ENDS, INCOMMENSURABILITY AND ECONOMICS

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"Quantitative judgements don't apply",
Evelyn Waugh, *Sword of Honour*

Abstract: A considerable proportion of the authors engaged in the field of philosophy of economics and in economic theory have been explicitly or implicitly claiming for a reconsideration of ends within the subject-matter of economics. This line of inquiry suggests a considerable challenge to economic science. The logical structure of the rationality of ends differs from the one of means. This paper intends to explain the differences between both rationalities and some of the consequences of incorporating this new emphasis on ends. Is this reconsideration of ends legitimate? Is it positive? Is it necessary? Is it possible? Does it affect the use of maximization and optimization in economics? In this paper Sen's ideas will be considered in this regard.

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As all economists know, standard economics looks for the best possible allocation of means satisfying given ends, in order to attain the maximum possible utility: "Max U" is the ABC of economics.[2] Thus, economics attempts to maximize the utility function. Although economists recognize that ends (preferences) are multiple and different, as much as they considered them as given and their satisfaction expressible in the utility function, they implicitly assume that these ends are reducible to a homogeneous common notion.

What happens however with economic analysis if we penetrate the black box of preferences? In this paper I will first explain why ends matter. Then I will expose the differences between the structures of the rationality of means and the rationality of ends. Two related topics will be addressed: the incommensurability of ends and the inclusive (or not) character of the final end. Finally, implications for economics will be outlined.

1. Reincorporating ends in economics

Robbins asserted in his *Essay*: "Economics is not concerned at all with any ends *as such*. It is concerned with ends in so far as they affect the disposition of means. It takes the ends as given in scales of relative valuation (…)"(1984: 30). That is, economics considers ends insofar as they are the goal of the allocation of means, which constitutes the proper task of economics. For Robbins, ends can be substituted and are "proximate to the achievement of this ultimate end [the maximization of

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[2] In this paper I characterize modern standard economics as developing by following the method of instrumental rationality that will be described here.

satisfaction, utility]" (1984: 15). They can be expressed in terms of utility, a common unit of measure to which they can be converted.

This perspective has some advantages. First, it provides exactness to economics. The key to making human action fit into an exact frame is to consider ends or preferences as given. The exogenous character and the stability of preferences pave the way to build a deterministic scientific subject. As Carl Menger entitled the Appendix VI of his *Investigation on the Method*, "[t]he starting point and the goal of all human economy are strictly determined" ([1883] 1985: 216). Thus, "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" ([1883] 1985: 217). This enables to formulate exact laws whose "formal nature is no different from that of the laws of all other exact sciences and of the exact natural sciences particularly"([1883] 1985: 218-9). Following this approach, economics has the exactness of technique. Paradoxically, Robbins cares about distinguishing technique from economics: "The problem of technique arises when there is one end and a multiplicity of means, the problem of economy when both ends and the means are multiple" (1984: 35). In his hands, however, economics becomes a technique by the unification of ends in utility, a single end.[3] If ends are multiple and cannot be quantitatively reduced to only one, calculation and exactness become impossible.

This impulse towards exactness is understandable since it was (and still is) one of the major prejudices of science during the last two centuries. Its anthropological roots can be found from the first occidental thinkers: human beings try to overcome uncertainty. Plato in his dialogue *Protagoras* looks for a procedure of choice that might save us from the contingency of "luck". How could we reduce choice about qualitative features to a quantitative calculation? Even though this is often impossible, given the nature of things, human beings strive for security and acting in accordance. Martha Nussbaum accurately notes that:

> "What we need to get a science of measurement going is, then, an end that is single (differing only quantitatively): specifiable in advance of the *techne* (external); and present in everything valuable in such a way that it may plausibly be held to be the source of its value."[4]

Another advantage of this perspective which takes ends as given is that it rules out subjective and evaluative elements from science. The latter was another positivist prejudice the history of which began earlier. "Nassau Senior was the first economist to proscribe prescription" (Maloney 1990: 187). Indeed, Senior is the first economist to maintain the distinction between positive or neutral analysis, and policy recommendations in his *Outline of Political Economy* of 1836. Then, in 1860, he delivered his presidential address to the Section F ("Economic Science and Statistics") of the British Association for the Advancement of Science. As Hutchison points out, "Section F had to assert its scientific respectability, and its worthiness to be included alongside the established subjects of natural science." According to Hutchison, Senior "gives a brief restatement of his ultra-narrow view of 'Economic Science' and the economist's functions, according to which the subject is confined within the limits of a strictly 'positive' science with a narrowly economic subject-matter [wealth]"(1962: 9 and 13).

Robbins, however, even holds some subjective elements. A new step in the progressive elimination of subjectivity from economics was Samuelson's theory of

[3] Cf. Ralph W. Souter's criticism of Robbins, 1933 (383ff.).
[4] Nussbaum 2001a: 179. See also Elizabeth Anderson 1993 3.1.

revealed preferences. Samuelson's aim was to free economics from psychological subjective elements (1938: 61-2 and 71). Leaving aside the difficulties undermining Samuelson's attempt, this initiative can be regarded as a mistake. The elimination of subjectivity, as Davis explains, entails the elimination of even the very individual (2003: 26). Indeed, according to a number of authors the best metaphor for representing the economic agent today is the computer (2003: Chapter 5). Nevertheless, we must also consider that certain behaviours resemble animal conduct –rat-like, says Buchanan (1987: 74 and *passim*) - thus following the logic of computers. However, these situations are the least interesting ones. As Peter Boettke puts it,

> "[t]he problem situation of economic actors had to be simplified drastically so as to yield the precise formulations Samuelson sought. Samuelson's research program eliminated the conscious component from the economic choices facing individuals in a world of uncertainty. Choice was reduced to a simple determinate exercise within a given means-ends framework, something an automaton could master. The task of discovering not only appropriate means, but also which ends to pursue, was left out of the equation" (1997: 20).

Hitherto the "advantages" of the means-ends logic. However, a number of disadvantages also pervade the approach. The major one points out that, since there is not real action without ends, if ends are given, economics is not a science of real action, but of past actions (and with serious limitations). Talcott Parsons wisely captured the problems stemming from this attempt back in 1934. "To be sure", Parsons asserted then, "an "end" may refer to a state of affairs which can be observed by the actor himself or someone else *after* it has been accomplished." Robbins' ends, Parsons concluded, are not ends (1934: 513-4). They are, if properly interpreted, a result: "The scale of valuation is not a factor in action, but is merely a resultant, a reflection" (1934: 516). In the same vein, Frank Knight asserted:

> "Economic rationality as a description of deliberative conduct is limited in two further respects, fully as important in principle as the fact that actual results of action diverges in all degrees from the intention of maximizing a given end. First, the end is rarely or never actually given in any strict sense of the word; rather, it is in some degree redefined in the course of the activity directed toward realizing it, and the interest in action centers in this definition and discovery of ends, as well as in their achievement (…) The second limitation to which the notion of given ends is subject -…- is that to the extent to which an end is give, it is not really the end in the sense of finality."[5]

Ends are not given but they are generated in the very process of action. As Buchanan poses, "we must also acknowledge that men can choose courses of action that emerge only in the choice process itself" (1987: 78). Means and ends mutually interact and determine. Elizabeth Anderson has considered Dewey's thought on this point. She notes,

> "(…) the character and value of means and ends was reciprocally determined. We do not first already have an end in view, with the only question how to achieve it. We lack a complete conception of our end until we have a complete grasp of the course of action that will take us there" (2005: 8).

[5] 1956: 128-9. Cf. also 1940: 25.

Hence, the consideration of ends as given supposes a truncated action which is not human, but fiction. “Acting on such radically truncated judgments would be crazy”, Anderson affirms (*ibid.*) In effect, this action could only exist in the *Matrix*. Why? Because the determination of ends implies a paralyzation of time, a full knowledge of all the circumstances and a determinist (against free-will) position. This happens only in the *Matrix* where, however, men are falling into deep sleep and their minds are the toys of over-powering computers.

