

DISCUSSION FORUM II

Behavioural economics

At the 2009 SASE meeting in Paris, Amitai Etzioni, Michael Piore and Wolfgang Streeck discussed the potential contributions of behavioural economics to socio-economics. Following are slightly expanded versions of their presentations.

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Bounded rationality

Amitai Etzioni

Institute for Communitarian Policy Studies, George Washington University, Washington, DC, USA

Correspondence: etzioni@gwu.edu

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Bounded rationality is a concept that seeks to reconcile the neoclassical paradigm of choice behaviour with the robust findings that people do not and cannot optimize, a key assumption of that paradigm. (I refer to the neoclassical paradigm rather than to neoclassical economic theory, because the said paradigm is widely used in political science, sociology, law and other social sciences.) A review of this effort speaks directly to the question whether or not a fundamentally different paradigm is needed in order to study economic behaviour and choices in general.

The thesis that choice-makers stop searching for better options once they are 'satisfied' is an idea famously associated with Nobel Laureate economist Herbert Simon.¹ The concept is by far the most popular version of bounded or limited rationality. It has a great intuitive appeal. Faced with a long menu, after a long day's work, I stop searching once I find a dish I basically like. My wife, after an

¹See http://nobelprize.org/nobel_prizes/economics/laureates/1978/simon-lecture.pdf.

equally onerous day, will work quite a bit further down the menu, looking for the best the given restaurant has to offer. And my energetic daughter-in-law will go a step further, asking the waiter how various dishes are prepared, all in the quest for the best dish. I am at best a satisficer; my daughter-in-law is a classical optimizer.

I guess that many readers of these last lines will have an ‘ah-ha experience’ (especially if they previously have not been exposed to the distinction between satisficing and optimizing), recognizing the value of the distinction. Like many such concepts that are widely used in humanistic texts, a social science probing of its definition and ways it can be operationalized (or measured) reveals that the concept is vague and elusive, and hence does not provide a sound building block for a social science.

The optimal choice—the one that truly (unbounded) rational actors make, the one people are expected to make according to the neoclassical paradigm—is clearly defined. It takes place when all the relevant information about various options is collected, absorbed and properly processed, and logical conclusions are drawn from it. However, mountains of data, especially collected by behavioural economics (BE),² show that people have congenital cognitive limitations that make it impossible for them to make optimal choices in all but very trivial cases, such as playing tic-tac-toe.³ Moreover, studies show that education and training do not sufficiently enable people to make optimal choices.⁴ Furthermore, the data show that people are not shy of what is considered optimal by a few degrees (although by definition, one either is or is not optimal), but that their choices are off this vaunted stage of rationality by a very great degree.⁵

In addition, when individual choices are aggregated, their cognitive limitations are not magically corrected by a select few who act rationally, the way some economists have tried to get out of this corner. For instance, Gary Becker, a Nobel

²Jacowitz and Kahneman (1995); Russo and Schoemaker (1989); Ariely (2008); Plous (1989); Kahneman *et al.* (1991); Franciosi *et al.* (1996).

³According to W. Brian Arthur, deductive rationality could apply to a game as simple as tic-tac-toe, but that ‘rational “solutions” are not found at the depth of checkers, and certainly not at the still modest depth of chess and go’ (Arthur, 1994, p. 406).

⁴For example, Eddy (1982, pp. 252–254) demonstrated that most physicians (95 out of 100) in his experimental sample were unable to combine two probabilities to determine the accuracy of a mammography; other researchers have observed similar results. Furthermore, Fischhoff (1982, pp. 439–440) reports that the education experts receive in their specialty does not cause overconfidence in decision-making and assessments to disappear, although calibration training has proved effective in reducing overconfidence in professions like weather forecasting.

⁵See above cited studies of BE.

Laureate in economics, argues: ‘It doesn’t matter if 90 percent of people can’t do the complex analysis required to calculate probabilities. The 10 percent of people who can, will end up in the jobs where it’s required’ (Becker, as cited in Stewart, 2005). This line of argument is not supported by evidence. Becker provides no data to demonstrate that 10% (or even 1%) of economic actors are optimizers, or that the markets, in aggregate, act rationally, as opposed to, for instance, gyrating between periods of irrational exuberance and greed and irrational fear and panic (Shiller, 2005). Also note that individuals who seek to pick stocks in the market on the basis of the advice of specialists, such as financial advisers and brokers, underperform when compared with random choice (Malkiel, 2007, pp. 135–136).

In short, optimizing is clearly defined, and at least in select situations, it is relatively easy to measure; however, it is neither a descriptive nor a normatively fruitful concept of human behaviour. This incontestable fact has led to different reactions by those who use the neoclassical paradigm.

