong Aristotelian mark, Aristotle has been most present in my research in the field of philosophy of economics. My interest in delving into Aristotelian thinking about the economy has not been, however, a matter of archaeological concern. I have found in Aristotle what I consider smart insights and contributions for contemporary economics.

This alleged relevance of Aristotle for our times economics can be approached from two points of view expressed in the following two questions:

1. Is Aristotle present in today's economics? Or, do today economists base some of his ideas on Aristotle´s teachings? The answer entails an analysis of Aristotle's influence on some specific economists.
2. What could current economists learn from Aristotle? Or putting it in other ways, what could Aristotle add to economics? Or how could his ideas contribute to contemporary economics or help to overcome its deficiencies?

In respect to the first question, I have worked on the presence of Aristotle's ideas in Marx, the Austrians –especially Menger–, in Amartya Sen and in Nancy Cartwright (Crespo 2005; 2002 and 2003; 2008d and 2008e respectively). There is an extensive bibliography on this. Here I will not revisit these issues.

In respect to the second question, a complete answer supposes an exposition of an ontological analysis of 'the economic' according to Aristotle (Crespo 2006), of his notion of economics as science (Crespo 2008a), and of his possible teachings about the relationship between economics and epistemology, economics and ethics, and economics and politics (Crespo 2008b and 2008c). In this paper I aim to summarize the answers that I have offered to this second question in those scattered papers.[2] With this summary, I expect to provide a service to those concerned with Aristotle's contribution to current economics.

1. Enlarging the scope of *oikonomikè*

In his *Lives of the Philosophers*, Diogenes Laertius depicts an outline of Aristotle's life and work, characterizing him as a morally upright person. Diogenes transcribes Aristotle's testament where he expressed his last will in a detailed manner, caring of his relatives, and freeing his slaves. This worry about all of them reflects the non ethereal nature of his

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[2] To maintain a sensible length of the paper, I selected the most relevant topics. Crespo 1997 contains a longer, though incomplete, exposition of which other scholars have done more extensive work. Among them, I consider the best book to be by Scott Meikle (1995), although I have criticized it for its Marxist perspective in Crespo 2005 (and see also footnote 17 in this paper).

practical philosophy, firmly rooted and embedded in matter and time. Diogenes writes of Aristotle's teachings that "virtue was not sufficient of itself to confer happiness; for that it had also need of the goods of the body, and of the external goods." Hence, we should look after not only virtue but also these goods. According to Aristotle as quoted by Diogenes, "things which are ethical (…) concern politics, and economy, and laws."

In respect to economy, Aristotle uses the term *oikonomikè*, here translated as "the economic". However, a first point to be clarified about Aristotle's concept of "the economic" is that, strictly speaking, it differs from today Economics. At the beginning of an article on the Aristotelian notion of economy, Christian Rutten (1988, 289) notes:

> Firstly, "the economic" of Aristotle does not correspond at all with what in our times is called the economy. Secondly, this does not mean that we do not find in Aristotle (…) developments about the economic reality in the current today sense. Thirdly, this does not mean in advance that there is no relationship, in Aristotle's thought, between "the economic", on the one hand, and production, distribution and consumption of material goods, on the other hand.

In effect, though Aristotle was not an economist, I consider that he offers basic ideas about economics and its relationship with Ethics and Politics.

To extract these teachings, we must first untie a terminological knot that strictly links Aristotle's *oikonomike* to a specific community, the household. Then, once untied, a rich conception contributing to Economics emerges. Thus, the relevance of Aristotle's thought for economics stems from "actualizing" its hidden "potency". A faithful reading of the economic passages of the *Politics* (specially Book I, Chapters 3-13) and of the *Nicomachean Ethics* (in particular Book V, Chapter 5) captures Aristotle's exposition of the ways of managing the household, including the members of the family, the slaves and the material possessions. However, it is possible –and I think that not unfaithful– to derive relevant concepts and teachings for the present days economics. Here I will leave out the relationship between the husband-father-master and the other members of the household, and I will concentrate on what is of interest to us, the relationship with the possessions.

In reference to this last sense, Aristotle deals with the economic together with a related technique, chrematistics. Chrematistics, Aristotle asserts, "is a form of acquisition which the manager of a household must either find ready to hand, or himself provide and arrange, because it ensures a supply of objects, necessary for life and useful to the association of the polis or the household" (*Politics* I, 8, 1256b 26-30).[3] That is, chrematistics is a technique which serves both *oikonomikè* and *politikè*. Given that the former deals with the house and the latter with the *polis*, the expression "political economy" would be for Aristotle, as Barker or Arendt maintain, a contradiction in terms.[4] However, regardless of the terms adopted, the criteria proposed by Aristotle for using properties in the house and in the *polis* are the same.

[3] Cf. also *Politics* I, 10, 1258a 19-21 and I, 11, 1259a 33-6.
[4] See Barker (1959: 357) and Arendt (1959: 28).

Besides, could we find any indication in Aristotle's thought about current Political Economy? Chrematistics is not the right place to look for this because it would correspond to contemporary production, commerce and finances, not to the economy. In the Aristotelian thought the tasks of Political Economy are included in Politics, and not only regarding those actions concerning the "necessary" or the "useful" for the *polis*, but also the activities of "the economic" related to the *polis* performed by the owner of the house. The thus emerging set of teachings about how to use the possessions in the house and the polis would then constitute an enlarged re-elaborated notion of "the economic" according to Aristotle. It would deal not only with the house, the life (simply life) and necessity, but also with the *polis*, with what is useful and free, and with the good life and happiness. I consider, then, that we can untangle the terminological knot: Hence, here I will integrate in the term *oikonomikè* the use of wealth regarding the household as well as the civil community.

