

Altruism and Social Capital

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Armida Salvati

Universal Publishers
Boca Raton

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CHAPTER I: UTILITY AND INTEREST

Introduction

We will tackle the way that altruism and cooperation are treated in socio-biology by referring to the paradigm of rational action, which involves the calculation of a subject's utility (Maynard-Smith 1982, Bateson 1989).

Starting from Olson's formulation (1965) of a collective action whose goal is the acquisition of a collective good, we will see how, in an attempt to go beyond what Olson maintains is an impossible result, the literature on rational choice provides a series of explanations calling for a broader reading of the phenomena which can be defined as collective action. It is in this context that we come across a proposal to extend the conception of the reference group from the *economic* group (eg. a pool of companies) to groups whose defining borders are less clear-cut and whose identifying link is a common interest in a result (*outcome-orientated*). This result might range from a classic public good, *indivisible* and *non-excludable* (a public park, a road, national defence), to other more varied forms of collective decisions. This chapter is essentially dedicated to demonstrating the difficulty of a *successful collective action* as outlined by Olson.

For the purposes of our analysis, we will define a rational actor as the subject of intentional and conscious actions, carried out in pursuit of individual utility. Such subjective utility is described by a hierarchically-ordered and non-contradictory 'map' of complete preferences, which direct the allocative choice, it-

self made in conditions of scarce resources and perfect information. The scarcity of resources means that the choice must respond to criteria of minimising costs and maximising benefits. The choice of optimal allocation thus obtained is made with perfect information of the alternative allocations. It therefore seems that this choice is the most advantageous from the economic point of view or, put more precisely, the best approximative adaptation of the means to the ends, even if we can not categorise it as such.

1.1 - Utility and Interest

The author who has best formalised the difficulty of collective participation and cooperation in terms of rational action is Mancur Olson in *The Logic of Collective Action* (1965). Olson is the obligatory critical point of reference for every analysis of the rational justifiability of cooperative action. Olson affirms that it is impossible for a rational actor to participate in an action carried out in pursuit of an interest shared by a group of people. In particular, the common good which emerges in such a case will never be obtained if the reference group is so big that every individual's contribution will be lost in the collectivity of the result. A rational actor will only partake in an action in which his contribution is recognised as significant. Above all, he will only take part in an action in which the individual usefulness to him (the result of the collective benefit) is notably greater than the costs that he would have to bear if he decided to supply the collective good on his own. The emphasis on the solitude of the subject can not be explained unless one states at the outset of the analysis that one can hope for the help of others, but that it would be irrational to include it in one's calculation of available resources. The actor would do better to rely on his own forces, or to create conditions in which he could reasonably hope for the collaboration of others. Before examining more specifically why and how rationality translates into non-cooperation, it would be useful to set out some pre-

liminary notes on the theoretic field of reference used by the Olsonian analysis and those authors who refer to the theory of rational action. Olson's analysis is constructed in a semantic environment in which rationality, or the suitability of means to ends, is coherent with one's complete and hierarchically-ordered preferences, to which the action adapts itself according to a rigorous cost-benefit calculation. We assume that each actor maximises his utility, a term used in rational choice theory to indicate the subjective perception of a benefit or, to use a wider and much abused term, interest. Utility and interest measure the 'desirability' of an action and are what make one desire certain things and optimise them. Utility is the effect of what you obtain; interest is the fact of wanting to obtain it. The rational actor is someone for whom the desirability of his actions is defined in terms of utility and interest to him; any behaviour which is recognised or demonstrated as acting towards these ends is rational. On these bases it makes no sense to accuse rational behaviour of egoism or altruism, just as it makes no sense to pretend to deduce the nature of a content from the form of its container. As described above, rational behaviour is an empty form whose significance is measured in terms of the actor's intent. The intention establishes the object of interest and thus satisfies the minimal formal requisites of rational action.

From the methodological point of view, the theory of rational action is characterised by the use of the individual as the reference for the action and its significance. This contrasts with the so-called *holistic* approaches which stress the aspects of the social body which can be broken down into *natural* characteristics common to the entire *category*.

What we are concerned to do here is to establish the fundamental boundaries for an analysis of altruistic and cooperative behaviour, within the hypothesis that such behaviour is prejudicially 'lost' against alternative decisions motivated more directly by *egoistic* interest.