Consequently and obviously, this exile of ends from action can only be analytical. As noted above, it has epistemological origins. These are of two types. The first, as noted above, is the search of exactness. The second is the belief that ends are beyond reason. This marginalization of ends from rationality has a long history. Modern skepticism about the possibility of knowing ends reduces the role of rationality to a means-ends accommodation. As it is well-known, according to Hume reason was the slave of passions which determine ends.[6] Adam Smith considers that the first perceptions of morality “cannot be the object of reason, but of immediate sense and feeling (…) [r]eason may show that this object is the means of obtaining some other which is naturally either pleasing or displeasing.”[7] This is the seed of the reduction of all rationality to means-end (instrumental) rationality, which applies to economics. As Davis says,

> “[t]he [economic] theory of choice is about being instrumentally rational. Instrumental rationality is defined as the choice of actions that best satisfy an individual’s ends or objectives however those ends or objectives may happen to be characterized. Instrumental rationality is a rationality of efficient means, and per se is completely agnostic regarding the nature of the ends means serve.”[8]

At present, however, we are witnessing a re-emergence of the possibility of a rational deliberation about ends in social sciences, called practical rationality. Unfortunately, this rebirth has only timidly reached economics. Nicholas Rescher, among others, complains about it:

> “A narrowly construed ‘economic rationality’ based on unevaluated desires and mere preferences as such is rationality in name only; it can be altogether irrational. Rationality is a matter of appropriate alignment all along the line–not just choices with preferences but of preferences with evaluations and of evaluations with values. True rationality demands the pursuit of appropriate ends based on valid human interests, rather than that of unevaluated wants or preferences” (1988: 115).

On my view, I may advance, this is the path we should pursue.

As conceived by Aristotle, economics deals with means and also with ends. For him, economics was the use of what is needed for the life and for the Good Life, i.e. a life of virtues.[9] Twenty four centuries later, Max Weber also concentrated on ends: “economic action is primarily ordered to the problem of choosing ends to which a thing

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[6] Hume [1888] 1968, p. 415 (II, iii, 3).
[7] [1759] 1979, 320 (VII, III, II, 7 and 8).
[8] Davis 2003, 27. In this way, the epistemological requirements are satisfied. As also Davis affirms: “One reason that instrumental rationality theory has been attractive in economics is that having a single model of analysis makes possible a high degree of logical and mathematical determinacy in economic explanation” (Davis 2004, 401).
[9] See my paper 2005.

should be applied; technology, to the problem, given the end, of choosing the appropriate means."[10] This is especially interesting because he realized what has been signaled, that the process of allocation of means to satisfy an end is a technical, not an economic process. Thus and against Robbins, modern economics departs from economics thus becoming a different discipline: a technique.

In the same line, a relevant current position is Amartya Sen's. Concentrating on well-being, capacities and functionings, achievement and commitment, the Capability Approach (CA) necessarily gives priority to ends.[11] This concern with ends leads him to realize the narrow conception of economic rationality valid up to date. He claims: "Indeed, at the risk of sounding unduly 'grand', it can be argued that it is important to reclaim for humanity the ground that has been taken from it by various arbitrarily narrow formulations of the demands of rationality" (2002: 51). Another recent approach, happiness theory, although arguable from the position that will be held in this paper, also focuses on ends.[12]

This section outlines that ends are matters of concern in economics. My answer to three of the questions posed in the abstract – is this reinsertion of ends legitimate? Is it positive? Is it necessary?– is affirmative. If you are not convinced, please let me at least suppose it and let me pass to consider, first, which is the logic of the consideration or deliberation about ends, and, second, how this insertion modifies economics (or not).

2. Structural differences between rationalities of means and ends

Rationality constitutes the order of realities, whether they are physical, biological, mental or social. Acknowledgement of rationality supposes bearing an ontological and logical-semantic realism. This last position holds that the propositions about entities in respect to which there is an ontological commitment, are true (or false) if the truth conditions of these propositions hold (or not) determinatively, objectively and independently of our knowledge capacities.[13]

Rationality is an analogical or polisemic term which applies, as suggested above, to different realities. Our concern in this paper is with human action because the subject-matter of economics, as conceived by most of the "economists-philosophers" (e.g., Weber, Mises, Robbins, Knight), is a kind of human action.

Human actions may be transitive or immanent. Transitive actions are those which outcome goes beyond (i.e. transcends) the person who performs them, like producing a good. Immanent actions are those which result remain in the subject, as thinking, loving or, more simply, living. Transitive human actions have both, a transitive and immanent character and result: while we produce, we think, acquire skills, love or enjoy or hate the boss. When performing a transitive action, we have: 1. a "first-order" end: the product (service); 2. the means to achieve it. But we also have: 3. a "second-order" end, as, e.g., realizing ourselves as professionals, and 4. a "third-order" or final

[10] *The Theory of Social and Economic Organization*, Glencoe, The Free Press, p. 162. Quoted by Barry Gordon 2005, p. 403.
[11] See, e.g., Nussbaum and Sen (eds.) 1993, Introduction.
[12] For a comparative appraisal of both approaches, see Comim 2005.
[13] For these notions, see Craig 1998 and Mäki 1998. Mäki (1998: 406) points out that "(…) semantic realism is the thesis that the thesis contained in scientific theories are genuine, *true or false*, statements about the real world and that they have a truth value irrespective of whether we are able to determine it."

end, happiness, in as much as realizing ourselves as professionals may be a specification or a constitutive of happiness. Second and third ends are general ends that have to be embodied in some concrete ends. There is an order or rationality appropriate to each character of actions directed to the achievement of their results. Thus, in transitive human actions we may distinguish practical and technical rationality, corresponding to their immanent and transitive aspects.

Technical rationality is the order inscribed on the action so as to attain the sought external result (or first order end): i.e. how means combine to originate a product (or service). A deliberation about means is central to this kind of rationality. On the other hand, practical rationality is the deliberation about the possible conformation of our constellation of ends. It is the order inscribed for the purpose of achieving the inner goal: it is the way in which this action contributes or constitutes our ends. In other words, we reason technically when we deliberate about the means-ends relation. And we reason practically when we deliberate about the ends that we are choosing. In classical philosophy the immanent character of action was called *praxis* or *agere* (action or to act, frequently associated with morality) and the transitive *poiseis* or *facere* (to produce or to make, frequently associated with technique or art).

2.1. Different structures:

Aristotle says in his *Nicomachean Ethics* that "the reasoned state of capacity to act [*hesis logou praktiké*] is different from the reasoned state of capacity to make [*poietikês*]" (VI, 4, 1140a 2-5). Aquinas adds, "Reason stands in different relations to the productions of art, and to moral actions. In matters of art, reason is directed to a particular end, which is something devised by reason: whereas in moral matters, it is directed to the general end of all human life."[14] Deciding "how" to do something and to decide "what" we want, or the reasons or ends "why" we act are different matters. As mentioned, the "how" and the "what" or "why" are inter-related for in the very consideration of means, ends may change, or vice versa. "A full inquiry into the means needed to achieve the end may lead to a re-evaluation of the end itself" (Anderson 2005: 9). Nevertheless, given that, as explained, in the modern conception of rationality only the "how" is taken into account, it will be useful to analytically distinguish both rationalities –technical and practical– and their specific logics or structures in order to reestablish the "what" and "why" rationality.

The simplest and most easily understandable structure is the technical one. Given the end, which is the way towards it?, what are the appropriate means or instruments to achieve it? This is why it is also called "instrumental rationality". Within the instrumental rationality one may worry about the "best" way to do it. We may ask: what is the "best" use or allocation of means in order to achieve the end with the best possible cost-benefit equation? Standard economic rationality corresponds to this kind of rationality. This is called maximization or, better, optimization (which also includes minimization as part of the best allocation possibility).[15] Technical rationality is the *genus* and maximization/optimization the *species* within it. That is, not all instrumental

[14] *Summa Theologiae* I IIae q. 21, a. 2, ad 2. For Aquinas moral is synonymous of practical.

[15] About this sense of optimization and maximization in economics, see Chiang 1987: 236, and in morality Finnis 1983: 82 (as the strategy of consequentialism). This use of the word is not appropriate. I will come back to this. Amartya Sen uses these terms in another sense that will be also explained then. Consequentialism is the ethical theory that judges the goodness of an action by its consequences and looks for the greatest net good for the whole on the long run. It is the *genus* of which utilitarianism is an *species*.

rationality entails maximization.[16] (The feasibility of maximization demands a number of necessary conditions.)