2. Aristotle on "the economic" ontology, what is Aristotle's *oikonomikè*?

Oikonomikè is the Greek adjective usually used by Aristotle to refer to anything related to the use of wealth. He does not use it with corresponding nouns. Thus, it is in fact a substantivated adjective. What is the meaning of this thing called 'the economic'? What kind of reality is it? I have sustained (2006) that it is an analogical or "homonymous *pròs hén*" term. To argue for this I will turn both to explicit quotations of Aristotle and to the application of other elements of his system to this topic. Homonymous *pròs hén* terms have different though related meanings, one of which is the "focal" or primary meaning to which the other, derivative meanings, refer and are connected.[5] What are these different meanings?

2.1. A human action:

Let us begin with the focal meaning. It is likely that the focal meaning of 'the economic' for Aristotle will be found precisely in his definition of the economic. We will confirm this hypothesis when we compare it with other entities he also calls "economic". As already mentioned, Aristotle deals with *oikonomikè* together with *chrematistikè*. *Oikonomikè* is the use of wealth, while *chrematistikè* is the acquisition of wealth. "To use" is a human action, the action of using wealth. In the *Nicomachean Ethics* (I, 1, 1094a 9) he asserts that the end of *oikonomikè* is using wealth. However, the finality of this use does not point to unlimited wealth, but to the wealth necessary to live at all (*zên haplos*) and to live well (*eû zên*) (*Politics* I, 4, 1253b 24-5).

Aristotle also considers chrematistics as human action: a technique that ought to be subordinated to *oikonomikè*, dealing with the acquisition of things used by *oikonomikè*.

[5] I decided to use the expression "homonymy *pròs hén*" (that is, "*homonimia ad unum*" or "homonymous in relation with one thing"), to clearly distinguish this concrete use of the term homonymy by Aristotle from other ways in which he himself uses it. It would lead us too far from the objective of this research to describe those different uses and to completely justify this decision. I am following Joseph Moreau's suggestion (1962: 83). The expression "focal meaning" was felicitously coined by G. E. L. Owen (1960).

However, he distinguishes between two kinds of chrematistics: one actually subordinated to *oikonomikè*, limited and natural, and another unnatural in that it is actually not subordinated to *oikonomikè* and it looks unlimitedly for money. Concerning the latter he affirms: "this second form [leads] to the opinion that there is no limit to wealth and property" (*Politics* I, 9, 1257a 1). He calls it "justly censured" (*Politics* I, 10, 1258b 1).

Thus, completing the definition, for Aristotle, *oikonomikè* is the action of using the things that are necessary for life (*live at all*) and for the *Good Life* (*live well*). When Aristotle speaks about "life at all" he is referring to what is achieved at home (*oikos*). When he talks about the *Good Life* he is referring to what is attainable in the *polis*, and it is the end of the civil community. According to him, the latter concept of life has a precise moral meaning; it is a life of virtues by which humans achieve happiness.

What kind of action is 'the economic'? In the *Metaphysics*, Aristotle distinguishes between two kinds of human actions. Firstly, *immanent* actions, that is, actions which end is the action itself such as seeing, thinking or living. The results of immanent actions remain in the agent. Secondly, *transitive* actions where the "result is something apart from the exercise, (and thus) the actuality is in the thing that is being made" (*Metaphysics* IX, 8, 1050a 30-1). Transitive actions are actions the results of which transcend the agent and are something different from the agent, as in a product. Aristotle calls immanent action *prâxis* and transitive action *poíesis* (*Nicomachean Ethics* VI, 4, 1140a 1). All actions are both immanent and transitive except in the case of a fully immanent action (to think, to love). For example, when somebody works, there are two results, an 'objective' result, such as the product or service (transitive), and a 'subjective' result such as the increase in ability or the self-fulfilment of the agent as well as the morality of the act (immanent). For Aristotle, this latter –the immanent aspect– is the most relevant. It is the one sought for its own sake, not for any subsequent end. Aristotle says, "we call that which is in itself worthy of pursuit more complete than that which is worthy of pursuit for the sake of something else" (*Nicomachean Ethics* I, 7, 1097a 30-1). That is, Aristotle attributes more relevance to the intrinsic or immanent aspect of action –that which is in itself worthy of pursuit– because it is the aspect whose end is the very fulfilment or perfection of the agent. For him the external aspect of action is simply instrumental.

Oikonomikè is the action of using, in Greek, *chresasthai.* What kind of action, immanent or transitive, is *chresasthai*? "To *use*" is a transitive action insofar as the thing used is consumed or wasted when used. However, the complete action of *oikonomikè* is to use what is necessary to satisfy the agent's requirements to live well: this is the immanent consideration of use because it is using for the sake of the proper perfection, while the action of *chrematistikè* is clearly transitive.[6]

[6] *To chresasthai* is the 'substantivation' of the Greek verb *chráo* in its 'middle voice' infinitive aorist form. The middle voice has a reflexive use that is coherent with this possible predominant sense of *prâxis* of *chresasthai*. The French and Spanish translations show this characteristic: "se server" (French)/ "procurarse de," "servirse de" (Spanish). *Chresoméne*, another form used by Aristotle to signify the action of *oikonomikè* is another form of *chráo*, a future middle participle that indicates finality.