- (a) Many ignore these findings and continue to use the paradigm as if the data do not contradict its key assumptions; this is at best a sub-optimal reaction for a science.
- (b) Some claim that the findings apply only to a limited or even merely trivial set of choices (Camerer and Loewenstein, 2004; Harford, 2008); however, the data show that the limitations apply to significant choices, such as purchasing houses and investing in one’s pension plans, among others. Hence, this is not a valid defence.⁶
- (c) The definition of rationality is moderated in ways that allow one to call behaviour rational even if it is very far from optimal. Satisficing is but one example, although arguably the most popular version, of this approach, labelled bound rationality. I turn next to explore two key versions of this concept and to evaluate them.

Kinds of bounded rationality. One argument used by the advocates of bounded rationality is that behaviour that looks like merely satisficing is actually optimal, once one takes into account the information costs. While originally neoclassical economics assumed that information was instantly accessed, absorbed and processed, and rational conclusions were drawn from it, all at no cost, in later versions of neoclassical economics some scholars introduced the notion that searching has a cost. Hence, it is suggested, when a person stops searching even though he has not yet found the optimal choice, it is because the benefits from additional searching are smaller than the costs of continuing the search.

⁶See above BE studies and Etzioni (1988).

Therefore, what seems sub-optimal is actually optimal, once information costs are taken into account.

To illustrate my point: a person has stopped comparative shopping for a car after visits to two dealers. If one now assumes that Y (the cost of more searching) is greater than X (the reduced price and better quality the buyer would have found at the dealers he did not visit)—one has reconciled the fact that people are poor searchers with optimization theory. All one has to assume is that additional searching is costly and/or the marginal gains are small.

Whether one can use this exit from the dilemma posed by the contradictions between BE findings and the neoclassical paradigm is largely an empirical question, namely whether people can correctly (i.e. rationally) assess the costs and benefits of information they have not yet collected nor processed. As Jon Elster has pointed out, in order to be optimizers, decisions about cutting off an information search would have to be based on assigning the unknown information a concrete value—and would require one to ‘know the future’ (Elster, 1986, pp. 25–26). Having to know the unknown might be a better way of expressing the same cardinal point—hardly a promising out.

A rather different version of bounded rationality asserts that a person acted rationally—if he intended to act rationally. ‘Bounded rationality is not irrationality’, Simon writes, ‘On the contrary, I think there is plenty of evidence that people are generally quite rational; that is to say, they usually have reasons for what they do’ (Simon, 1985, p. 297). Bryan Jones writes: ‘Bounded rationality asserts that decision makers are intendedly rational; that is, they are goal oriented and adaptive but because of human cognitive and emotional architecture, they sometimes fail, occasionally in important decisions’ (Jones, 1999, p. 297).

This version of bounded rationality is of merit in the limited sense that deliberative behaviour—even when deliberations are poorly executed—might often been less irrational than behaviour that is habitual, let alone genetically determined, although this observation remains to be validated. (Kahneman, 2003, p. 1450, distinguishes along similar lines between intuitive and reasoned behaviour, although note that he carefully avoids the term rationality altogether. And one can read Langer *et al.*’s (1978) distinction between mindless and mindful behaviour along similar lines as well.) However, a moment of reflection will reveal that actually this kind of intended rationality is light years away from the one assumed by the neoclassical paradigm. Thus, under this kind of bounded rationality, a consumer that sets out to purchase what is needed for a Thanksgiving dinner, but runs into a sale of glass figurines and is swayed by the colourful wrappings of the packages and a promise that he might win a trip to Hawaii, would be defined as having acted rationally.

Neoclassical economists may well argue that if one rejects the two suggested ways of reconciling their paradigm with the findings of BE, as well as other

similar efforts, one is left with the perception that people act irrationally, a term which evokes the image of mentally challenged people, in plain English, acting crazily. However, just the fact that people cannot process information and deliberate in ways that come even close to what optimization presumes does not mean that there are no patterns to their thinking and that these cannot be studied and improved. The term Parsons used, non-rational behaviour, would seem most appropriate.

Indeed, it might be useful to avoid binary notions (one either optimizes or fails this vaunted test) and think instead in terms of *degrees of rationality*, which allows one to state that most people—most of the time—act on a low level of rationality and are closer to the non-rational end of the continuum than to the optimizing end. This precept points to a quest for ways to measure the progress individuals make as education is spread, training is provided and technology comes to assist. The main thesis would be that, although it is given that economic choices such as investment, career choices and major purchases are highly complicated and a high degree of non-rational behaviour is to be expected, we still can study which factors make for relatively more rational behaviour.

Among the factors that affect the degree of rationality, cognitive limitations are those most studied by BE. They have also paid some attention to emotions (e.g. loss aversion, see, for example, Kahneman *et al.*, 1991; Thaler and Sunstein, 2008), and even to normative factors (e.g. social norms).⁷ Once these two sets of factors, emotions and norms, are studied more extensively, as I have outlined elsewhere (Etzioni, 1988), we may well discover that variables not included in neoclassical paradigm are so numerous and powerful that the study of choice calls for forming a new paradigm.