Maximization as a kind of technical rationality shares its limitation: as quoted from Aquinas, "[i]n matters of art, reason is directed to a particular end." This is why, as described above, economics reduces ends to a sole end: utility (or value). This end, however, is mere fiction. It is composed by a set of particular ends that are supposed to be quantitatively reducible to only one. But one may wonder whether this is possible. This leads us to consider the nature of ends and the logic of the deliberation about them, i.e., the structure of practical rationality.

Practical rationality is the order of ends so as to form an ordinate constellation. We may distinguish ends that are only means, only sought for the sake of something else (first-order or instrumental ends), ends that are desirable in themselves and that are parts of the final end (second-order or constitutive ends), and ends which are only desirable in themselves (third-order or final ends).[17] For example, studying for exams (mean for an instrumental end) in order to be a professional (a constitutive end), in order to be happy (a final end), according to our plan of life (designed by practical reason). Practical rationality is the harmonization of this complex set in order to achieve a plan. This plan, however, is not perfectly designed: persons must deal with the future, the complexity and the singularity of situations, and all these conditions make plans incomplete, underdetermined, unspecified. Human time, rationality and freedom open the practical realm. The relation between these elements (different level of ends and means) is dynamic involving changing elements. Notwithstanding, there is a general unspecified final end (more often than not happiness is considered to be this final end) and a preliminary plan or draft of components of the yearned happy life: as, for example, material conditions, a family, friends, social life, professional development, culture, art, religion, political and economic freedom. The latter are ends in themselves but also means to the final end. The instrumental character of these ends however is not as the instrumental character of means. They are not interchangeable conditions but constitutive parts.

According to Aristotle, the habit of practical rationality is practical wisdom. He says:

> "[I]t is thought to be the mark of a man of practical wisdom to be able to deliberate well about what is good and expedient for himself, not in some particular respect, e.g. about what sorts of things conduce to health or to strength, but about what sorts of things conduce to the good life in general" (*NE* VI 5 1140a 25-30).

Deliberation about means conducting to health corresponds to instrumental rationality. Health, strength and the like are ends in themselves and parts of the ultimate end which is desired "a complete life. For one swallow does not make a summer, nor does

[16] As maintained by Harvey Leibenstein 1976 and Michael Slote 1989. The use of the word "maximization" as rationality and of the word "interest" as intentionality are fallacies of ambiguity (see Copi and Cohen 1998: 6.4) often unconsciously committed. It involves the confusion and conflation of levels of ends. M. Stocker is near to see it (cf. 1997: 208). I will go back on this topic.

[17] Scott MacDonald (1991: 51) calls them purely instrumental ends, weak ultimate ends and strong ultimate ends respectively. Henry Richardson 1997 speaks about final (195) or intermediate final ends (52) and ultimate ends (corresponding to second and third order respectively, 195).

one day; and so too one day, a short time, does not make a man blessed and happy" (*NE* I 7 1098a 18-20).

A short digression on Aristotle's thought on the final end should be inserted. Aristotle thinks that happiness (*eudaimonia*) or human fulfillment is a normative guide for action. This is not a fact but a task to accomplish. It is the program proposed in the *Nicomachean Ethics*, i.e. a life of virtues. As T. W. Irwin suggests, Aristotle's conception of the good is not *conative* but *normative* (1990: 362-3). Thus, Aristotle's book on virtues is not a description of that what happens but an account of that which should happen. This characteristic opens the possibility of making two distinctions. First, men can seek a final end or not. Aristotle states:

> "everybody able to live according to his own purposive choice should set before him some object for noble living to aim at –either honor or else glory or wealth or culture– on which he will keep his eyes fixed in all his conduct (since clearly it is a mark of much folly not to have one's life regulated with regard to some End)" (*Eudemian Ethics* I 2 1214b 6-11).

Second, some persons may behave in a foolish way and do not decide anything at all about the final end of their lives.

Most people, however, (at least pre-postmodern people) decide something about their lives, at least vaguely. In this case a second distinction can be drawn: people can either: 1. decide to engage in a life of virtues (a final end conducting to happiness) and do it, 2. decide to engage in a life of virtues but often fail to live it: it is the case of the incontinent (*akrates*), or 3. decide to consistently live a life of vices (another final end): the case of the "self-indulgent" (dissolute, wanton, *akolaston*).[18] (it must be clarified that actions may be performed for a reason not only actually but also "virtually" or spontaneously in the case of habits). That is, time and freedom allow for different possibilities of final ends and also for different ways to achieve these final ends.[19] However there is a set of ends that are oriented towards human fulfillment. As noted at the beginning of this section, speaking of rationality entails sustaining an ordinate nature. Hence, if we want that the ends chosen to be rational, we should find out which are the natural human ends: "Nature is everywhere the cause of order", as pointed out Aristotle.[20] This is why Martha Nussbaum, a good Aristotelian scholar, criticizes Sen for "his reluctance to make commitments about substance."[21] Nussbaum argues for the definition of a list of capabilities composed by substantive goods, with intrinsic value.[22]

Hannah Arendt, referring to the final end says that "the means to achieve the end would already be the end; and this "end", conversely, cannot be considered a means in some other respect, because there is nothing higher to attend than this

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[18] Cf. *NE* VII, especially 9. On the stability of the final ends chosen, see Harry Frankfurt 2004, 2, 6.

[19] Christianism reduces final ends to two possibilities: God or oneself. Either we ultimately do things for the sake of God's glory or we do it for the sake of ourselves. Aquinas, in commenting Saint Augustine's *De Civitate Dei* XIV, says: "sicut in amore Dei ipse Deus est ultimus finis, ad quem omnia ordinantur quae recto amore diliguntur, ita in amore suae excellentiae invenitur ultimus finis, ad quem omnia alia ordinantur" (*De Malo*, q. 8, a. 2, ad primum). This final intention does not need to be conscious in each act, but it often virtually subsumes in our habits and in a general orientation of our life.

[20] *Physics* VIII, 1, 252a 12. My thanks go to Miguel Verstraete for this quotation.

[21] In, e.g., Nussbaum 2003: 35.

[22] These expressions –"intrinsic value", "substantive goods" are frequently used by her. Cf., e.g., Nussbaum 2001b: 71, 84 and 87.

actuality itself"(1959: 185). Consequently the structure means-ends of technical rationality does not apply. Aristotle speaks about the constituent parts of happiness: "good birth, plenty of friends, good friends, wealth, good children, plenty of children, a happy old age, also such bodily excellences as health, beauty, strength, large stature, athletic powers, together with fame, honour, good luck, and virtue"(*Rhetoric* I, 5, 1360b 19 ff), which seems to be a sensible list.

Aquinas also speaks about parts of ends (I IIae q. 2 aa. 2 and 6). This conception has been consolidated as a philosophical tradition which speaks of ends that are constitutive parts and/or specifications of the end. Rawls offers the examples of compositions, paintings and poems.[23] Robert Spaemann also offers these examples and explains:

> "in the means-end relation, the end is defined independently of the means, thus determining their search. On the other hand, we cannot know what is a fulfilled life leaving aside its components. These are not functionally interpreted as means because of our placing them toward the whole. They are not interchangeable either" (1991: 57-8).

This structure of the practical or end's rationality, and the specific dynamical character of the determination process of ends, differ from the maximization/ optimization structure applicable to the means-ends relation (and, as we will see, prevents its application to the attainment of ends). First, within the means-end logic the means are only instrumental and disappear when the end is achieved. Instead, in the ends logic the ends must remain and cannot disappear because they are all necessary for the achievement of the final end. Second, while ends may be considered as given in the technical case, in the practical case we advance by sizing up, determining and modifying ends as action progresses. However, the opposite position might as well point out, denying freedom, that either plans may be completely determined *a priori* or that they are unconsciously determined, and that we should not rule out the possibility of knowing in a future time the complicate mechanism that governs plans. The first case is technical. The second is simply extra scientific.[24]

Third, means are considered as commensurable and interchangeable, substitutable, at least to some extent. Conversely, ends must remain and we cannot determine *a priori* a rate of substitution of them according to their values, because they are not determined before performing an action. This is reinforced by the thesis of the incommensurability of ends before action. If there is not a common measure to appraise the ends, they cannot be maximized: they are harmonized, coordinated, aligned, by practical wisdom. As David Schmidtz asserts there are no algorithms for rationally choosing ends (1994: 246). But this does not rule out reason from the realm of ends. The calculative role of reason is merely one of the many – the least relevant.