Action belongs to the metaphysical category of action: *Categories* IX. Human action –*praxis*– is the most perfect 'sub-lunar' way of being of actuality or *energeía* (cf. *Metaphysics* IX, 6). Humans try to achieve perfection through action. This is one reason why *oikonomikè* is a typically human entity. Previous activities needed to act –i.e., deliberation and choice– are qualities of the mind and the will. The use of wealth is a kind of human action. As previously mentioned, it has both an immanent and a transitive character. Human actions are voluntary and intentional. They do not only happen to humans, as if they were something alien and presupposed previous activities in the same person. Some of these activities are intellectual –knowledge, belief–, and others are volitional –will, choice and decision. Aristotle considers deliberation of mind (*bouleúesthai*) and choice of will (*proaíresis*) as the previously required acts preceding action. Capacity, habit and science facilitate these previous steps. In sum, economic action is, for Aristotle, the action of using the things necessary to live and to live well (in a moral sense). I add that it is a subjective action, because each person judges what is necessary for himself.

2.2. A capacity

Aristotle says: "(…) and we see even the most highly esteemed of capacities to fall under this [Politics], for example, strategy, economics (*oikonomikèn*), rhetoric" (*Nicomachean Ethics*, I, 2, 1094b 1-2). That is, he also considers *oikonomikè* as a capacity, an ability, or power; in this case, a power to perform economic actions.[7] *Oikonomikè* as capacity is a derived sense of *oikonomikè*, because the capacity of using exists for the sake of the action of using. Given that capacities are defined by their ends or functions (*De Anima* II, 4, 415a 16-21), these ends are ontologically prior to the very capacities and correspond to the focal meaning in a case of an analogical term such as *oikonomikè*. "The excellence of a thing is relative to its proper function," says Aristotle (*Nicomachean Ethics* VI, 2, 1139a 17).

Capacity (*dýnamis*), to have a power ("a source of movement or change": *Metaphysics* V, 12, 1019a 15) is a quality. Capacities, for Aristotle, are natural (*physikes*) (*Categories* VIII 9a 14ff.). A capacity is an ability, potentiality, power or talent possessed, in this case, by a human person. Human nature is equipped with some innate capacities that require development and with others that are acquired. *Oikonomikè* is one of these, probably innate but with broad possibilities for development.

2.3. A habit

[7] *Oikonomikè* being a capacity may explain why it is often translated as "an art of household management." Jowett and Barker translate *oikonomikè* in this way. Ross also speaks about the art of economics (*Nicomachean Ethics* I, 1). However, this translation is not coherent: if *oikonomikè* 'uses', whereas *chrematistikè* 'produces', it is clear that the latter is an art or technique, but not the former, since an art indicates the habit of production (cf. *Nicomachean Ethics* VI, 4), and *oikonomikè* does not produce but uses. Vattimo (1961: 64 ff.) has shown that art – *téchne* – has two senses for Aristotle. The most employed is the one explained above. However, Aristotle also uses the term *téchne* as *dynamis* – capacity or general principle of human actions – in the *Physics* and other workings. Thus *oikonomikè* is an art in the sense of capacity. Besides, the Greek suffix 'ik' means capacity.

It seems reasonable that if *oikonomikè* is both an action and the capacity to perform this action, it also engenders a habit that facilitates it. For Aristotle, habits rely on natural dispositions and are propelled and reinforced by education and law. The very repetition of the action also consolidates the habit thus constituting a kind of virtuous circle: actions-habit-actions. It also makes sense to find that *oikonomikè* is a habit that facilitates the immanent aspect of action –not a *téchne*– i.e. a habit of production. In effect, Aristotle speaks about household management as a kind of prudence, which in the Aristotelian conception mainly reinforces the immanent proficiency of the human being (*Nicomachean Ethics* VI, 8; cf. also *Eudemian Ethics* I, 8, 1218b 13). *Oikonomikè* as a kind of habit is another derived sense of *oikonomikè*. The same argument set out above about *oikonomikè* as capacity being a derived meaning, applies in this case: the focal meaning, to which this derived meaning is oriented, is the proper object of the habit, that is, the corresponding action. *Oikonomikè* as a kind of habit helps the performance of *oikonomikè* as the action of using necessary things for living well. It is also clear that *chrematistiké* is a technique which is a habit of production for Aristotle (cf. *Politics* I, 9 and 10, *passim*; e.g., 1257b 7).

As action and capacity, habit (*héxis*) is ontologically a quality, a "having" (*Metaphysics*, V, 20). Habits are more lasting and stable qualities than dispositions. Virtue (*areté*) is a quality also belonging to the sub-type of habit (*Categories* VIII 8b 34-5). Virtues are built on a natural disposition through repetition of actions. A habit is an acquired behaviour pattern regularly followed until it has become almost involuntary, dominant or regular disposition or tendency.

Habits are fundamental to human life. We cannot leave everything always subject to decision thus becoming psychologically ill; we need habits in order to structure behaviour in daily life. Personality is shaped by acquiring habits through the repetition of acts. They constitute a person's "second nature". Given that habits are determined by actions and that actions are free, they may differ from person to person. Hence, habits are accidental and they are also contingent.

2.4. A science

This last sense of *oikonomikè* moves closer than the former to today's meaning of the term economics: *oikonomikè* as science. At the very beginning of the *Nicomachean Ethics* Aristotle states (I, 2, 1094b 4-6) that Politics:

> ordains which of the sciences should be studied in a state (…) and we see even the most highly esteemed of capacities fall under this, e.g., strategy, economics, rhetoric; now since politics uses the rest of the sciences, and since, again, it legislates as to what we are to do and what we are to abstain from, the end of this science must include those of the others, so that this end must be the good for man.