There are many reasons as to why scholars stick to the neoclassical paradigm or seek to reconcile it with the BE data. These include the mathematical elegance of the paradigm; the fact that it provides a shared framework for the many thousands of scholars who use it; and that it has considerable support in the minds of public policy-makers and in much of the electorate. The paradigm also benefits from the fact that it is compatible with *laissez-faire* conservative and libertarian thinking. However, the main obstacle to subjecting the neoclassical paradigm to the kind of competition it so strongly favours is that critics of the neoclassical paradigm have been unable to develop a reasonably parsimonious paradigm of their own. Neoclassical economists fairly complain that there are numerous social, cultural and still other variables that are found to influence choice behaviour, and that these cannot be modelled, and therefore studied, in a coherent

⁷Recent studies include Daniel Ariely and James Heyman's study of students who were given various types of compensation for their participation in a short experiment; see Ariely 2008, pp. 69–71.

matter.⁸ Until this obstacle is overcome, the neoclassical paradigm, however defective, will not face a competitor.⁹

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⁸As two leading economists put it, 'given the wide array of psychological explanations from which to choose . . . research undertaking such a task has virtually unlimited freedom to explain any observed behavior ex post facto' (Levitt and List, 2008).

⁹For an attempt to provide such a paradigm, see Etzioni (1988).

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From bounded rationality to behavioural economics

Michael J. Piore

Department of Economics, Massachusetts Institute of Technology, Cambridge, MA, USA

Correspondence: mpiore@mit.edu

Amitai Etzioni's short statement opens a very wide range of issues that I think cannot be adequately addressed in a panel of this kind. But it seems to me that the main question posed in the context of the Annual Meetings of SASE is that of how we should understand socio-economics as an intellectual endeavour and where we should look for help and support. For me, speaking here as an economist, what is interesting about the endeavour is that it represents an attempt to temper the almost exclusive emphasis in the discipline of economics upon the individual—an emphasis which is moreover both analytical and normative—with a recognition of and concern for the role of the society in which the individual is embedded. From this point of view, I think the emphasis on Herbert Simon's notion of bounded rationality is misdirected. The issues once addressed in economics under this heading have since been reinterpreted,

partly in response to the kinds of criticisms which Etzioni makes in his statement. They are now being explored in two research programmes.

One of these, which Etzioni does not mention, is economic institutionalism (a term which I use to distinguish the concern with institutions in economics from institutional concerns in other social science fields). The basic 'assumption' here is that much of what Simon calls 'rules of thumb', which overcome the limits of rationality (or more exactly, the limits of our *models* of rationality), are actually legal rules and social norms. The discipline has come to make a distinction, following Douglass North (1990), between formal rules and informal rules. The former are subject to overt contestation by the economic actors. North, and most economists as well, would have us model the behaviour of the actors in that contest in terms of rational choice. But the creation of a formal theoretical category for rules of this kind opens the door to the models of how these rules emerge in other social sciences.

Thus far, the most direct attempt to offer an alternative model is the literature on institutional isomorphism in economic sociology (DiMaggio and Powell, 1983, 1991). But other institutional theories could obviously be made to speak to the relevance of the rational choice model (Wolfgang Streeck's comments on this panel are to the point here). Economics as a discipline has not been interested at all in the question of from where *informal* norms come. The discipline has focused instead on how they affect outcomes as the people who share them interact in a market setting. I think this is unfortunate, in that an exploration of the origins and evolutions of these norms would bring economics closer to sociology and anthropology, a subject to which I return shortly in the following. But the fact that informal norms are recognized as an analytical category distinct from formal rules is nonetheless a considerable advance. It is a recognition that rational choice models do not apply to all rules, and that some other theory is required to explain them. It also enables us to address in a more sophisticated way the question that Etzioni raises about how individual behaviour affects the operation of the economic system. It enables us to distinguish cases in which the system is driven (as Becker asserts) by deviant actors operating at the margins (i.e. those cases where behaviour is unconstrained by informal rules) and cases where the system is driven by the inertia of the vast majority of intra-marginal players (cases where it is tightly constrained by informal rules). In this, formal rules, which the actors can potentially shape in their own interests, constitute an intermediate case.

The second research programme that is focused on the issues once explored under the rubric of limited rationality is, of course, behavioural economics (Del-laVigna, 2009). Behavioural economics has opened up a whole new realm of empirical investigation and theoretical development in a field which previously operated in very circumscribed intellectual terrain, and it is hard as an intellectual

and a scholar not to be intrigued and excited by these developments (especially if one is oneself an economist). But in terms of the endeavour of socio-economics—or at least in terms of what attracts me to the organization which operates under this banner—it is not a particularly welcome development, and I do not see its political and moral implications in the age of neo-liberalism as especially promising or attractive.