From an opposite perspective, it can be argued that, first, the common measure is happiness to which ends contribute (utilitarianism). Second, that in fact we commensurate when we decide and act. These arguments have their refutations (as we will see). Supposing, however, that they may be right, the thesis held by many that ends are not all included in happiness invalidate the possibility of considering

[23] Cf. John Rawls 1971: 550. See also Kolnai 2001 examples (267). On the difference between constituents and specifications, see Scott MacDonald 1991: 59 onwards.

[24] Although we could discover the neurological mechanism of emotions or love, we will never be able to assert which is the direction of causality between the neurological and the psychical correlates.

happiness as the common measure of ends. I will analyze these problems step by step.

The different structures have been explained. Their differences, however, have to be clearly understood for a variety of reasons. The temptation to apply the means-ends structure to the deliberation about ends is strong. I have signaled the reason argued by Nussbaum: it is the way of controlling human affairs. Another is the one highlighted by Aurel Kolnai:

> "because the end-means relation is the simplest and most evident of the different types of relations between the manifold single elements, phases, aspects and objects which make up the articulation of an '*action*' (…) there arises an intellectual temptation to extend the end-means model far beyond its true range" (2001: 266-7).

The point is that it is not easy to grasp the problems involved. But it is a necessary task. As Nussbaum poses, if the technical logic replaces the practical, uncertainty will diminish, but with certainty we will also import the elimination of *akrasia* and more generally of humanness (2001: 191).

2.2. The process of practical deliberation:

It will be useful and enlightening to concentrate for a moment on a short description of the process of ends' choice. I will mainly rely on some quotations of David Wiggins and others in a sort of descriptive collage. According to him, when Aristotle uses the expression *ta pros to telos* ("what is toward the end"), often translated as means (Aquinas, instead translated literally as *ea quae sunt ad finem*), he includes the deliberation both about means and about the constituents of the end (2002: 220-1). Then Wiggins explains:

> "In the latter a man deliberates about what kind of life he wants to lead, or deliberates in a determinate context about which of several possible courses of action would conform most closely to some ideal he holds before himself, or deliberates about what would constitute *eudaimonia* here and now, or (less solemnly) deliberates about what would count as the achievement of the not yet completely specific goal which he has already set himself in the given situation" (2002: 220).

This process, as we have seen, is dynamic. This is also wonderfully explained by Wiggins:

> "In the non-technical case I shall characteristically have an extremely vague description of something I want – a good life, a satisfying profession, and interesting holiday, an amusing evening – and the problem is not to see what will be causally efficacious in bringing this about but to see what really *qualifies* as an adequate and practically realizable specification of what would satisfy this want. Deliberation is still a *zetesis*, a search, but it is not primarily a search for means. It is a search for the *best specification*. Till the specification is available there is no room for means. When this specification is reached, means-end deliberation can start, but difficulties that turn up in this means-end deliberation may send me back a finite number of times to the problem of a better or more practicable specification of the end, and the whole interest and difficulty of the matter is in the search for adequate specifications, not in the technical means-end sequel or sequels" (2002: 225).

In the same vein, Kolnai expresses,

> "Our ends are not all ready-made, awaiting their fulfillment when the proper means should have been found; they may come to life and harden into shape in fairly unexpected contexts; and their fixation involves to some extent, at times it may be a considerable extent, a revision, modification and reorientation of our preestablished structure of permanent or comparatively lasting ends –…– itself. It is the choices, confrontations, inner dialogues, hesitations and new engagement implied in this process that *primo loco* constitute the field of deliberation" (2001: 266).

Or as Irwin puts it, "if I do not modify a desire when deliberation points out its exorbitant cost to me, in relation to my other desires, I will be grossly irrational, even though reason has completed its instrumental task for me" (1990: 335-5). (This interaction between instrumental and practical rationality gives us a hint of the limited scope of maximizing instrumental rationality. Ends may be modified. Independent variables become dependent. How could we manage this?).

In ordinary deliberation, Wiggins explains, we do not maximize; we try to respond to particular contexts.

> "No theory," he adds, "if it is to recapitulate or reconstruct practical reasoning even as well as mathematical logic recapitulates or reconstructs the actual experience of conducting or exploring deductive argument, can treat the concerns and agent brings to any situation as forming a closed, complete, consistent system. For it is of the essence of these concerns to make competing, inconsistent claims. (This is a mark not of our irrationality but of *rationality* in the face of the plurality of ends and the plurality of human goods)" (2002: 231).

Schmidtz applies this argument to economics:

> "Homo economicus wants to maximize profit; the question of how Homo economicus developed or settled on such an end does not arise.(The end did not develop; it was stipulated.) But whereas Homo economicus deliberates only about alternative means of achieving stipulated ends, we also deliberate about ends themselves. We sometimes stop to wonder whether an end like maximizing profit is worth having. We have self-regarding ends, to be sure, but they are not given to us in the same way they are given to Homo economicus. On the contrary, we shape ourselves and our ends as we go. We are the outcome as well as the makers of our choices. Admittedly, Homo economicus is a useful model in the social sciences. But we are not Homo economicus, and what is good for us is not the same as what would be good for Homo economicus. Thus Homo economicus is a poor model of rational choice even when self-interest is all that matters, for even then there is a crucial difference between Homo economicus and beings like us. The difference is this: we need to worry about our goals in a way that Homo economicus does not. Homo economicus does not have to work at maintaining an attitude that her goals are worth living for, but we do" (1994: 250-1).

The last quotations bring us back to the anthropological roots of practical rationality. I come back to Wiggins:

> "The unfinished or indeterminate character of our ideals and value structure is constitutive both of human freedom and, for finite creatures who face an indefinite or infinite range of contingencies with only finite powers of prediction and imagination (*NE* 1137b), of practical rationality itself"[25].

Must we surrender to future and freedom, and resign to explanation and prediction? No, but, first, the way to struggle against those "anthropological constants" is not to formulate reductive theories of rational choice but to try to find out the trends or routines of persons and to foster them by institutions and morality. And second, we must recognize the imperfect character of these trends that could always be broken by unexpected events or free human actions. Quoting Wiggins again:

> "There is simply no reason to expect that it will be possible to construct an (however idealized) empirical theory of the rational agent to parallel the predictive power, explanatory nonvacuity, and satisfactoriness for its purposes of an economic hypothesis –e.g. that under a wide variety of specifiable circumstances individual firms will push every line of action open to them to the point where cost and marginal revenue are equal. If prediction were essential, then a phenomenologist or someone with a strong interest in the value consciousness of his subject might do best. But what is needed here is not prediction, but the subject's own decision process, constantly redeployed on new situations or on new understandings of old ones" (2002: 234).

This is what practical economists actually do. With an eye on theory they reason mainly relying on their economic instincts acquired through several years of familiarity with economic affairs.

But there are not all the problems. We still have to assess the thesis of the incommensurability of ends.

2.3. Incommensurability:

Wonder is and was the beginning of science.[26] Within the range of surprising facts that amazed men and originated science, Aristotle mentions

> "the incommensurability of the diagonal of a square with the side, for it seems wonderful to all who have not yet seen the reason, that there is a thing that cannot be measured even by the smallest unit. But we must end in the contrary (…); for there is nothing that would surprise a geometer so much as if the diagonal turned out to be commensurable" (*Metaphysics* I 2 983a 15-20).

The same surprise would arise to Aristotle (and most the Occidental thinkers until Utilitarianism) if also second-order ends turned out to be commensurable.

Within this subject there are lexical problems (Chang 1997: 1). Different notions associated with this probably lead Finnis to assert that incommensurability is an analogical term (1997: 232). I prefer to use a precise sense, that which corresponds to the origin of the term and the more frequent. Commensurable are things that can be compared by a common unit of measure (and inverse). Comparability is a broader

[25] 2002: 233. On this, see also Kolnai 2001: 272-5.
[26] Aristotle, *Metaphysics* 982a 13.

term. It includes things that are quantitatively comparable (commensurable) and qualitatively comparable. Notwithstanding I reserve comparable to qualitative comparison. Nevertheless, matters are not so easy.