There is even a terminological similarity between Politics (*politike*) and *oikonomikè* that is worth pointing out. Let us hear from Ernest Barker's commentary on Aristotle's *Politics* (pp. 354-5):

> ‘Politics’ in the Greek is an adjectival form –as if we should say ‘the political’. What is the noun which it implies? Strictly, it is the noun ‘science’ (*episteme*). But sciences may be, in Aristotle’s view, practical as well as theoretical, and since the science of politics is largely practical, we may say that ‘the political’ implies the noun ‘art’ or ‘capacity’ (*techne* or *dynamis*) no less than it implies the noun ‘science’. In a word, it implies both. ‘Politics’ is the scientific study of the *polis*, and of all things political, with a view to political action or the proper exercise of the political ‘art’.

As previously remarked, *oikonomikè* is a Greek adjective. Taking into account the whole context of the treatment of *oikonomikè* in the *Politics*, Aristotelian scholars have usually interpreted this passage in the sense of Economics as a practical science (see, for example Reeve 2006: 206, Natali 1980: 117, Berti 1992: 89, Newman 1951: 133 and Miller 1995: 6-11). Aristotle distinguishes among theoretical, practical and *poietical* (or technical) sciences. For him the subject of practical sciences is the immanent aspect of human actions and the subject of technical (or *poietical*) sciences is the transitive aspect of those human actions. Politics is the “most architectonical” Aristotelian practical science. Given that “the economic” action has a relevant immanent aspect, *oikonomikè* is also a practical science for Aristotle.

This last meaning of *oikonomikè* as practical science is analogical in respect to ‘economic’ human action. Although a practical science, science for Aristotle is quite different from action and from practical wisdom (prudence): “practical wisdom (*phrónesis*) cannot be science (*epistéme*)” (*Nicomachean Ethics* VI, 5, 1140b 2).

Ontologically, knowledge and science are habits which are a kind of quality (*Categories* VIII, 8b 29-33). As a practical science ‘the economic’ is not exact: the truth of the practical is not fixed.

2.5. Some consequences stemming from the categorial analysis

All the entities qualified by the adjective *oikonomikè* –action, capacity, habit and science– are ontologically accidents. They inhere or ‘happen’ to human beings. Thus, they do not happen in isolation. That is why the economic aspect of an action is merged with other aspects –cultural, historical, geographical, singular– pertaining to the acting substance (i.e. the person, the society, and the environment). Within the human realm all these aspects mutually influence each other following a dynamic process: one aspect cannot be completely isolated from the others.

Second, if ‘the economic’ were a contingent accident we should be immersed in a completely unmanageable realm. Instead, the economic, as defined by Aristotle, though accident, is a necessary human condition: they all need to use things to live and they are all called on to live well. For Aristotle man is not only *zoôn politikòn* (e.g. *Politics*, I, 2, 1253a 3-4) but also *zoôn oikonomikòn* (*Eudemian Ethics*, VII, 10, 1242a 22-3). To be economic is necessary for man. Therefore, this is an appropriate subject-matter for science. However, the specific way of satisfying the individuals’ needs is left to their choice or taste; i.e., it is not *a priori* determined.

Third, this accidental subject matter of the economic practical science entails a kind of "living science", where the principles are few and most of the scientific conclusions are variable according to the cases (cf. Cartwright 2007: 54).

Finally, given the previous conclusions, there are several reasons why institutions matter greatly in the economic realm. Institutions both embody and reinforce steady habits. That is, there are two directions of analysis: on the one hand, how habits shape institutions, and on the other, how institutions encourage habits. Concerning the first direction, habits, especially good habits, make actions more predictable, and thus facilitate the consolidation of institutions. In the other way, institutions foster habits, for they reinforce the realisation of determined acts through rewards and punishments. According to Aristotle, the main means of fostering these actions are education and law. Firstly, education, in the broad Greek sense of *paideia*, is the shaping of personal character. This is why "it makes no small difference, then, whether we form habits of one kind or of another from our very youth" (*Nicomachean Ethics*, II, 1, 1103b 24). Secondly, law bears a pedagogical objective (cf. *Nicomachean Ethics*, X, 9, 1179b 31 – 1180a 4). Aristotle understands that a set of concrete virtues leads humans to their natural excellence. This process begins with the education of those virtues, conveniently consolidated by laws.

There are two reasons why this presence of institutions is relevant. Firstly, they are relevant for the very possibility of economic science. As explained, practical sciences (and Economics within them) may make generalizations and predictions thanks to the repetition of acts. Institutions help in the consolidation of habits. Secondly, predictability and institutions facilitate economic coordination. Coordination is possible when acts are foreseeable. Thus we can conclude in an Aristotelian minded spirit that economic coordination is more easily achievable and economic science can more accurately postulate generalizations within a highly institutionalized environment.

Arduous as it may seem, this explanation of *oikonomikè* will be more than useful if we intend to extract the greatest possible profit from Aristotle's conception. Let us proceed to some ethical, political and epistemological consequences of this ontological analysis.

3. Ethical consequences of Aristotle's oikonomikè

I have contended that one of the meanings of 'the economic' is a habit. Given that 'the economic' action is oriented towards the good, 'the economic' as a habit is a virtuous habit, i.e., economic prudence. In fact, however, there is a constellation of virtues that helps to perform suitable economic actions. Although Aristotle does not explicitly establish all the developments of this article, they can be regarded as Aristotelian.