1.2 - Rationality and public goods

The theoretical field of reference emerges from the inherent difficulty in supplying public goods. A group of people might be interested in obtaining a good or service, such as the promulgation of a new law which serves its interest or an agreement within the group itself. But if the actors within the group are rational in that they rationally pursue their interests by making the best possible use of the means at their disposal, Olson maintains that none of them will work towards this good. When rational actors form part of an interest group, they will not obtain this good, at least not in the best form. On the same rational basis, a rational actor acting alone would work towards the acquisition of the good in question. But if placed in an interest group the actor would find it rational to not work towards the goal in question. The reason for the disparity between individual rationality and collective rationality lies in the characteristic of *public good*, in its indivisibility and non-excludability. By indivisibility we mean that the use of a given amount of a good by a subject does not prevent other people from using that same amount of good. And by non-excludability we mean that any subject which can be identified as belonging to an interest group, that is to say any subject for whom the collective good provides utility, can not be excluded from the benefit of that good.

Indivisibility and non-excludability determine what is termed in economics the *external effect of the public good* or, put another way, the fact that the consequence (negative or positive, hence the terms negative and positive external effects) of the public good's acquisition falls outside of the relationship between purchaser and vendor. In the case of an acquisition of a private good the purchaser is the only person who can manage *his* purchase - thanks to the right of property. However, in the case of a public good, no one who has an interest can be excluded from the use of the good. From this it follows that it is more convenient for a rational actor to let *someone else* deal with the acquisition.

1.3 - A quantitative determination of the group and a collective undertaking

Assuming this initial schema, the probability of an individual undertaking a cooperative initiative increases if the interest group is small and there's a positive answer to the cost-benefit calculation. If a collective good must be sought by a small group, it is important to establish the relative weight that each member of the group attributes to the benefit. The benefit will not have the same importance for each member of the group - the importance is defined as the part of the group benefit that constitutes the individual gain. We can label this fraction F_i , to be calculated over $S_g T$ where S_g represents the collective interest of the group, and T the level of public benefit obtained. We use A_i to represent the advantage that an actor gains from the acquisition of the good - this is calculated by deducting the cost of the benefit, C , from its individual value, V_i .

To determine how far the individual actor will push when he has to assume a cooperative decision, we can say that the maximum advantage is reached when:

$$dA_i/dT_i = o(1)$$

or when the conditions leading to marginal increments in the good's production do not lead to increments in individual gain. For $A_i = V_i - C$ (individual value minus the overall cost of the acquisition of the public good) we can say that (1) becomes:

$$dV_i/dT - dC/dT = o(2)$$

We have considered individual costs and overall costs as a unit because the cooperative decision is made in conditions of uncertainty with respect to the decisions made by the other components of the group. Given that $V_i = F_i S_g T$, we can simplify to get:

$$F_i S_g - dC/dT = o(3)$$

This last equation, (3) indicates the quantity of public good obtained through the individual undertaking of an actor, whose participatory interest is represented as F_i .

As the first term of (2) is $dV_i/dT = F_i(dV_g/dT)$, a balance obtained by taking the only quantity we assume to be constant out of brackets, that is to say the fraction representing individual interest in the acquisition, we get:

$$F_i(dV_g/dT) = dC/dT(4)$$

In other words, for an actor acting cooperatively, the optimum return from a public good will be obtained when the growth rate of the value for the group, divided by the growth in quantity, and multiplied by the portion of the public good in which the actor is interested, equals the growth rate of the costs of the acquisition over the growth in quantity.

This is for the point up to which it is advantageous for a single actor, acting in a small group, to work towards the attainment of a public good. But the minimum conditions to be met before one can expect an individual undertaking are defined within the situation $F_i > C/V_g$, as if F_i equals individual value over collective value, we have:

$$V_i/V_g > C/V_g$$

and simplifying:

$$V_i > C.$$

Which is to say that one can expect individual undertaking when the value an actor gets from a certain good is greater than the cost of its acquisition, even in the pessimistic hypothesis that the actor was the only person bearing the costs.

The condition for a positive result to the cost-benefit calculation is that the predicted expenses take into account the *overall* costs of supply. In other words, the calculation must consider the eventuality that all other actors will desert the undertaking. Only when the actor can assume the overall burden of the acquisition and still benefit will he initiate a cooperative strategy.

In fact, for as long as the increases in individual gain are greater than the increase in the overall expenses, the overall expenses might coincide with the individual expenses.