For Aristotle a quality may be accidentally a quantity. He says: "The things we have mentioned [number, time, space, etc.] alone can be called in the strictest sense quantities. Other things that are so called are so called in a secondary sense (*katà symbebekós*, *per accidens*)–with an eye to some one of the former"(*Categories*, 6, 5b1). And he also says: "Qualities admit of degrees. For one thing is whiter than another."[27] But this has limits: while quantity does not admit contrariety, quality admits it (blackness and whiteness, goodness and badness) (cf. *Categories*, 6, 5b 11 and 8, 10b 13). That is, within some qualities we may establish an ordinal scale. Some authors place this possibility within commensuration (e.g. Anderson) and others within comparison (e.g. Chang). According to Aristotle, it would be more appropriate to place it within comparison: "The aforementioned characteristics [to have or not degrees] are no way peculiar to quality. What is peculiar is this, that we predicate 'like' and 'unlike' (*ómoia kai anómoia*) with reference to quality only"(*Categories*, 8, 11a 15-6). The Latin translation of *omoios* is *par* (like), from which come *comparare* and the verb "to compare". That is, when we claim that this robe is whiter than another we are comparing more than commensurating. From the point of view of quantity, instead, something is equal (and greater or lesser) and when we say e.g. that a car is faster than other we are commensurating rather than comparing.

There is a way of transforming comparing into commensurating: assigning cardinal values to the degrees of qualities. This may be more or less precise. It is easier to do it with whiteness than to do it with goodness. Economics does it, for example, with the utility of different goods. This is not new. Aristotle himself did it for the first time: "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" (*NE*, V, 5, 1133a 20ff.). Aristotle then highlights that money is the representative of demand (*chreia*, subjective need) 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,"[28] in order to exchange them, we may add. When we commensurate we may maximize. What do we do when comparing we try to do the best? My colleague, Patricia Saporiti, once told me:

> "Literally speaking 'maximum' is the superlative of 'great' whereas 'optimum' is the superlative of 'good' [this is properly the best]. The agent maximizes when she deliberates on a quantitative basis and optimizes on a qualitative basis (she establishes a hierarchy of ends). (...) Maximization only makes sense if integrated in an optimization."

This sense of optimization is obviously different from the one adopted in economics (explained above).

Commensuration supposes a common measure and comparison a common quality or value, a *covering value*, as Chang calls it (1997: 5).The following question naturally arises: how do we deliberate when there are neither common measures nor

[27] *Categories*, 8, 11b 26. Except, for example, forms: a triangle cannot be more triangular than another triangle.
[28] *NE* V, 5, 1133b 1-3. By these statements Aristotle seems to be the first author simultaneously proposing the revealed preference theory and suspecting about it.

covering values? Ruth Chang suggests that there are always covering values, though sometimes unnamed. I may agree; but I prefer to approach the problem in another way.

Chang recognizes that abstract general values do not sort out the problem: "it makes no sense to say that one thing is simply better than another; things can be better only in a respect" (1997: 6). In a similar vein Anderson notes that "to call a good intrinsically valuable is not to specify a respect in which it is valuable" (1997: 272). Nowadays most authors think that commensuration is not universal.[29] Many specify the different fields or values between which comparability, as here defined, is not possible. (or in each within which comparability is possible). 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."[30] Finnis proposes the four orders considered by Aquinas in his *Proemium* to the *Commentary of the Nicomachean Ethics*: natural, logical, moral and technical, as these different fields (1997: 223). Chang distinguishes being useful, skilful, enjoyable, beneficial and morally good (1997: 257).

Economists know how to maximize: it is a rather mechanical procedure. This does not constitute a problem. But, how do we optimize (in my sense of optimization)? And, if there are situations in the life where deciding requires comparing different incomparable orders, how do we do? Here is where practical reasoning, as explained before, enters into the game. It will appraise the value of each different realm depending on the final end, it will contrast the actual situation with the draft of our plans of life in order to make the required concrete decision. This would be Chang's unnamed covering value and may be called "practical comparability." Let us put some examples.

On March 4, 1966, John Lennon affirmed:

> ""Christianity will go. It will vanish and shrink. I needn't argue about that; I'm right and I will be proved right. We're more popular than Jesus now. I don't know which will go first -- rock 'n' roll or Christianity. Jesus was all right, but his disciples were thick and ordinary. It's them twisting it that ruins it for me."[31]

Leaving "prophecies" aside let us concentrate on the comparison: "We're more popular than Jesus now." Obviously this makes no sense if not specified, saying, for example, "we are more popular than Jesus as musicians." And it could also be said: "Jesus is more popular than the Beatles as a religious leader." However popularity as musicians and as a religious leader cannot be compared. We cannot say: The popularity of Beatles as musicians is greater than the popularity of Jesus as a religious leader. We might count how many fans of the Beatles there are and how many people are devout of Jesus. We cannot, however, infer from the conclusions of this counting that the Beatles or Jesus are more popular. This kind of popularity would be no more than a number, without any intrinsic meaning.[32] This is because to be a fan of the Beatles and

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[29] Authors maintaining the incommensurability of ends are, for example, Kolnai 2001, Nussbaum 2001a, Irwin 1991, Finnis 1982: V.6, 1983: 86-91, Raz 1986: chapter 13, Grisez and others 1987: 110 and 137, George 1993: 88-91, Richardson 1997, Taylor 1982 and 1987.

[30] *NE* I, 6, 1096b 22-5. Cf. also *Politics* III, 12, 1283a 1ff..

[31] On February 25, 1969, three years later, Jim Morrison asserted, after playing Albinoni's Adagio, "Rock is dead". I acknowledge my colleague Gustavo Seijo for this contribution.

[32] "There is no covering value in terms of which their intrinsic merits can be compared," in Chang's words (1997: 7).

to be a devout of Jesus imply different commitments. They are "different loves". They may even overlap: we may be simultaneously fans of the Beatles and devout of Jesus. These attitudes pertains to different –no greater or lesser– levels. This is what Elizabeth Anderson means when she affirms that intrinsic values are nonscalar. Both are valuable but not as more or less but in different ways. Using Anderson's expression, we do not assign to fanatism and devotion a weight but a *status* (cf. 1997: 103-4).

However somebody may say: "for me religion is more important than music, and the same apply for most people." Or even she may say: "religion has an incomparably higher value than music." She is "practically" comparing, not commensurating. We may do it because we have practical reason, which is our capacity of comparing different kinds of values and attitudes toward them,[33] and of integrating them as second-order ends related to a third-order or final end of our life,"the general end of all human life," as quoted from Aquinas.[34] Fortunately, although it has been forgotten, men have another way of appraising, comparing and deciding that goes beyond calculating, i.e. practically reasoning. This comparison is neither exact nor numerical: we cannot claim, "for me, religion is twice more important than music." The most we could do would be to arrange an ordinal hierarchy of importance for us, but difficultly complete. However, we can always compare and decide.

Some clarifications are to be added. This hierarchy, first, may change.[35] We might acknowledge that during some parts of our life we might prioritize the Beatles over Jesus, but this may change afterwards. Second, this hierarchy is abstract; it does not have a significant meaning unless we use it for deciding in a concrete case. Suppose that attending the Beatles' concert would prevent me from attending Sunday Mass. Nobody would calculate the utility of both meetings and then compare them. Both the calculation and weighting of utilities are impossible. We should decide by appraising both alternatives with our practical reason. While I was writing this paper, I asked a friend (who is a judge) how does he compare values in conflict in order to solve dilemmas. His answer was: first, the comparison is qualitative; second, that there are always good reasons to decide for or against –or for a combination contained within a vast range of possible greys–; and third, that this solution is "reasonable" (a word that very well express practical rationality).[36] This practical reasonableness does not include feelings, whim and other emotions, but can either adopt or consider them.[37] On the contrary, when reason serves passions, we are *rationalizing*¸ no practically reasoning (Finnis 1998: 74). To put an example from pictures, a painter may fill the sketch in order to achieve the picture (by taking practical decisions on the concrete colours and forms), or may momentarily fall outside or substantially modify the sketch that, however, remains aside or behind. The former is an image of the prudent person practically comparing and deciding how to specify or fill his general plan of life, and the latter is an image of the *akrates* rationalizing on how or why to behave in a different way. This highlights the relevance of human time that allows for these alternative decisions.[38]