First, *oikonomikè* requires temperance. "How can the ruler rule properly, or the subject be properly ruled, unless they are both temperate and just (*sóphron kai díkaios*)?" Aristotle asks (*Politics* I, 13, 1259b 39-40). I have stated that Aristotle distinguished between two kinds of chrematistics: the one subordinated to *oikonomikè*, limited and natural, and the other unnatural and not subordinated to *oikonomikè*. Both forms of chrematistics use money

as an instrument. What happens is that the instrument and the means are often confused, due to their unlimited (*ápeiron*) desire (*epithumías*), and thus they look unlimitedly for money (cf. *Politics* I, 8, 1258a 1). This mistaken kind of chrematistics infects other behaviours, leading to the use of

> each and every capacity in a way non consonant with its nature. The proper function of courage, for example, is not to produce money but to give confidence. The same is true of military and medical ability: neither has the function of producing money: the one has the function of producing victory, and the other that of producing health. But those of whom we are speaking turn all such capacities into forms of the art of acquisition, as though to make money were the one aim and everything else must contribute to that aim (*Politics* I, 9, 1258a 6-14).

This sounds really contemporary. The medicine to cure the unlimited appetite is precisely virtue or, more specifically, temperance. This interpretation of Aristotle is more coincident to William Kern's view (1983 and 1985) than to Stephen Pack's (1985). While Kern considers that unnatural chrematistics stem from unlimited desires, Pack thinks the other way round: money and unnatural chrematistics cause unlimited desires. My argument in support of Kern's interpretation is that it is literally borne by Aristotle: "as their desires are unlimited, they also desire the means of gratifying them should be without limit" (*Politics* I, 9, 1258a 1-2).

Second, *oikonomikè* also requires prudence and justice. Let us put forth an example provided by Aristotle. He analysed the functioning of the market in the *Nicomachean Ethics* (V, 5). He concluded that the tenet ruling demand, and therefore prices and wages, is *chreia*, which means economic need. *Chreia* is subjective and intrinsically moral. It is subjective because each person judges what is necessary for himself. There is another Greek term for necessity, *anagke*, also used by Aristotle in other contexts. *Anagke* is strict necessity (as, for example, it is necessary that an effect has one or more causes). However, *chreia* is relative necessity: in order to survive, it is necessary to eat, but one may eat one thing or another, according to any timetable, and so on. Referring to *oikonomikè*, *chreia* means that the way of using necessities is not determined *a priori*, but it is up to each one's will, with an eye on the end to be achieved. These developments on economic exchange belong to Aristotle's writing about Justice (*Nicomachean Ethics* V) and are a typical example of practical reasoning. What virtues are needed in this process? First, prudence or practical wisdom –an intellectual and ethical virtue– in order to accurately assess the real situation and the real necessity of the things demanded: the suitable *chreia*. Second, Justice which helps to act as indicated by prudence. If market relations are regulated by justice there are no commercial vices. People who are strongly committed to justice are not free-riders.

Third, *oikonomikè* needs continence, a virtue related to fortitude. According to Aristotle, the reason we need *oikonomikè* is that "it is impossible to live well, or indeed to live at all, unless the necessary conditions are present" (*Politics* I, 4, 1253b 25), and "it is therefore the greatest of blessings for a state that its members should possess a moderate and adequate fortune" (*Politics* IV, 11, 1296a 1). Happiness is an activity conforming to virtue, and "still, happiness, [...] needs external goods as well. For it is impossible or at least not easy to

perform noble actions if one lacks the wherewithal" (*Nicomachean Ethics* I, 8, 1099a 31-3). Then, though not expressly stated by Aristotle, chrematistics and economic action should assure that everybody succeeds in possessing what they need to achieve the *Good Life*. This goal has various aspects in which the virtues previously mentioned collaborate in easing coordination. This is another aspect of the economic life that calls for continence. One of the problems of economics is that of facing uncertainty. In this sense, continence contributes to making future affairs more predictable. There are higher chances of habits begetting stable behaviour when they are morally good (virtues). According to Aristotle, the incontinent person is unpredictable, while the continent one is more predictable because he or she perseveres:

> A morally weak person does not abide by the dictates of reason (*Nicomachean Ethics* VII, 9, 1151b 25-7). A morally strong person remains more steadfast and a morally weak person less steadfast than the capacity of most men permits (*Nicomachean Ethics* VII, 10, 1152a 26-7).

Thus, the probability of economic coordination is greater among virtuous people for their stable character and conduct can be foreseen. Coordination is easier within a group of people who possess an ethical commitment and a common *ethos*.

Virtues foster the economic process in other ways. Aristotle devoted the largest part of his *Nicomachean Ethics* (Books VIII and IX) to friendship. This virtue, site of social cohesion, supplements justice. In fact, justice is not necessary among friends. Liberality or generosity (Book IV, 1) also helps to overcome the problems of disequilibrium, through individual or collective action. In an imperfect world, virtues help reduce error and act as a balm. They foster coordination and reduce problems during coordination adjustments.