1.4 - The prisoner's dilemma and the dominant strategy

This section concerns a classic case of realizing a dominant strategy, defined as the most advantageous course of action to take no matter what the others do. For this strategy there is no need to *know* what the other players do. Whenever a cooperative decision fulfils the utility criteria described above, it will be made *independently* of what the others in the group do. According to Olson, the schema's dominant strategy that is in the game in question, will only be cooperative in the presence of factors that render the collective good available to *private* acquisition. Thus Olson's analysis denies collective good its very nature, that of being procurable only by a *collective* and not by an individual. Although not expressed in the formal terminology of game theory, the questions posed by *The Logic of Collective Action* make it the reference point for the subject, offering a classic example of rational choice in conditions of conflict. The conflict in question is the choice between cooperation and *free riding*, as formalised in the prisoner's dilemma (from here referred to as pd). The typical situation used to describe this play is well-known: two prisoners are held in solitary confinement accused of the same crime. Their guilt notwithstanding there is no concrete proof against them. Separately, each is asked to collaborate with the authorities and reveal who is guilty. Each actor is therefore faced with the following dilemma: betray my companion by denouncing him and so gain my liberty, or confess to being the guilty party. The outcome of the prisoners' decisions might be as follows: if they both accuse each other they will receive a light sentence for slander; if one confesses to the crime and his companion denounces him, he will be condemned and the 'betrayed' will be released; if, however, both

confess they will be released for not having committed the crime.

To the explanation above it should be noted that the two prisoners can not communicate with each other and that they are allowed one and only one choice.

The preferences of the two prisoners are described in the following *payments matrix*, obtained by combining the strategies of 'Defence' and 'Cooperation':

$$(y > x > w > z)$$

		Player 1	
		C	D

Player 2	C	x, x	z, y
	D	y, z	w, w

$$DC > CC > DD > CD;$$

which is to say that the players prefer the combinations in which they are the only ones to desert, or accuse their companion, over those in which both confess. The latter solution is, however, preferable to the one in which each accuses the other. The worst possible solution is when a player confesses and is simultaneously accused by the other player. According to this order of preferences, one can predict that the *outcome* will be mutual desertion, the only strategy capable of avoiding the result CD. However, adoption of these choices renders the second-choice preference unattainable. By increasing the number of players to *n*, one can apply the matrix to an Olson group. In this case, the game is played by each player against, or in cooperation with, all the others - this because of the initial assumption of individualism. The reason why what appears to be rational, that is useful, for the collective is not rational for the in-

dividual, lies in the possibility of free-riderism, in the possibility of a player profiting from the work of others by using the public good without having paid for his contribution. In this sense, the pd is a typical non-cooperative game.

Meeting the criterion of individual rationality in the supply of a public good, along the lines of the pd model, makes a collectively rational response impossible. In terms of the pd, if the actors pursue their individual interests, the result is DD rather than CC (mutual cooperation). For this reason Olson is considered a representative of the pessimistic school of thought, as someone who doubts the possibility that a public good can be constructed by uniting the participants' individual interests (Dunn 1989, 111). The described impasse is the result of a 'parsimonious' vision of human action, which reduces motivation to the economic register, to the maximising of individual interests (Hirschman 1987) based on the assumption that resources are scarce and it is therefore necessary to maximise utility.

Taking the recognised distinction between the two logics as a starting point, Margolis (1982) proposes a possible solution. Working on the premise that "*We are all citizens, just as we are all consumers*" (p7), he claims that there is a need for a theory to link *self-interest* and *group-interest*. According to Margolis, this can only be done by recognising the existence of two distinct functions of utility: one which maximises the individual interest, as in the classic theory of rational action, and another which maximises the social and public interest. Within the latter, discussion of the public good's external effects can finally be included in the economic treatment.

To return to our analysis of the pd model, one can see that the payment matrix shows that the interaction between the two players is based on the transferral of one's preferences to one's adversary, and the consequent actualisation of a defensive strategy, in this case, a defecting strategy. There is, therefore, no mention of any form of conditionality to which one's choice of action could be linked. Distrust in the good disposition of one's interlocutor, resulting from one's own fear of co-

operation, leads to the suboptimal result of mutual defection. A player who adopts a dominant strategy makes the preliminary choice not to predict the other players' moves, resigned to the impossibility of cooperation. If, in the case of the classic two-player prisoner dilemma, this outcome is reached through fear of defection, in the case of the supply of a public good, with n players, the dominant strategy will be dictated by the severe parcelization of the contributions, and by the lack of perception of the real impact of individual behaviour on the final result. In this case, the dominant strategy is the course of action that one follows no matter what the others do as one can not predict what the others will do, nor can one understand the connections between the strategies.