Let us incorporate another example. In my Argentinian province, famous for its vineyards and tasty wines –Mendoza– the entire population engages in the election of the *Queen of the Vintage* every year. Each department chooses its representative to

[33] See Anderson 1997, 104-5.
[34] See the exquisite and short paragraph V of Charles Taylor 1997.
[35] Taylor speaks about the "kairotic element or context" (1997: 182).
[36] On the case of the application of law, see Finnis 1997, especially 219-20 and 228-32.
[37] Cf. Anderson 1997: 100-1 and Finnis 1997: 227.
[38] This example was originated on a suggestion by Henry Richardson.

the final contest. There are juries, but all the people speak about this and opine who should be the winner. Assumed the body's beauty and proportions, other criteria are taken into account by the jury to decide: a nice face, an agreeable pose, an attractive personality, the charm and friendliness of the candidates, their activities – education, culture, sports, work, hobbies, and commitment with noble causes. These characteristics are evidently incommensurable and some of them are not even comparable in the sense defined by Chang. How does the jury decide? By practical wisdom and comparability. The decision is not exact, it may be arguable. But quite often coincides with the general appreciation. Rationality does not entail exactness. Rigorous thinking in the practical field is inexact. Well, the everyday life affair, including its economic aspects, is as the task of a jury on a beauty contest. As Aristotle highlights, "a rational animal is one with the power to arbitrate between diverse appearances of what is good and integrate the findings into a unitary practical conception."[39] This human capacity of comparing what is not comparable is indeed admirable. In Wiggins' words,

> "[individual agents] can deliberate, in the light of the good and the possible, about ends, about the constituents of ends, and about the means to ends. Somehow, despite the intractability und uncertainty of the subject-matter of choice, agents do arrive at judgments about what is worthwhile or what can or cannot be done in pursuit of what. And somehow, from out of all this, they arrived at shared, partly inexplicit norms of reasonableness."[40]

The facts that the decision is inexact and that the hierarchy may change do not imply that the ends are completely substitutable. In the actual decision they may be: I can postpone dinner to help a friend finishing her work. I can hold my breathe to enjoy a free dive admiring a beautiful coral reef. Although these situations cannot be carried on for too much time. In his praise of friendship Aristotle notes that "when men are friends they have no need of justice" (*NE* VIII, 1, 1155a 26). But friendship without justice risks falling into favouritism. In the general plan of life ends are to be harmonized and cannot be completely substitutable. Ends are heterogeneous and are not reducible between them: "human good is heterogeneous because the aims of the self are heterogeneous," Rawls asserts (1971: 554).

The criterion for this harmonization is the horizon of our plan of life. This very criterion may be for some authors the covering value that may commensurate the constituent ends. Pleasure, happiness, goodness may be the common measure (e.g. Jeremy Bentham's hedonic calculus). The constituent ends would be instrumental to the final end and would be possible to maximize it. That would be an application of the instrumental or technical logic to the practical field. We answer this objection with several arguments. First, it is not practically feasible. Second, the ends cannot be substituted in order to maximize: there are some basic unexceptionable ends (Finnis 1982: 112). Third, the final end is not something concrete but the result of holding their parts. As Nietzsche asserted, "man does not strive for happiness, only Englishmen do (*The Gay Science*)." The constituent ends cannot be transformed into instrumental means because there are not ends for which they could be means. Nobody reaches happiness directly. We must go through the ends that constitute it. Happiness is not the end men must seek for, desire and try to maximize, but the result of achieving the constituent ends they desire (Inciarte 2001: 118-9). Or, in other words, men do not look

[39] *De Anima* III, 11, 434a 9, as is cited by Wiggins 2002: 258 (Essay VII, "Weakness of Will, Commensurability, and the Objects of Deliberation and Desire").
[40] Wiggins 2002: 373-4 (Essay X, "Incommensurability: Four Proposals"). See also Taylor 1997: IV-V.

for goods only for the sake of happiness but for the sake of themselves as constituent parts of happiness. The difference may sound subtle but it is a relevant subtleness because it is the key to distinguish consequentialist ethics from virtue ethics. As Rawls points out, following Hardie's interpretation of Aristotle, happiness is not a dominant end but an inclusive one (1971: 552). This is the argument by which he criticizes consequentialism.[41] Robert Spaemann explains that happiness cannot be conceived of as the end of an action because it has not the selective (particular) character that actions require. Happiness is an indirect, an "oblique" aim. There are not actions seeking happiness directly. If there were any, the constituent ends would not be ends but instrumental means that conflate in the last end (1991, 53-8).

However, once the decision on ends is set, will it be possibly expressed in terms of a maximization procedure? Can we account for the decision calculating a constant or varying ratio of substitution of the ends concerned? Let Wiggins answer: "the incommensurabilist will not, of course, deny that after the event, some such ratio may be hit upon. That claim is nearly vacuous and the incommensurabilist will be foolish to deny the nearly vacuous (…) It does not represent a falsifiable claim about the agent's springs of action" (2002: 371). Why is it vacuous? Because this notion of maximization is a truism. We maximize utility and utility is what we maximize. Thus, all human actions can be seen as maximizations; but this notion of maximization is so wide that is the same to say that all actions have a reason why there are performed, which is something different to say that we are always maximizers, at least in ordinary language. Besides, this representation is misleading, because misleads about the actual reasons behind the actions. May be that some actions are motivated by maximization: this is obvious and applies to a vast field, i.e. the means-ends relations. They are not all of them however: once ends are defined, these relations constitute a second phase. Given the fact that ends may change during the means-ends matching process, we can point out that we only rarely act instrumentally. Wiggins relentlessly points out: for him utility theory is not a sketch but a caricature of human decisions and actions (cf. 2002: 390). In any way, if we suppose accepting a change of vocabulary, and use maximize as "having a reason for", all we would have is a theory *a posteriori*, "supervenient", but not a guide for action concerning ends. Thus, economic theory is, at best, a good theoretical representation of what has happened, as macroeconomist Daniel Heymann recurrently claims. Henry Richardson explains the problem in this way:

> "[P]reference-based is not a form of commensurability useful in making choices but rather a way of representing choices once made. Saving the action-guiding role of the formalistic model by supposing some finally complete articulation of reasons, of dimensions of value or goodness, and of discriminations therein, is like telling Seurat that in order to place all the figures in his masterly afternoon scene of the Grande Jatte, all he has to do is first determine where to put all the points of paint on the canvas. The solution may be logically coherent, but it is totally impracticable, and puts the cart before the horse. If our practical knowledge were perfect, we would already know what to do" (1997: 102).

Another way of putting the cart before the horse is to decide what ends we will choose given the value of the means. We can do it, but limitedly and in a second phase. We do not buy unnecessary goods only because they are cheap. First come needs and then the concrete demand. But needs are not an homogeneous bundle, but incommensurable different ends. Then, I repeat, practical rationality always is required and instrumental rationality is a theoretical representation of the second phase.

[41] Rawls 1971: paragraph 84 (554-60).

Speaking with the hand in your heart, do you think that this is an accurate representation? Then, one may wonder how could it be that economic theory often works (not only describes and explains, but also rightly prescribes and predicts). Be patient, I will try an explanation in the last section.

The former may help to answer another objection: "If we actually decide, how could it be that ends were incommensurable? Therefore, incommensurability is only a philosophical theory and we are wasting time considering it." The answer supposes to return to something already mentioned: this decision, which might be the best, results from an act of practical reasoning, not from a quantitative calculus or from the application of a decision theory (Finnis 1982: 115). This act is practical, not theoretical, as standard rational choice theory is.

There is still another related problem the commensurabilist must deal with. Suppose that ends are commensurable by the final end (be it pleasure, happiness), and that we can maximize the former in order to attain the largest quantity of the latter. The new problem may be that the final end could be neither dominant nor inclusive. It may happen that an end appears that does not serve to nor be a part of happiness. (It also depends in part on the adopted definition of happiness). In this case, maximization would fail. Is it possible? Some authors agree while others disagree. We can think of, for example, *akrasia* (incontinence) which, as yet said, is eliminated by the technical logic. I will not pronounce myself on this topic which would require more elaboration.[42] The aim of mentioning it is to add another argument which would undermine consequentialism.

In effect, arguments against consequentialism insert tensions in it. I find it interesting to shortly mention Mill's tensions for he was a fine utilitarian.