To summarize, I propose that an Aristotelian conception teaches that we must take more care in promoting the development of personal virtues than in building perfect systems.[8] As an accident, the best we can do to perform the economic action is to consolidate it by

[8] It could be appropriate to add a few words about the gender perspective in this section. In her introduction to *Feminist Interpretations of Aristotle*, Cynthia Freeland (1993: 15) asserts "it is no longer acceptable to read Aristotle's works while ignoring issues of gender." Aristotle has been criticized for relegating women to a secondary position, specifically to the area of the household, because of his patriarchal bias. For him, man's virtue is to command and woman's virtue entails obeying (*Politics* I, 13, 1260a 23-4). However, it has been highlighted, in Aristotle's defence, that he considers man and woman to have the same essence, to be specifically equal (Deslauriers 1993: 139) and to both be citizens (*Politics* I, 13, 1260b 19; II, 9, 1269b15) oriented towards the ends of life (*Nicomachean Ethics* VIII, 12, 1162a 21-2). The differences between men and women remarked on by Aristotle lie in their functions (*erga*) in the house (*Nicomachean Ethics* VIII, 12, 1162a 22) – in other words, a gender division of labour. For some authors, they stem from 'an unreflective belief' (Deslauriers 1993: 159) based on sociological observation (Hirshman 1993: 229). Other authors suggest that feminist theories may profit from updating Aristotle's ideas. Ruth Groenhout (1993) notes that the ethics of care may be fruitfully complemented by Aristotle's ethics. Irene van Staveren (1999) applies this ethics to economics. Martha Nussbaum's work highlights not only Aristotle's contribution to feminism, but also to a required new conception of economics, for Aristotle 'insists on an exhaustive scrutiny of all existing distributions and preferences in the name of the basic needs all human beings have for functioning' (1993: 249).

virtues. This lesson calls for returning to a greater emphasis on education in virtues and on observance of law. This is an important aspect of economic policy in an Aristotelian spirit.

4. Political and economic policy consequences

Aristotle was neither a political economist nor did he develop concrete policy proposals at length.[9] However, in this section general lessons and meaningful criteria relevant to this field are presented by means of a combination of his more general teachings.

Virtues, for Aristotle, are always political: they can only be developed and consolidated within the interaction of community. Thus *oikonomikè* as virtue is embedded in a political environment. Coordination would be guaranteed if, first, there is a set of socially recognized values and, second, if the individual actions are aimed at these ends. Prudence helps to perform these requirements. Knowledge of these shared social values is a matter of Politics, the most architectonical Aristotelian practical science.

Let me further explore this issue beginning with the Aristotelian concept of civil society. "The polis," he says, "is an association (*koinonía*) of freemen" (*Politics* III, 6, 1279a 16).[10] For him, the *polis* is a unity of families. What kind of entity is a unity of families? Ontologically, the Aristotelian *polis* is an order of relationships between human actions, i.e., an ordered relation (a *prós ti*). The order is given by the fact that these actions aim at a common goal, a shared thought and intention of those people. The foundation of this order of relations between families that constitutes a polis is the orientation of their actions towards an end:

> It is clear, therefore, that a polis is not an association for residence on a common site, or for the sake of preventing mutual injustice and easing exchange. These are indeed conditions which must be present before a polis can exist; but the existence of all these conditions is not enough, in itself, to constitute a polis. What constitutes a polis is an association of households and clans in a good life (*eû zên*), for the sake of attaining a perfect and self-sufficing existence (*autárkous*)" (*Politics* III, IX, 1280b 29-35).

That is, exchange and the consequent possibility of possessing the goods that are necessary when looking for a Good Life, is a condition of a *polis*. In this way, the end of the *polis* subsumes the end of *oikonoimiké* as action. For Aristotle, Politics as the practice and

[9] However, in some passages he deals with concrete tasks of economic policy. For example, in *Rhetoric* I, 4 he considers within the duties of politicians to know about fiscal revenues and exports and imports, food supply, and commercial treatments. In *Politics* VI, 5 he speaks about taxes, revenues and ways of distribution in order to ensure a permanent level of prosperity and that the masses are not excessively poor. However, he prefers an indirect way: "It is more necessary to equalize men's desires than their properties; and that is a result which cannot be achieved unless men are adequately trained by the influence of laws" (Politics II, 7, 1266b 28-30).

[10] As John Finnis poses it, "The reality of a community is the reality of an order of human, truly personal acts, an order brought into being and maintained by the choices (and dispositions to choose, and responses to choices) of persons" (1989: 271).

science of Good Life is itself morality, and *oikonomikè* is an action and science subordinated to it. At the same time, however, *oikonomikè* is a condition of society's unity. Aristotle's autarky is not an economic concept; it does not essentially mean economic independence, but the possibility of self-sufficiently achieving a Good or fulfilled Life: autarky is happiness.[11] However, personal and political autarchy has also material components only achievable through interaction. As a consequence which is not explicitly formulated by Aristotle, the exchange interaction cannot work well outside political society without falling into "censured chrematistics". Good functioning of market does not develop in a vacuum but in political society.[12] This approach resembles current positions about the necessity of moral ties to ensure a correct performance of the market.[13] It also assumes that the economy is a social reality.[14]

Ontologically, the market seems also to be an accidental reality, a net or order of relations – of buyers and sellers, people who exchange. The order or unity comes from the coincidence of wills willing to buy or sell in order to satisfy their needs and this coincidence is facilitated by prices.

For Aristotle, both society and exchange are natural in the sense that they are institutions demanded by human nature to achieve its natural fulfilment. As already noted, according to Aristotle men are both *zoôn politikòn* (e.g. *Politics* I, 2, 1253a 3-4) and *zoôn oikonomikòn* (*Eudemian Ethics* VII, 10, 1242a 22-3). However, for Aristotle the natural in the human realm is not merely 'spontaneous' or 'automatic'. *Polis* and exchange are tasks that are to be performed with effort, not facts. This does not mean that some institutions cannot arise that facilitate this performance and work quite automatically.[15] Precisely, the task of Politics and Economics is to find out and to shape these institutions which foster the suitable habits dealing with economic coordination. In any case, as previously stated, provided that one goal of these institutions is to shape habits, the very institutions are like empty structures to be filled. This goal highlights the relevance of paying special attention to their efficacy in promoting good habits (virtues). This is one important political lesson from the Aristotelian conception of *oikonomikè* and *politikè*.