Standard economics is built around three key ideas: (a) rational individuals; (b) motivation by narrow self-interest; (c) interaction in a competitive market. Most of the work in the discipline, especially in the post-World War II period, has explored the implication of these ideas, and they provide the intellectual underpinnings of the neo-liberal economic programme which has dominated economic policy over the last 30 years in most countries of the world. The focus of behavioural economics has been the empirical investigation, largely through laboratory experiments, of the assumption of rationality. What have been uncovered in the process are not rules of thumb which *substitute* for full rationality but rather systematic *deviations* from rationality. This has led to a variety of behavioural models incorporating alternative assumptions suggested by the experiments and exploring their implications for the interaction of individuals in the market. More recent work has also identified systematic deviations from the assumption of narrow, self-interested behaviour and has begun to explore the theoretical implications of these deviations as well. It is primarily this last development which seems attractive to socio-economics because it implies that people recognize and are concerned about the adverse impact of their behaviour on others. The pioneer in this research programme is Ernst Fehr, and while Fehr's work on socially oriented behaviour fits well with the rest of behavioural economics, it leads to very different behavioural models and understandings than either 'bounded rationality' or the irrational patterns upon which behavioural economics previously focused, and distinguishes the new research programme fundamentally from the old (Fehr, 2003).

The problem with behavioural economics, as I see it, is basically that it is committed to rooting economic behaviour in individual psychology and ultimately tracing that psychology to the biological construction of the human brain. It thus leads directly to what is rapidly becoming a distinct branch, neuro-economics.

In the extreme, this leads to a willingness to improve economic outcomes through biological intervention. It need not, of course, be carried to this extreme. But it does pick up a strand of thought in American economics in particular which led the discipline in the late nineteenth and early twentieth centuries to become closely associated with Social Darwinism. One of the most highly rated American economists even today, Irving Fisher, was an outspoken proponent of eugenics and wrote extensively on this subject (Allen, 1993; Thaler, 1997; Tobin, 2009).

There is no question that, in some way and at some level, human behaviour is rooted in our biological construction. But there are at least two distinct ways in which human beings are distinguished from other biological species. One is in terms of our capacity for rational action. But the second is our capacity for speech and the development of language. The two undoubtedly interact, and there is no reason why they could not be explored together. Modern linguistics as a discipline, moreover, has tended to emphasize the biological underpinnings of speech and the universalistic characteristics of language. But an exploration of the way in which language, as opposed to speech, develops and evolves through use would appear to provide a very different path towards understanding human interaction, and one which is much more inherently social in nature. This theme lies in many ways at the heart of Friedrich Hayek's research programme, where it is linked to the origin and evolution of institutions (Hayek, 1973). But there is virtually no contemporary research in economics of which I am aware which pursues this theme.

The most active alternative paths represented under the umbrella of socio-economics for addressing the intellectual challenges of standard economics, and the limits of public policies towards which it points, are drawn from sociology and political science. This would imply exploring other motivations for human behaviour besides self-interest, even broadly conceived to include altruistic concerns and other mechanisms of social cohesion besides the market. It would, moreover, emphasize the substantive differences among societies. It is a path that would bring economics much closer to historical institutionalism as it is developing in political science and to economic sociology. The one school of economics which appears to be exploring this path most systematically is the Conventionalist School of economics in France (Piore, 2003). But as suggested earlier, the new emphasis on institutions in economics, which Etzioni does not mention, but which is at least as active an area of research as behavioural economics, points in that direction as well, although economics has certainly not followed it there, at least not yet.

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Does ‘behavioural economics’ offer an alternative to the neoclassical paradigm?

Wolfgang Streeck

Max Planck Institute for the Study of Societies, Cologne, Germany

Correspondence: ws@mpifg.de

Does social science need a new, ‘reasonably parsimonious’ theory of ‘choice behaviour’ to compete with ‘the neoclassical paradigm’? And can behavioural economics provide such an alternative? My view on both is: not really. Above all, I believe that the alternative Etzioni is asking for already exists, although unfortunately it will never be ‘parsimonious’. I also believe that the real issue for socio-economists is not individual but collective choice, in particular, the social mechanisms by which individual action is aggregated into collective

conditions and social structures. Moreover, I suggest that our main concern has to be not with 'rational' but with moral choice. Finally, I see behavioural economics not as a challenge to standard economics at all but rather as a friendly amendment: an attempt to rescue it from its growing theoretical and practical difficulties, even though this is not always recognized and appreciated by the discipline's hardliners.

I begin, for reasons that will shortly become apparent, with a discussion of the relative importance of commonality and difference, of human nature and social structure, of instinct and culture for human action and society. In the second chapter of *Wealth of Nations*, at a place that could hardly be more prominent in what economists maintain is the foundational text of their discipline, Adam Smith roots economic action in a distinctively human 'propensity to truck, barter, and exchange one thing for another', which he regards as a 'necessary consequence of the faculties of reason and speech . . . , common to all men, and to be found in no other race of animals' (Smith, 1993 [1776]). *This, however, was as far as human nature went for Smith.* Already the economy and society of his time exhibited and required a degree of diversity between individuals that Smith was convinced could not be natural in origin. In fact, 'by nature' human individuals seemed to differ less than different breeds of animals belonging to the same species:

By nature a philosopher is not in genius and disposition half so different from a street porter, as a mastiff is from a greyhound, or a greyhound from a spaniel, or this last from a shepherd's dog. (Smith, 1993 [1776])

How can it be, then, that exchange takes place among people but not among dogs, although exchange, and with it the possibility of complex societies, depends on difference, and people are 'naturally' much less different than dogs? Smith's answer is that it must be forces beyond nature that give rise to the amazing variety among individuals that Smith observed in what he called the 'higher societies':

The difference between the most dissimilar characters, between a philosopher and a common street porter seems to arise not so much from nature, as from habit, custom, and education. When they came into the world, and for the first six or eight years of their existence, they were perhaps, very much alike, and neither their parents nor playfellows could perceive any remarkable difference. About that age, or soon after, they come to be employed in very different occupations. The difference of talents comes then to be taken notice of, and widens by

degrees, till at last the vanity of the philosopher is willing to acknowledge scarce any resemblance. (Smith, 1993 [1776])

In other words, the complex edifice of human societies, including the modern economy, rests on social mechanisms of differentiation that have nothing to do with a common human nature, or only in so far as difference is made possible by the one natural commonality of humans, which is their sociability-cum-plasticity—their *natural* capacity, and indeed their need, to be formed into competent actors by a process of *socialization*. What is common to humans, according to Smith, is above all that their inborn instincts are *not enough* to instruct their behaviour. To the contrary, they are *in need of instruction* as human behaviour, certainly where it matters for the organization and cohesion of complex societies, is not governed by a pre-installed, biologically hard-wired programme but is and must be culturally and socially developed. What matters for and in society and economy is not pre-existing commonality but socially produced difference unfolding in the context of a historical ‘division of labour’ or, as we say today, a social structure. Socialized individuals, i.e. individuals competent to act, can therefore be understood only in relation to other individuals and to the society that has brought them up—so that, if you look for their ‘nature’, all you will find is an open, undefined, unfinished set of potentialities in need of elaboration and cultivation in the company of others.

I note in passing that this seems a pretty progressive position to take: social structure and economic stratification reflecting, not a *natural* distribution of valued virtues and abilities, but a historically inherited *social* distribution of access and advantage, one that might, in fact, be amenable to change through politics since it is not naturally given. As the nineteenth century proceeded, and with it the political organization of an ever more self-confident working class, a position like this was bound to become increasingly difficult to accept for the bourgeois academics of the time. Indeed, by the end of that century, psychological naturalism had effectively sidelined Smith’s sociological constructivism, with legions of positivistic, experimental, ‘scientific’ psychologists untiringly proving that the vast majority of people would never be capable of anything other than very simple manual work. Like under the feudal regime that preceded Smith, social differences were once again regarded as reflecting innate differences between individuals, anchoring the social order, rather than in politics and power, in an invariable human nature.

Theoretical economics disposed of the increasingly uncomfortable political economy heritage of early social science in yet another way. In their effort to advance the academic status of their discipline in a world in which then-modern physics was becoming the new paradigm of ‘rational’ knowledge, economists embarked on a programme of quantification and mathematization aimed at

ever higher abstraction and generalization. In the course of the ‘marginal revolution’, neoclassical economics emerged as a result of a separation of economics from political economy. Ultimately, this yielded the formal model of the *homo oeconomicus* as the centrepiece of a new discipline aspiring to be recognized as ‘scientific’ in the academic environment of its time: a construction of the human actor as an ahistorical, monadic utility-calculation machine capable of advanced mathematics and amenable to being explained by it, cleansed of all historical contaminations, emptied of any substantive specification and so abstract and general as to be invariably applicable everywhere, to everyone, and at all times.¹

Today, *homo oeconomicus* is in retreat, and this is where ‘behavioural economics’ comes in. Originally, the *homo oeconomicus* model may have been no more than a conceptual device to enable the use of calculus and simultaneous equations for explaining relative prices. But with the advancing economization of society and politics, it imperceptibly became reified and turned into a substantive concept of the human actor as a rational egoist, and indeed as a materialist driven by a natural desire to possess and consume ever more material goods, ultimately by accumulating more and more money. Thus, a general materialistic disposition invaded the empty space created by theoretical abstraction from the concrete variety of motives of human actors in different times and places. What started out as a theoretical model became a substantive anthropology, and indeed a model in the *normative* sense: striving to improve one’s material position was the ‘rational’ and ‘natural’ thing to do, and rational egoism was not just statistically ‘normal’ but also expected, recommended and, in this sense, normatively approved.