1.5 Dimension of the groups and selective incentives

According to Olson, and bearing in mind that his analysis does not borrow from the games model, these conditions are valid for large groups, for groups in which the part of the overall benefit which constitutes individual profit is too small to support the costs of the overall result and therefore to justify individual input. Furthermore, if there were someone in the group prepared to bear the overall cost, for the above-mentioned reasons of externality, a cooperative agreement aimed at dividing the costs would seem irrational. So, if on one hand, the action is subject to the economic expediency of a *private* acquisition of a *public* good, on the other hand, the possible presence of someone in the group interested in that modality of acquisition makes any attempt at cooperation irrational. From another perspective, if there were an individual prepared to pay the overall cost, but who did not hold a majority stake in the benefit, and if there was no member of the group for whom the benefit represented a major interest, the individual's eventual undertaking (in the above-mentioned sense) would continue up to the point where the acquisition's costs were covered by his slice of the result. Therefore the good attained

would be sub-optimal at best. With regard to the necessity or possibility of a cooperative agreement, Olson maintains that groups can be *privileged*, *intermediate* and *latent*. The first category includes small groups for which collective action is assured by the presence of an actor whose major interest in the attainment of the public good justifies the undertaking. An intermediate group is one whose size makes it possible to discern the interactive strategies between members, that is to say the influence that the members' behaviour has on the overall group benefit or, put another way, how the members determine the success (or failure) of the key acquisition.

If we've shown above that the non-visibility of contributions is a major cause of difficulty in acquiring a public good, in cases where responsibility for defecting behaviour can be attributed to an actor, the effects on the strategic plan are different. Given the exiguity of the group, the relative weight of each member becomes significant and it becomes necessary to have an explicitly cooperative agreement. The fate of the acquisition depends on the success of this agreement and on recourse to bargaining or *threats*. Present in the agreement is a risk, absent for privileged groups for whom the cost-benefit calculation is the action's sole criterion.

The third category is that of the latent groups which possess none of the characteristics of visibility and interdependence which we've seen in the intermediate groups. In this case, a collective action, aimed at the pursuit of a common good, will only be undertaken if the actors are motivated by separate and private incentives. Latent groups are large and not organized, and so the benefit is, by nature, hypothetical. These groups are made up of people who would be interested in a certain communal good if it were provided to them, but who have no rational motivation to work towards its acquisition. According to Olson, this motivation must be separate and distinct from the benefit itself, hypostasized in incentives which establish a difference in utility between those who work and those who don't. Thus we can include in this group the hierarchy of inter-

ests which form the essential conditions to be met before an individual works for a communal good. The examples Olson uses in this regard focus on union groups (see also Elster 1983, p236) whose collective struggle is motivated by the drive for 'social' measures favourable to militants, measures linked to the idea of a 'circle' or club and, therefore, to some extent 'exclusive'.

CHAPTER II: FOR AN UNORTHODOX THEORY OF RATIONALITY

Introduction

If it's true that a narrowly defined rationality leads to irrational results, we need to shift our focus. We need to look at widening the idea of rationality to include the option of being irrational as one of the choices open to the rational subject.

To guide us along this path we will use the works of John Elster. Elster's conception of rationality is far from orthodox - his works are a series of examples of how a partial theory of rationality (*thin theory of rationality*, Elster 1983) reduces the range of heuristic possibilities for an interest-based action paradigm. He goes as far as to depict an excessively simplified, even abstract, action. The thin theory of rationality requires only that the action is coherent with the actor's preferences and that these preferences include his beliefs and desires. The broad theory of rationality, however, requires that the requisite for an action to be called rational is verified for those beliefs and desires which must be coherent in the proper sense of the term, that is well-grounded, coherent between themselves, and coherent with the action they motivate. In light of this broad theory of rationality, rationality is no longer the rule but an exception (Elster 1983, 3), even if for the sole fact that desires and beliefs, even when verifiable and real, are induced causally and are not autonomous.

Elster's position is part of a literary trend aimed at highlighting and surpassing the limits of Anglo-Saxon utilitarianism. We need to remember that the utilitarian position is characterised by the strong pragmatism of its judgement criteria for actions or decisions. These are judged to be just or unjust on the basis of the so-called maximin criterion which measures the effects of that action.