Another lesson, more specific for economic policy, has to do with the involvement with ends. In the Aristotelian conception of *oikonomikè* ends are not given (as in standard

[11] On this, see Barker's commentary (in Aristotle 1958: 8) and *Nicomachean Ethics* I, 7, 1097b 15-7. See also C. C. W. Taylor (1995: 237). Consequently, Aristotle's concept of self-sufficiency or autarky does not necessarily rule out international trade.

[12] As Gudeman poses, "Markets never exist 'outside' a cultural and social context" (2001: 94).

[13] Bruce Caldwell affirms: "It seems clear that the existence of a 'certain moral climate' is indeed a necessary condition for an economy to be able to function adequately" (1993); and Irene van Staveren says: "Smith, Mill and Taylor, Marx, Reid and Perkins Gilman knew very well that free exchange does not function without justice, nor without care" (1999: 73). Cf. also Luigino Bruni and Robert Sugden (2000).

[14] Finnis says: "Things will be better for everyone if there is a division of labour between families, specialization, technology, joint of co-operative enterprises in production and marketing, a market and a medium of exchange, in short, an economy that is more than domestic" (1980: 145). Gudeman sees the relationship between people as mediated by things as the stuff of economy (cf. 2001: 147).

[15] As Finnis also asserts "now such relationships in part are, and in part are not, the outcome of human intelligence, practical reasonableness, and effort" (1980: 136).

economics), but really matter: they are the goal of *oikonomikè* and cannot be avoided. The problem which arises in dealing with ends is incommensurability. Often, in the realm of ends there is not a common measure allowing a precise calculation of the optimal selection. Aristotle argues against Plato's monistic conception of the good: "of honour, wisdom, and pleasure, just in respect of their goodness, the accounts are distinct and diverse. The good, therefore, is not some common element answering to one Idea" (*Nicomachean Ethics* I, 6, 1096b 22-5, cf. also *Politics* III, 12, 1283a 1ff.).[16] This may be solved by practical wisdom and practical science but may not be solved technically. There is a kind of "practical comparability" that enables decisions in fields where calculus does not apply. In this area, economists, although enlightened by calculations, should make the final decision on prudential grounds (see Crespo 2007). The benefits of some decisions of political economy cannot be calculated since they are intangible and incommensurable. For example, the so-called "second generation reforms" are highly relevant, independently of their low or uncertain return rate.

This problem does not arise in the technical field. This domain can be subjected to a cost-benefit analysis. Even though some ends are priceless –goodness, beauty, friendship–, some others may be priced and made commensurate through prices. Aristotle himself did it: "things that are exchanged must be somehow comparable. It is for this end that money has been introduced, and it becomes in a sense an intermediate; for it measures all things, and therefore the excess and the defect –how many shoes are equal to a house" (*Nicomachean Ethics*, V, 5, 1133a 20ff.). Aristotle then highlights that money is the representative of demand (*chreia*) through price. A tension however remains: "Now in truth it is impossible that things differing so much should become commensurate, but with reference to demand they may become so sufficiently,"[17] in order to exchange them, we may add. This is

[16] Authors following Aristotle on this are, for example, Kolnai 2001, Nussbaum 2001, Finnis 1980: V.6, Raz 1986: Chapter 13, Richardson 1997, Taylor 1982 and 1987.

[17] *Nicomachean Ethics* V, 5, 1133b 1-3. I do not agree with S. Meikle's interpretation (1995: 39) which follows the Marxian. Marx quotes Aristotle's *Nicomachean Ethics* in this passage: "neither would there have been association if there were not exchange, nor exchange if there were not equality, nor equality if there were not commensurability" (*ουτ ισοτεσ με ουσεσ συμμετριασ*). Here, however, he [Aristotle] comes to a stop, and gives up the further analysis of the form of value. "It is, however, in reality, impossible (*τε μεν ουν αλετηεια αδυνατον*), that such unlike things can be commensurable" – *i.e.*, qualitatively equal. Such an equalisation can only be something foreign to their real nature, consequently only "a makeshift for practical purposes." (*The Capital* I, I, 3, 3). That is, Marx considers that Aristotle would have weakly conceded what he ought not to concede. The mistake arises from an imperfect translation. Marx put into brackets the Greek version of the part of the passage well translated. But he does not do it with the last part, which is incorrectly translated. Aristotle did not say "a makeshift for practical purposes", rather "but with reference to demand they may become so sufficiently" (*προσ δε τεν χρειαν ενδεχεται ικανεσ*: V, 5, 1133b 31). In this way, both Marx and Meikle rely on Aristotle to maintain an intrinsic problem of the exchange system that necessarily leads to a practice of the censured chrematistics. According to Aristotle, the reason why this chrematistics arises is not the exchange value but the unlimited desire. If things exchanged are qualitatively different and incommensurable, what is, according to Aristotle, the unit of analysis or commonalty that enables things to be compared? It is the necessity (*chreia*) of the goods exchanged for the demander. Although in many passages of the *Metaphysics* and *Physics* Aristotle claims that measurement requires homogeneity, in the *Categories* he considers the possibility of measure and commensurate qualities by degrees (see, e.g., VIII, 10b 26). The resulting commensuration between the things so measured, he warns, has limits and is conventional (see, e.g., VI, 5b 11 and 8, 10b 13). Thus, it can be applied – with limits – to things exchanged through necessity. Instead, it cannot be applied to different ends because ends differ in more

certainly possible, but when different priceless goods are in play commensuration becomes impossible. In these cases strict formal schemes ought to be broken and decisions taken with a higher risk or inexactly.