However, self-evident as this may have appeared to the self-selected members of the economics discipline, as well as to a growing middle class whose life world and common sense corresponded closely to the new rational–egoistic–materialistic model of human action, when the model was applied in practice to the real world—which it increasingly was with the rise of economics to the status of a lead science of public policy—it was all too often found less than satisfactory. In critical moments, people failed to respond the way one would have expected *homo oeconomicus* to respond to what economists believed were irresistible incentives. In countries undergoing ‘development’, people frequently seemed to refuse getting rich at the price of giving up their traditional family or tribal solidarities. In countries considered already developed, workers resisted economic restructuring although it would have increased their income, or they rejected new payment systems or social policy reforms as ‘unfair’ even where they would have materially

¹Supplemented by a reductionist construction of the economy as a result of individual actions aggregated by a privileged social mechanism, the market.

benefited. Increasingly, voices were heard arguing that *homo oeconomicus* had to be replaced with a more 'realistic' image of human actors, one less 'rational', less egoistic, perhaps even less materialistic and certainly less deductively derived and more empirically grounded.

What was to take its place? Nobody inside the economics profession, as far as I know, ever even considered responding to the increasingly obvious obsolescence of *homo oeconomicus*, recognized by some although by far not all of the profession's members, by returning to the complexities of a social theory of action as envisaged by Smith and the classics. Instead of abandoning the failed project of a timeless substantive anthropology as such, in favour of a model of action based on the plasticity of humans in their social and historical context, an attempt began to exchange one substantive anthropology for another, for one that actually was to be even more naturalistic than *homo oeconomicus* had become over time. Rather than on deductive reasoning, the new model was to be based on empirical observation. But since it had to be 'parsimonious', i.e. general and universal and as fixed and timeless as its predecessor, such observation could not be of real people in real circumstances since this would have introduced too much complexity and variety (and, *horribile dictu*, would have turned economics into sociology). Thus, the method of choice became the experiment. Behavioural economics stripped human beings naked of their social relations and connections, took away their language and with it their scientifically uninformed views about themselves and put them in a vacuum, as it were, where lead balls and feathers take exactly the same time to fall, revealing and confirming natural laws otherwise hidden by the contaminating conditions of the real world.

Small wonder that the new behavioural economics soon discovered its elective affinity with the new neurosciences: both apply methods of natural science to human behaviour; both are essentially reductionist and deterministic; and both are technology-driven and hardware-intensive. Indeed, the border between behavioural economics and 'neuro-economics' seems to be rapidly disappearing. Reductionist explanations of human action, by *causes* hidden to actors instead of *reasons* known to them, still seem to enjoy enormous prestige as being 'really scientific', much more so than interpretative approaches that take seriously the meanings people attach to what they are doing and try to understand them. In any case, magnetic resonance imaging or not, the modifications that experimental research in behavioural economics suggests to the *homo oeconomicus* model are of basically two kinds: they introduce allegedly built-in dispositions of human actors towards 'fairness' or 'altruism', and they take back the claim that people are capable of correctly calculating the consequences of their decisions. In both respects, the level of 'rationality' assumed is significantly lower.

In the social sciences outside economics, one finds a strange tendency to feel gratified if economists claim to have discovered something that other disciplines

have known forever. If an economist reports to have observed altruism as well as egoism and notes that people are not supercomputers, this tends to be celebrated as an important breakthrough, not just for economics but for all of social science. One should, however, beware of the Danaans, even if they seem to be bringing gifts.² No sooner than behavioural economists had retired *homo oeconomicus* as an individual, they turned to socio-biology to reinstate him as a species, explaining his experimentally observed deficiencies as a rational utility maximizer with 'adaptive stories' (Gould and Lewontin, 1979) that re-introduced rationalist efficiency reasoning by the backdoor. Man may not always be egoistic, but it is exactly his altruism that is required for the species, or his individual genes, to survive. Man may not be a calculator, but calculating would take too long anyway, and 'evolution' has developed rules of thumb that are much better suited to an uncertain world. This is what I mean when I say that the research programme of behavioural economics is even more naturalistic, and its model of action even more hard-wired and reified, than the old *homo oeconomicus* model, which still bore the traces of its birth through abstraction and *Gedankenexperiment*.³ A social science that supplies itself with altruism and sub-optimality by buying them from behavioural economics better be aware of the functionalist fundamentalism that comes with them.

Up to now, the emerging theory of behavioural economics assumes that, for the social world, what people have in common is more important than what distinguishes them.⁴ The stark assumptions that underlie this include that the 'natural', instinctive base of human behaviour is the leading determinant of how people act; that differences can be reduced to and subsumed under commonalities; and that it is impossible for something like moral reflection or collective political mobilization to suspend the dictatorship of our instincts and meaningfully affect what we do. This, incidentally, explains why experiments in behavioural economics can be conducted, as they usually are, on very small samples that happen to be drawn mostly from undergraduate students of economics: what they are to reveal is a unified model of behaviour, something that would be revealed regardless of who is invited into the laboratory. (The same logic rules when cognitive psychologists study, say, how people recognize

²'Quidquid id est, timeo Danaos, et dona ferentes' (Virgil, Aeneid II, p. 49).

³This does not prevent the hardliners in the discipline from finding *homo oeconomicus behavioralis* too flabby, and the whole programme too mushy and soft-headed, or simply too difficult to mathematize. But this alone should not be enough to make one take sides in a battle that is really no more than a quarrel among Siamese twins.