Mill has been comprehensively educated. Elements can be identified from authors as e.g. Aristotle and Bentham in his writings. His conception about the parts of happiness in *Utilitarianism* resonates with Aristotle. These parts, Mill asserts, "are desired and desirable in and for themselves; besides being means, they are a part of the end" ([1863] 1991: 170). These parts are virtue, the sense of dignity, love of music, desire of health or of money ([1863] 1991: 171). They are plural and indeterminate. However, at the same time, he affirmed, as a good Benthamite, that "pleasure and freedom from pain, are the only things desirable as ends" ([1863] 1991: 137). Neverthesless, the other things are not only desired as means for pleasure but they are also desirable for the pleasure inherent in themselves. However, these values that are nonhedonic in themselves are also appraised according to their hedonic properties. In this way, through pleasure, what is incommensurable becomes commensurable, even proposing a method to do the conversion, a preference criterion ([1863] 1991: 139). Neverthesless, in the same paragraph he annuls commensurability saying that few human beings would reject higher faculties for pleasure. Mill, Anderson notes following Moore, does not finally uses his empirical test, but "ultimately bases the distinction among pleasures on nonhedonic value judgments" (1991: 10). And these higher pleasures are of a different rank. Mill is continuously coming and going. As Carrasco highlights: "John Stuart Mill distinguishes qualities (inconmensurable) of pleasures, and tries to calculate. Here is where his method fails because he does not find a legitimate common denominator in order to make pleasures homogeneous and to add and substract them."[43] The balance finally seems to privilege an inclusive conception of happiness containing higher incommensurable values.

[42] For a non inclusive position, see Richard Kraut 1989 and Irwin 1991 for a criticism of it. .
[43] Carrasco 1999, 357. Cf. also 74, 105, 156, 198, 207-11.

Consequentialists and economists took from Mill the insertion of nonhedonic values among preferences. They however did not realize that Mill himself rejected the commensurability of these values, and they attempted to maximize those values.

This section highlights that the structure of technical or instrumental rationality, i.e. a rationality of means allocation in order to achieve ends which allows for maximization, differs from the structure of practical rationality, a rationality of ends that tries to decide what are the ends that will constitute the final end and how to harmonize them. I have incidentally mentioned economics along this paper. Now it is the turn to briefly concentrate on it.

3. Lessons for economics

If modern standard economics would have remained in the field of means and would not have dared to invade the field of ends the former would not be relevant for it. However, given that it recently has turned back to these troubled waters navigated by its founders, the former discussion is of importance to economics. Fortunately it is so, because incursions in ends also affect the legitimacy of standard economics. I will divide this final section into three parts: first I will draw conclusions for modern standard economics, then I will mention and shortly appraise two families of theories concerned with ends and, finally, I will do a positive proposal for economics, given all the former.

3.1. Modern standard economics

Modern standard economics should remain where it is. It cannot analyze ends with its logic. Modern standard economics is based on commensuration and commensuration is only possible when the end is unique. That is, economics should stay in the technical field. I suppose economists (I am one) are not going to get offended by this remark.[44]

This means that economics can legitimately work on specific areas (ends) defined by practical rationality (individually or socially). “Maximizing value can play a local role in a theory of practical reasoning,” as noted by Anderson (1993: 45). Wiggins points out that

> “what has been shown over and over again is only that in many different areas of social life it is theoretically fruitful to pick out large classes of actions which are aimed, whatever else may true of them, at this or that specified end –the end a peasant has in pasturing his beasts and collecting firewood, say, or the aim of a fisherman in open waters, or the aim of a financial trader” (2002: 386).

Other examples may be, more generally, health and education, transportation, industries, regulations, privatizations, integration to mention a few, provided that the practical constraints were also defined: for example, that basic education, or some medical interventions will have priority. Economics may also work with a set of ends which singular specifications could be appraised by cost-benefit analysis. The interplay with practical rationality here is usually more necessary. This is because there are

[44] Concerning Expected Utility Theory as developed by von Neumann and Morgenstern, Jean Hampton reminds us that it did not attempt to be a theory of rationality, but only a predictive theory (1994: 209). The arising problem is that theories dealing with human rationality were descriptive, explicative or predictive, either directly or indirectly, but they are also normative nonetheless (q.v. Rescher 1988: Chapter 1).

aspects of this ends and the decisions about them that are not economically valuable. All actions are performed by men and affect men somehow. The impact is not only appraisable in terms of cost-benefit analysis and in this case practical rationality must enter the game and continually originates constraints. Let me put two brief examples on this. The first example: I am in the board of my University. We often discuss the appropriate allocation of "human resources" of our University Hospital. If we had to guide our decisions on this by the monetary returns, we should decrease the time devoted by our medical doctors to teaching and research, and we should increase their surgery and assistance timetable; or, we should assign "less productive" medical doctors to teaching and research, and more profitable or productive medical doctors to surgery and assistance. If we decided according to these criteria, however, we would be wrong, even in economic grounds. This is because teaching and research are "intangible" values that cannot be appraised by their monetary returns and that are essential to the concept of a University Hospital. The second example: A macroeconomic decision between assigning a budget to first generation reforms or second generation ones cannot also be appraised by monetary returns because reforms, for instance, in justice and education, are difficult to value in monetary terms and may thus be wrongly delayed.

Nevertheless, there are also frequent occasions on which the relevant decision criteria on ends are only economic: this is the appropriate field of standard economics. But as soon as the matter losses this specificity, economic calculation becomes more complicated and, finally, it is not possible in order to be practical.

What actually happens is that economics becomes abstract considering only a few constraints. This is when economics becomes theoretical, no more than an often distorted representation, as explained in the former section. Let us hear from Rawls:

> “It may be objected that in economics and decision theory these problems are overcome. But this contention is based in a misunderstanding. In the theory of demand, for example, it is assumed that the consumer’s preferences satisfy various postulates: they define a complete ordering over the set of alternatives and exhibit the properties of convexity and continuity, and the like. Given these assumptions, it can be shown that a utility function exists which matches these preferences in the sense that one alternative is chosen over another if and only if the value of the function for the selected alternative is greater. This function characterizes the individual’s choices, what he in fact prefers, granted that his preferences meet certain stipulations. It asserts nothing at all about how a person arranges his decisions in such a coherent order to begin with, nor clearly can it claim to be a first-person procedure of choice that someone might reasonably follow, since it only records the outcome of his deliberations” (1971: 558).

Suppose that Daisy and Freddy go shopping once a month. After a specific purchase we can express their decisions by a utility function, which includes the contribution of each product to their preferences. This function, however, neither accurately explains what has happened nor can it be taken as a faithful guide for further occasions. This is obvious, because information is not perfect, preferences are not complete: not only prices influence decisions, but also a large number of other factors. We may mention ignorance about some good products, lack of others, miscalculations of required quantities, tiredness or full carts when they arrive to the last sections, a wrong decision about a new product, etc. The utility function does not overcome all these defects.

I have already sufficiently argued about the theoretical *a posteriori* character of economic theory which reduces it to a simplified representation. However, an answer to the question why it may be then that it is often useful explaining, predicting or prescribing remains unanswered. My answer is: this is not due to the accuracy of the theory but to statistics. I sketched this answer at the end of section 2.2. I will briefly elaborate on this.

Men develop habits. Habits are necessary because we cannot be continually be deliberating and deciding: this would be psychologically unbearable. Generalisations in practical (today called social) sciences are possible thanks to tendencies of actions to be repeated (habits). Time and freedom introduces contingency. But tendencies mitigate it. As Alasdair Mac Intyre explains, predictability in the social sciences is, though only imperfectly, possible. This happens thanks to knowledge of statistical regularities and of the way people fulfil their necessity of scheduling and coordinating their social actions, and also thanks to the awareness of the causal regularities of both, nature and social life (cf. 1984: 102-3). Institutions both embody and reinforce steady habits. This is why they are so relevant in economics.[45]

Turning back to the answer: as soon as the representations were proved to be good representations by an extensive verification we could assume that they represent stable habits and that, thus, it is explaining and will predict rightly. Concerning prescription, proved theories that calculate rightly will prescribe effectively from a cost-benefit point of view and from all point of view if they are immersed in practical considerations about the constituent ends concerned. We should however continuously remember that this field is inexact and that the only way to increase accuracy is by practical rationality fully impregnated by a close contact with reality. Briefly summing up, standard economics either has to concentrate on specific areas or has to interact with practical reasoning, as will be proposed in 3.3.