The rationality criterion attributed to one course of action over another responds to the criterion of the decision's universal acceptability, characterised by utilitarians as the quantifiability and measurability of a decision's effects. Through a calculation of the utility that each action produces for everyone, utilitarianism attempts to reconcile individual and collective interests, egoism and the communal good. The utilitarian alternative to egoism calls for the harmonisation of single actions through competition. This leads to realisation of what is termed in economics the Paretian optimum, the point at which no one can further improve their own position without damaging that of the others. The principle on which this is based, the selfish motivation behind the action, is open to criticism, in particular with regard to the formation of the actor's preferences, the basis for his interests. According to the critical approach that unites Sen and Elster, the preferences are not always 'revealed' or manifested - they could be temporarily incoherent, they might not be synchronously coherent between themselves, they could be induced, and so forth.

Extending the analysis to include the actors' *beliefs* means shifting the emphasis from an action *rational in respect to its aim*, for which the means must be adapted to the ends, to an action *rational in respect to its value* (Weber 1922), for which the costs (the means and energy used) are neither calculated nor compared to the benefits with which they often coincide (Hirschman 1982, Turnaturi 1991). This transformation of means into ends (Pizzorno 1986) is made possible thanks to the placement of action in a universe of meanings, based on and defined by the actor's *identity*. This shift from the notion of *interest* to one

of *identity* allows us to base collective action on the motivating values behind participation in it. Given the reciprocal nature of identity, which makes it essentially an *identity of recognition*, it follows that participation confirms and renews that identity. Even political action, as a collectively-organised action orientated towards an end, appears as an example of collective action. The appeal to an ideology reassures the actor in regard to his investment in the future – within an ideology interests are channelled and deferred according to the political project.

According to game theory, any intentional action aimed at building a relationship is identified as strategically rational. Such a relationship is enacted on the basis of anticipating the other's decisions in such a way as to establish relations of conditionality and harmony. Cooperative action is a particular case of strategic action which, in the case of two or more poles (depending on how many actors are involved), shares this conditionality. The definition of a rational actor as someone who maximises his own utility makes it difficult to accept the explanation of altruistic and cooperative action on the basis of classical rationality.

According to Jon Elster, cooperative and altruistic action is the *by-product* of strategies used to overcome the obstacles raised by the application of orthodox rationality to the adaptation of revealed preferences (Sen 1977). Such difficulties mainly regard the impossibility of conforming one's own action to expressed preferences. They also touch the theory of rational action in the axiom of liberty of choice.

According to this approach, freedom of action is the freedom to choose on the basis of coherent and hierarchically-ordered preferences. The first difficulty facing the theory of rational action is to adapt the action to these preferences in the face of exogenous causes, but also, and it is this that interests Jon Elster more, of endogenic causes dependent on the actor himself. To equate freedom of choice with freedom of action is problematic, although this is the direction which we will move in. Following a reading of "*Ulysses and the Sirens*", we will start

by looking for a basis for the claim to liberty of determination (§ 3.1), and the consequent branching into *parametric and strategic* rationality (§ 3.2). Following from this we will review possible cooperative solutions to the pd, assumed in a model of interaction (§ 3.3). These solutions will try to demonstrate the contrast between sub-intentional causality and super-intentional causality as mentioned above (§§ 3.4-5). Finally, we will try to respond to the question of altruism's rationality, to see how it is linked to the question of collective action and the public good (§§ 3.6-8). The superiority of the utilitarian paradigm is questioned on the grounds that it is impossible to realise one of its prime presuppositions: of adapting an action to the rational actor's expressed preferences or, put another way, to his interests.

2.1 - Freedom of choice and freedom of the mode of choice

Concerning attempts to reduce human rationality to its biological fundamentals, Elster admits that one can accept *passage* to human teleology (the capacity to act towards an end or 'intentionality') through biological teleonomy (the simulation of this capacity by animals), and therefore the human capacity to work towards global and strategic maximisation as the result of a local and parametric maximisation process (Elster 1977, 371).

Elster accepts the hypothesis of the biological evolution of the freedom to choose ones' ends through natural selection. But the reduction (from human teleology to biological teleonomy) must involve two stages not one. As to the possibility of this reduction, of the capacity for rational behaviour as the result of natural selection, the author clarifies that the object of the reduction is the capacity to behave rationally and not the realisation of specific cases of rationality. Furthermore, he explains rational behaviour as the result of two consecutive stages: the first being the possibility of including rational behaviour within the general faculty to resolve problems in a ra-

tional way; and the second being the possibility of explaining this general faculty as a product of natural selection (Elster 1979).