⁴This could change, though. If the tendency to ground behaviour in biology continues, we may see another round of explanation of social structures by innate differences in intelligence and talent, unequally distributed by (racial?) lines of descent.

numbers or other people: 20-or-so individuals, however selected, are enough, since what is looked for is supposed to be so general that it should be found in any human being.) And this is also why no behavioural economist, as far as I know, ever interviews test persons after the test to ask them what they thought they were doing, why they acted the way they did, whether they would have acted differently upon reflection or discussion with others, or if they knew what hypothesis they were supposed to confirm or disprove. Just as in the popular psychology we find in the weekend editions of newspapers, the idea is that science is about uncovering unknown forces, like 'egoistic genes', that drive human behaviour without those who do the behaving being aware of them.

To me, the problem with behavioural economics is *not* that it cannot predict better than neoclassical theory how people make choices, but that it is simply another attempt to rescue a monadic, methodologically individualistic, behavioural, efficiency-theoretical model of human action from its ever more obvious obsolescence. Since I am not a specialist, I cannot say exactly how far the experimental exploration of the instinctive-biological substratum on which human society resides may eventually take us in accounting for the actions of real people. But I doubt it can take us very far, in the light of the enormous differences we observe between individuals and historical periods with respect to almost everything that really matters. Our common genetic-psychological endowment carried Buddhism in India as well as human sacrifice in Mexico; it was and is the same for the masses that attended the public executions of the Middle Ages for evening entertainment, and for the American citizens petitioning their legislatures against all political odds to outlaw the death penalty; it was present in Idi Amin and Mother Teresa, in Adolf Hitler and Martin Luther King and in Josef Stalin and Mahatma Gandhi. Only 150 years ago, well-to-do 'white' Americans found it entirely 'fair' economically to own slaves and entirely 'unfair' to force slave owners to let their property go; today, their descendants find the idea of buying or selling human beings plainly abhorrent. I suggest that it is such differences that matter, and not whatever common substratum, biological or otherwise, may be underlying them. I also suggest that, to the extent that it exists at all, a common behavioural genotype as expressed in such widely different behavioural phenotypes cannot have much control over what happens and what counts in our historical world.⁵

One can also draw on examples closer to home. If we hear that people are 'by nature' altruistic, rather than being egoistically rational *homines oeconomici*, does

⁵I rule out the possibility that the hard-wired behavioural heritage of 'white' Americans has undergone sufficient evolutionary change between the nineteenth and the twenty-first centuries to re-wire biologically based perceptions with respect to the fairness of slavery, or that the Germans of the Nazi era suffered from a hard-wired anti-Semitism that today's Germans have somehow lost.

this include the boss of a mortgage bank and his agents and sub-agents who sell subprime mortgages to buyers who they know will never be able to repay them? If we are told that people—all people—share a natural sense of fairness, produced by ‘evolution’ to enable ‘us’ to ‘survive’, is this to apply also to the board members of a private equity firm that sucks the capital out of the manufacturing firms it buys up, eventually causing the workers there to lose their jobs? Are the private equity manager and the worker who gets fired really supposed to have the same sense of fairness? (They themselves certainly would not think so.) If the CEO of an investment bank who finds it ‘fair’ that he makes 50 million dollars a year were to take part in a ‘dictator game’ experiment in which his behaviour confirmed that people are not rational egoists but follow what behavioural economists consider standards of fairness, what would we learn from this? What would it mean if a mother of four working 15 hours a day to feed her family was found in the same experiment to act in the same ‘altruistic’ way as, say, Bernard Madoff? Or if, to the contrary, she would turn out to be a rational-egoistic utility maximizer? What would it say about whether or not there was a moral difference between what ‘subjects’ do outside the laboratory and who should be helped by public policy in pursuing their goals?

I understand that laboratory experiments, like all measurements, produce not just means but also variation around them. Not that these are prominently reported by behavioural economists; their aim is, after all, to establish a *unified* model of economic behaviour to succeed *homo oeconomicus*. Nevertheless, what variation there is can be and is used to distinguish between, say, ‘natural egoists’ and ‘natural altruists’, in the small homogenous samples tested. But even assuming that there was ‘a there there’,⁶ the really important question would be how that difference relates to social structure. As students grow up, do the more egoistic among them become bankers? In other words, does social structure reflect a ‘natural’ distribution of action dispositions? In fact, there seem to be indications, as reported in a recent paper by Richard Freeman, that ‘people in business are less moral than the typical person’ (Freeman, 2009, p. 5). But this need not force us to conclude that banks are, or have to be, set up to accommodate the natural dispositions of greedy people, although it may be true that, as organizations, banks on the whole prefer the greedier candidates when hiring staff.⁷ Again, social structures are simply too different between times

⁶As Gertrude Stein famously noted when visiting Oakland, CA: ‘There is no there there’.