5. Epistemological lessons

At this stage we should be convinced that from an Aristotelian point of view economic science is a practical science that may originate generalisations relying on tendencies. These generalisations cannot be exact because tendencies may fail due to the contingency and singularity of the human realm. We may face unforeseeable reactions by free human beings to known facts, unforeseeable facts that cause foreseeable or non-human reactions. The essentials are only a few and thus we are in an accidental realm which is often unpredictable. As already explained, the way of providing security is by strengthening habits. Trustworthy institutions, social and political stability, and personal virtues (which are at the root of the former elements) are highly relevant for a thorough economic analysis. Consequently, ethics and politics matter. Economic analysis cannot be developed in a social or personal vacuum.

All the characteristics of practical science should be taken into account: inexactness, practical aim, closeness to reality, normativeness and a methodological pluralism. These characteristics suppose a quite different economic science; such new science is submerged in ethics and politics. This does not mean that rigorousness is left out when the nature of the decision enables a cost-benefit analysis. This technical analysis will however remain under the umbrella of practical science. Let us briefly review those characteristics of practical science. First, inexactness. He asserts in the *Nicomachean Ethics*:

> Our treatment discussion will be adequate if it has as much clearness as the subject-matter admits of; for precision is not to be sought for alike in all discussions (…) Now fine and just actions, which political science investigates, exhibit much *variety and fluctuation* (...). We must be content, then, in speaking of such subjects and with such premises to indicate the truth *roughly and in outline* (*Nicomachean Ethics* I, 3, 1094b 11-27, emphasis added).

Aristotle identifies two reasons for this 'inexactness' of practical sciences: "variety and fluctuation" of actions. That is, there are lots of possible different situations and the human being may change his decisions. This is why for Aristotle human action is always singular. He says:

> We must, however, not only make this *general statement*, but also apply it to the individual facts. For among statements about conduct those which are general apply more widely, but those *which are particular are more true*, since conduct has to do

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than degrees of quality. The difference between ends is analogical, of "priority and posteriority" (*προτερον και υστερον*), and cannot be measured for there is not a common measure (see, e.g., *Nicomachean Ethics* I, 6, 1096b 18-25).

> with *individual* cases, and our statements must harmonize with the facts in these cases (*Nicomachean Ethics*, II, 7, 1107a 31-3, emphasis added).

And also,

> (...) actions are in the class of *particulars*, and the particular acts here are voluntary. What sort of things are to be chosen, and in return for what, it is not easy to state; for there are many differences in the *particular* cases (*Nicomachean Ethics*, III, 1, 1110b 6-8, emphasis added).

Aristotle often compares Politics with medicine in this respect, as in the next quotation:

> matters concerned with conduct and questions about what is good for us have no fixity, any more than matters of health. The general account being of this nature, the account of particular cases is yet more lacking in exactness; for they do not fall under any art or set of precept, but the agents themselves must in each case consider what is appropriate to the occasion, as happens also in the art of medicine or of navigation (*Nicomachean Ethics* II, 2, 1104a 4-9).

Second, practical science must be closely linked to the concrete case. "Now no doubt," Aristotle says, "it is proper to start from the known. However, '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" (*Nicomachean Ethics*: I, 4, 1095b 2-4). That is, we must start from the facts manifest on the surface to discover the causes.

Third, 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." (*NE* I, 3, 1095a 6) and that "we are not conducting this inquiry in order to know what virtue is, but in order to become good." (*NE* II, 2 1103b 27-28) He adds in his *Metaphysics* that "the end of theoretical knowledge is truth, while that of practical knowledge is action." (II, 1, 993b 21-22) Nowadays, social sciences are theoretical studies of practical subjects. Then one can ask: what is their epistemological condition? 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, as those theoretical studies of practical subjects just 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*, i. e., 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* (q. 3, a. 3).

This is an important point because current social sciences, although they may try to be only theoretical, are virtually ordered towards action. Thus, although a particular science may be theoretical *secundum finem*, or may have both theoretical and practical aspects, its implicit orientation towards action determines its epistemological framework.

The fourth characteristic of practical sciences is normativeness. Inexactness, closeness to reality and pragmatic aim are features of the practical sciences stemming from the singularity of human action, as conceived by Aristotle. Besides, the normative character of practical sciences is linked to their pragmatic aim. The statement that "it is rational to act in a concrete way" is both a "positive" and normative statement.

Finally, a reference should be made to the methodological devices characteristic of practical sciences. The abundant bibliography on this topic could be summarized as a proposal of methodological plurality. In his *Politics* and *Nicomachean Ethics,* Aristotle admirably combines axiomatic deduction, inductive inference, dialectic arguments, rhetoric, imagination, examples, and topics.

These characteristics of practical sciences indicate that their conclusions are not rigid but are rather variable.

6. A short conclusion

From the apparently outdated passages of Aristotle on *oikonomikè* I tried to extract some valid teachings for today. From those elements –which may be abridged in the intrinsic ethical and political character of economics– we can extract useful lessons. These lessons refer to the impact of Ethics and Politics on Economics. They stress the relevance of personal virtues and institutions for a suitable functioning of the economy. From an epistemological perspective, these lessons highlight the inexact character of Economics and the necessity of firm reliance on data. The concern with ends may lead to prudential, not technical, analysis and decisions. This calls for broadening the scope of Economics and consequently should provoke changes in its teaching. Summing up, a closer attention to Aristotle would have a high impact on current economy and Economics.

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