This means that the general capacity expressed by human rationality might remain potential and might not always be applied in an orthodox fashion. The idea of a knowing intentionality to act, says Elster, is a regulatory idea, and is not dogmatic according to the Kantian distinction. As such it can be accepted as a working hypothesis even if it needs to be verified on a case-by-case basis. There is in mankind, as opposed to biological organisms, an assumption of rationality such that in action theory one always seeks the ideal form of rational action as a point of reference. At this point, all eventual exceptions to this model need to be verified.

The two-stage process here discussed involves the passage from the local maximisation capacity, which adapts its means to the conditions present, to a global maximisation capacity, which can take into account forecasts of the future. A theory of rational action which goes beyond codification based on purely economic standards of action needs to recognise how, in reality, human behaviour is more frequently characterised by the former rather than the latter.

Human rationality, as a general capacity to strategically resolve problems, can express itself by limiting itself. But this deliberately myopic articulation is not the result of evolution. Rather, and more simply, it is the product of a choice informed by a general rational capacity.

Altruistic and cooperative behaviour, which Elster attempts to explain, is included in a rational action theory as imperfect rationality. In some way this can be taken back to its biological-evolutionary origins although it is distinct from them thanks to the two-stage process described above. This does not, however, distract from the fact that, in practice, human behaviour is more often driven by imperfect and limited rationality than by perfect rationality. Altruistic-cooperative action, in fact, involves the application of a 'difficult rationality', in the sense

that its application in an orthodox form does not lead to the desired outcome.

Perfect rationality, as a regulatory idea, finds a case of negation in altruistic action. In the sense that if an actor acts altruistically, it doesn't mean that he is 'irrational', only that he has not used his rational capacity in this specific case. This capacity, as a generic capacity, is what distinguishes humans from animals. Animals adopt specific behaviour to resolve specific situations according to a local rationality.

Local rationality is the ability to resolve present problems using a present and 'visible' capacity. On the other hand, global rationality can wait. Like an investment which might renounce a good on a first occasion in order to acquire a greater quantity in a second moment, it is capable of temporal deferment. Global rationality is not applied to specific cases, which it can predict and *schedule*, but is capable of choosing the best allocation of resources even without knowledge of the parameters of the situation on which it must decide.

Now, if natural selection adopts a behaviour according to a local and parametric rationality or, put another way, if it responds to a series of parameters to which the genetic make-up has already proved itself suitable and in respect to which a certain behaviour is reproduced, human rationality can decide how to choose.

It could be that the human ability to operate a global maximisation, according to a strategic rationality, is derived from natural selection but, because it is not programmed, it can not respond to specific functions and behaviours. It is up to the rational individual to decide whether to apply his full rational capability or not. Therefore it is local maximisation derived from natural selection that generates global maximisation and it is this global maximisation that chooses whether to apply itself or to apply the other form. The metaphor of Ulysses, who had himself tied to his ship's mast to avoid succumbing to the bewitching song of the sirens, is the metaphor of the capacity, which a rational actor has, to adopt an imperfect rationality

which is limited and therefore local. But only humans can choose between the two forms and to pass from one form to another. This also explains Elster's diffidence towards the biological concept of *mixed strategies* (Maynard-Smith 1976). Given the definition of a mixed strategy as a strategy able to activate various forms of behaviour (Hamburger, in Rusconi 1989) depending on a percentage probability, its conditionality implies that the organism must be able to adapt its behaviour to changing conditions, something that the definition of parametric rationality negates.

Regarding human altruistic action, Elster maintains that the question should not be raised, at least not exclusively in terms of rationality (in the sense that rationality requires adaptation of the action to an end). The terms of the question should focus on the authenticity of the end, both in cases where there is a genuine desire to do good and in cases where altruistic action is perceived as a means to realising selfish ends. In other words, exercising the capacity to respond to certain situations by seeking an equilibrium between the parts - according to a definition of equilibrium that we will give later - requires, as a preliminary, that you are able to choose this form of action. One can say that yes, man operates according to local maximisation principles, based on a model which, in theory, is the same as natural selection. However, this link, this reduction of human rationality to something similar to the teleonomy described above, leads one to suspect that for man this possibility is an alternative, that such a way of action is not the only possible way.

Starting from the distinction between the finalisation of human action, which can be attributed to knowing intention, and that of animal behaviour, attributable to a *function*, and therefore to the specific resolution of specific problems, Elster traces the communal path which leads through natural selection to one or other form of action. However, not only is human rationality able to choose between an 'environment' of established possibilities, but it can also decide whether or not to act by taking into account part or all of the 'environment',