⁷Possibly, the laboratory experiments of behavioural economics could be used as a recruiting tool by profit-maximizing firms to select those best suited for their future jobs. This would resemble the macabre history of the research by Adorno *et al.* (1950) on the ‘authoritarian personality’, undertaken to measure potential support of fascism and allegedly picked up by employers in the 1950s and 1960s looking for obedient workers.

and places to be accounted for by constant and universal underlying behavioural dispositions of individuals or by a natural distribution of such dispositions. Are managers today 'by nature' greedier than in the post-war decades when they made so much less money compared with the middle class? If mortgage lenders today no longer abstain from squeezing capital out of the poor, is this because their 'animal spirits' have evolved or because the regulations that used to restrain them were rescinded?

Human society is *not* an emanation of human nature, or only in a very remote sense that abstracts from almost everything that is important for the way we live,⁸ and the same applies to human action, which *is* action and *not* behaviour. It is for this reason that behavioural economics will prove disappointing, not just as a theory, but also as what it is really meant to be, a technology of control. Any hard-wired psychology is ultimately about control: entailing the promise of a shortcut to influence the 'behaviour' of individuals and groups, by identifying the cues by which people may be made to do what their would-be governors believe is 'the right thing' for them—without having to convince them first by 'rational' or 'moral' argument. The ultimate reason why no such 'parsimonious paradigm' will ever work has been pointed out by none other than Charles Darwin when, in his *Descent of Man*, he spoke of the human actor as a 'moral being... capable of comparing his past and future actions or motives, and of approving or disapproving of them' (Darwin, 1871). Today, we mean the same when we attribute to humans a capacity for 'agency', for stepping back and pausing for deliberation when faced with a 'stimulus', in order to reflect together with their peers, present or virtually present, about what 'response' would be right. Where instincts no longer reign, there is always more than one possible response to a given stimulus, and how we choose between them is not given by our nature or determined by natural laws to be deciphered by science and utilized by technology. Rather, it depends on what we have learnt about what we can and should be from those with whom we consult in everyday moral discourse, in the communities in which we live, from the leaders by whom we allow ourselves to be affected, or from the social movements that draw us in and change the way we see the world and want to live in it.

Humans, that is to say, can and—for this very reason—cannot avoid thinking not just about price but also about value and meaning. Here, of course, we are in the centre of sociology as a theory of the moral core of society, as elaborated first and foremost in the work of Emile Durkheim. In my view, developing this theory further so that it fits with the world as it has changed in the meantime is by far the most promising way towards a contemporary socio-economic paradigm. Theories that deny human actors their agentic qualities and construe them

⁸In short and alluding to another American classic: 'It's the institutions, stupid!'

as passive by nature will always be surprised by the active resistance they will encounter when applied. The only exception is when control is already firmly established: where there is enough power to suppress reflection, prohibit moral reasoning and thereby forcibly verify a theory of human action that reduces it to behaviour.

To conclude, I briefly return to my initial questions. An 'alternative' to neoclassical economics must be more than its improvement through a refined catalogue of behavioural dispositions that presumably control the 'choices' of individuals. 'Choice' is important, but it must never be reduced to rational choice, since rational choice is always embedded in moral choice and cannot be understood outside of it.⁹ 'Parsimony' is a problem, not a solution, if for the sake of simplicity it disregards the moral, i.e. social foundation of human action; if it abstracts from the historical context of human life and from the non-quantifiable content of the shared meanings that define it; and if its promise is instrumental usefulness. A stimulus-response model of human action, as 'parsimonious' as it may be, is deficient not just for moral reasons but also because its technological application will ultimately not work, certainly not in a free society. What is needed is a theory of human action as moral action, as defined by Darwin, including a much more sophisticated understanding of how individual action is articulated into collective decisions and social structures than is offered by the free market paradigm. A theory of this kind must systematically allow space for ongoing collective deliberation on and transformation of individual preferences, as well as for the complexities of the double contingency of interaction between agents capable of reflection and self-reflection. In society as well as in the economy, the problem that a truly alternative theory to the neoclassical one must above all address is how to defend and build communities that produce, support and lend efficacy to actors who have learnt to consider other-regardingness and a sustainable use of social and natural resources to be their moral obligation. Ultimately, it is not science that will solve our problems but a theoretically enlightened political *praxis*; not social engineering but public debate; not causal theories but moral reasoning; not the discovery of new 'laws of nature' but the reform of outdated institutions; not improved control of individuals but the building of what none other than Amitai Etzioni has once described as an 'active society' (Etzioni, 1968). Social science will never be able to substitute for political mobilization and collective action, and fails its mission if it tries to. In fact, its most important 'scientific' insight may be that it takes more than science to interpret the world, not to mention to change it.

⁹In other words, the 'moral dimension' (Etzioni, 1988) of human life is, importantly, not on the same plane as the rational-egoistic, utilitarian dimension since the latter is encompassed by the former. Moral values decide where rational egoism is appropriate, not the other way around.

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