3.2. Theories concerned with ends

I will briefly mention and appraise two theories: happiness theory and the capability approach.

Concerning happiness theories, only a few words are to be said from the point of view of this paper.[46] Their aims are mainly descriptive. Their merits are that they focus on ends, explore new variables and open minds raising unexpected “anomalies” concerning the springs of human actions that may positively influence economic policy. The weakest link of these theories is that they fully embody the position against which I am arguing in this paper: they completely apply instrumental rationality to analyze the question of ends. Happiness theories replace utility by happiness, but the structure of the reasoning is the same: they have to face the same problems of their “mother theory”.[47] Their empirical findings are relevant and highly enlightening but their intrinsic logic is misleading.

My appraisal of the Capability Approach (CA) is more positive. CA also focuses on ends but in a qualitative way. Sen reinserts the ends into economics and economics into the practical area. He proposes an enlargement and specification of constituent ends, he considers ends as incommensurable and points out the consequent limitations of markets. His concept of commitment gives room to an element of the self, self-scrutiny, which supposes the introduction of moral and social non self-interested

[45] On this, see my paper 2005.
[46] For a review, see Frey and Stutzer 2002.
[47] I took this expression from Hampton 1994: 196.

motivations (2002: 36). Along with Bernard Williams he argues –against utilitarianism– that "rights of different people and of different types do not get merged into one homogeneous total, yielding a 'monist' morality based in the maximization of such a magnitude" (1982: 19). Martha Nussbaum also holds, as mentioned above, incommensurability.[48]

I would however raise two problems about Sen's thought. First, his resistance to specify a list of constituent ends. This position is not at al coherent, because he has in fact pointed out a lot of necessary ends. However, he has expressed his reluctance to this specification.[49] This has generated a debate about the list of capabilities and has also to do with his liberal concept of freedom.[50] Martha Nussbaum, as mentioned, has criticized Sen for this point and has proposed some lists.[51] She recently rejected however to ground this lists in metaphysical ideas (2003: 42). I think that if constituent ends should follow a natural order some metaphysical grounding is necessary. In this sense I think that the work of scholars as Sabina Alkire and Séverine Deneulin is more solidly grounded. Deneulin asks: "Could the claim be made that, behind its refusal to take a stand on what the (disputed values) of the good life is, the capability approach hides unavowed positions about the good, positions that it can no longer hide when the theoretical framework becomes practice? It seems so" (2002: 502). I also think so.

A second objection to Sen's thought is that, although his criticism of commensurability, he goes on maintaining that maximization is the common structure of all human action: "a person can accommodate different types of objectives and values within the maximizing framework" (2002: 37). We have to clarify that Sen's concept of maximization differs from the one habitually used in economics. For him, maximization does not require completeness of preferences (which is the case in his proposed concept of optimization)(1997: 746 and 763). According to Sen, maximization is like Simon's concept of satisfying (1997: 768). Sen relies on Debreu's *Theory of Value* to so define this notions ([1959] 1973, 10). Obviously, the relaxation of the requirement of completeness transforms commensuration in comparison. Notwithstanding the spirit is still quantitative. Elizabeth Anderson told him that he should completely abandon the utilitarian framework and concentrate on notions as *identity*, *collective agency* and *reasons for actions* (2001: 37). Sen answered that these motivations may be introduced in the maximization logic (2001: 57). It seems that he does not reach to fully capture the logic of practical reasoning. Anderson answered again in a yet unpublished critical note of Sen's last book (2006).

However, concerning this point, a tension can be observed in Sen. He admits that the maximization approach is limited as a characteristic of rationality.

> "We must also recognize that maximizing behaviour is at most a necessary condition for rationality and can hardly be sufficient for it. Reason has its use not only in the pursuit of a given set of objectives and values, but also in scrutinizing the objectives and values themselves. Maximizing behaviour can sometimes be patently stupid and lacking in reasoned assessment, depending on what is being maximized. Rationality cannot be just an instrumental requirement for the pursuit of some given –and unscrutinized– set of objectives and values" (2002: 39).

[48] Cf. e.g. Nussbaum 2003: 34 (where she speaks of *heterogeneity* and *noncommensurability*).
[49] Cf., e.g., Sen 2004.
[50] About this see e.g., Gasper and van Staveren 2003.
[51] Cf., e.g., Nussbaum 2003.

I think that a deeper knowledge and adoption of practical rationality would contribute to solve this tension. Let me finally propose something constructive.

3.3. A proposal for economics

I will not intend to suggest concrete proposals. I think that these should be formulated in three fields: the development of economic theory, economic policy and the teaching of economics. I will only propose a general framework for concrete suggestions.

Given the previous conclusions I propose that economics dare to jump a new step. This would be to be concerned with ends fully adopting practical rationality as economic rationality. I quote Anderson from a personal correspondence: "On instrumental rationality, I agree with you that there is a jump from strict instrumental rationality to economic rationality, which comes when, in addition to figuring out means to given ends, we have to order our qualitatively distinct ends in priority. There is nothing in the bare idea of instrumental rationality (if you adopt an end, you must undertake the means necessary for achieving the end or else give up the end) that requires this further step of ordering one's ends in a preference ranking."[52] I propose that the difference between both rationalities were the insertion of practical rationality in economic rationality. I remind Schmidtz' warning: "Homo economicus is a poor model of rational choice even when self-interest is all that matters, for even then there is a crucial difference between Homo economicus and beings like us. The difference is this: we need to worry about our goals in a way that Homo economicus does not" (1994: 246). Even when men act for instrumental reasons, these actions are also practical. This is why modern standard economics is affected if it does not interact with practical rationality (cf. Stewart 1995: 63). Hirschman is an apostle of this cause:

> "Economics has, for very good reasons, concentrated wholly on instrumental mode. I plead here for a concern with the opposite mode [non instrumental], on the grounds (1) that it is not wholly impervious to economic reasoning; and (2) that it helps us understand matters that have been puzzling, such as collective action and shifts in labor productivity" (1985: 19).

Examples on how the marginalization of practical rationality affects standard economics abound. One related with Hirschman's claim is the crowding out of intrinsic motivation (and the consequently effects on productivity) produced by extrinsic motivations.[53]

As historians of economic thought very well know, classical economists conceived economics (properly speaking, political economy) as a part of practical science (moral, political). Adam Smith considered it "as a branch of the science of a statesman or legislator" (*Wealth of Nations*, IV, Introduction, 1). It was a moral science.[54] Then, attracted by the mirrors of colours of exactness and positivist science, economics was unfaithful and abandoned practical science. Unfortunately, this often

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[52] For the context of the emails messages, she is referring to the problem raised by John Broome in his "Can a Humean be Moderate?", in R. G. Frey and C. Morris (eds.), *Value, Welfare and Morality*, Cambridge University Press, 51-73. Economic standard rationality intends more than instrumental rationality because it has to order the ends. But it cannot do it because it is not committed with substantial ends. Thus in the following proposal I am referring to a further jump, the insertion of practical rationality to ascertain the ends.

[53] There is a huge literature on this topic. See for example Bruno Frey 1997.

[54] Literature on this is also huge.

happens among couples. Sometimes the unfaithful part, disillusioned by his/her ephemeral adventure, regrets and tries to return to his/her first love. Unfortunately most times it is too late. Sometimes however, it is possible. The other part forgives him/her and they reconciliate. I do not intend to tell a Hollywood's love story. I would only like to stress that, given the difficulties produced by the divorce between technical and practical rationality, the only way of solving them is to foster the reconciliation. But this reconciliation will be useful if it is not machist. Reconciliation does not entail merge. Economics must not only have to discard his temptation of replacing practical rationality by his instrumental one.[55] Economics also has to recognize the priority of practical rationality. Because, briefly speaking, "the attempt to assimilate non-instrumental behaviour to the standard view of economics either trivializes the enterprise or undermines the instrumentality of the standard view" (Stewart 1985: 66). Resembling most well constituted couples, although subtlety, she is the one in command.

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[55] This is the attempt of Gary Becker and followers. I would call their project a machist project. Or putting another metaphor, is like trying to replace the natural movements of a normal person by movements mediated by orthopedic devices.

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