

Rationality and its Bounds: Re-framing Social Framing

MATTHIAS KLAES

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1 Introduction¹

Social scientific thought is riddled by a basic dichotomy. Analysis of individual behavior has found itself caught between an individualist perspective driven by rational choice theory, and a perspective that lends more weight to cultural and institutional forces shaping the behavior of individuals. This second perspective accords collective entities such as class, status, norms and values explanatory and at times also ontological primacy. In disciplinary terms, this basic dichotomy of social theorizing has given rise to a stereotypic division of labor between the disciplines of economics and sociology (Holmwood and Stewart 1991, 1994). According to the stereotype, economics proceeds from the rational decisions of atomistic individuals, while sociology is preoccupied with social collectives and a holistic view of social structure.

Recent work in behavioral economics and related fields has made important steps towards broadening the economic approach by turning attention away from classical notions of rationality toward the concept of bounded rationality. In particular, bounded rationality conceptually forms part of attempts that demand descriptive accountability of the rational choice paradigm in economics. Whereas the rationality concept at the heart of homo oeconomicus traditionally conceived runs together normative and descriptive aspects of studying human behavior, theories of boundedly rational behavior strive for empirical adequacy.

¹ Without implicating them in any way I am indebted to discussions with David Bloor, John Davis, Mihaela Kelemen, Martin Kusch, Rolland Munro, Roberto Scazzieri, and Patrick Suppes, which have helped sharpening my thoughts on the issues explored in this chapter.

In the main, the strategy has been to realize this empiricist program by broadening the rational choice paradigm in the direction of psychology, to the neglect of a similar broadening in the direction of sociology. This bias results from the persistence of the stereotypic division of labor between individualist and collectivist approaches in the social sciences. Behavioral and experimental economists pay little more than lip service to social framing effects. While a small but increasing number of studies consider the influence of social framing on economic decision making, these studies proceed on an impoverished understanding of the social, treating social framing as inessential in a sense that will be spelled out below.

This chapter will argue for an essential notion of social framing effects. The argument will proceed as follows. Section 2 revisits what is arguably one of the clearest expressions of the divide between economics and sociology, by turning to the distinction between logical and non-logical action introduced by the economist-sociologist Vilfredo Pareto. Section 3 explores how the concept of bounded rationality has been employed to broaden the logical action paradigm in economics towards its counterpart of non-logical action. Section 4 illustrates the role of social framing effects by means of an example drawn from economics, that of successfully performed transactions in anonymous non-repetitive encounters. Section 5 argues that in conceptual terms, social framing needs to be understood in the more general context of human intentionality, where rational behavior can be addressed as a particular kind of intentional response to environmental factors. Section 6 finally, drawing from Pettit's (1993) dual distinction between atomism versus holism on the one hand, and individualism versus collectivism on the other hand, introduces the distinction between essential as opposed to inessential social framing effects in a systematic way and concludes that departures from psychologistic notions of bounded rationality require a theory of essential social framing, in the sense that the social frames intentional behavior in a constitutive way.

2 Rationality and its Residual

In his 1916 *Trattato di Sociologia Generale*, Pareto (1966) contrasts the category of 'logical action' – which he regards as one of the central categories of economic analysis – with the category of 'non-logical action'. Logical action is that action to which economic analysis applies. It refers to a framework which derives its conclusions from the premise that atomistic individuals act instrumentally rational to fulfill their exogenously given wants. Pareto suggests that this type of action can only account for a subset of the world of social phenomena. Those phenomena that cannot be subsumed under the category of logical action he addresses residually as belonging to the realm of 'non-logical' action (see Klaes 2003; Parsons 1937).

Confining logical action to the realm of economic theory (Pareto 1896-97), it is non-logical action on which the *Trattato* concentrates. In the rationalist terms of the means-end framework, non-logical action appears to be based on ignorance and error. Actors simply fail to employ the means best suited, given local circumstances, to achieve their ends. Pareto comes

to the conclusion that in the majority of cases where individual behavior does not seem to be individually rational, actors tend to justify their behavior in terms of higher-order ends such as 'justice' which are difficult to reconcile with the individualist outlook of the atomistic individual as posited in the logical action framework of economics. Non-logical action is an aggregate phenomenon which only becomes recognizable as the shared conduct of a group of individuals, according to custom and internalized norms of behavior.

With the central explanatory role accorded in economics to Pareto's logical action, non-logical action has traditionally been relegated to residual categories such as economic friction:

The disturbing effects of causes that are not economic, on the action of the causes that are strictly so called, may be regarded as an "economic friction". (...) Not only the customs, but the vices, follies, and mistakes of men are accountable for economic friction (Davidson 1896: 160).

In modern economics, these frictions are largely addressed in terms of various notions of transaction cost (Klaes 2000). Ultimately, they are left unexplored, in the sense that they take the place of exogenous factors that are relegated to the territory of sociology and renegade traditions in economics such as institutional economics. But if both types of action address a common domain of investigation, that of institutionally situated individual behavior, then it may, in terms of an attempt at explanatory unification, pay off turning aspects of the residual into a 'positive' explanatory category, to use a terminology first proposed by Parsons (1937). In other words, quite apart from the separate question of the success or not of the rational actor paradigm, there may be some merit in qualifying the rationality postulate that underlies underlying logical action so that it would take account of aspects of our decision making hitherto confined to the realms of non-logical action.

It is motives of this kind that have led to bounded notions of rationality (cf. Klaes and Sent 2005). In fact, the concept of bounded rationality is at the forefront of a rigorous expansion of the concept of rationality into the domain of its residual, that of Pareto's non-logical action. Mounting empirical and experimental counterevidence to the strong rationality assumptions of the logical action paradigm in economics and allied fields has led to the emergence of a new behavioral economics that seeks formalizing these departures and to test psychological predictions of bounded rationality models (e.g. Kahneman and Tversky 1974, 1979). Adopting the perspective of utility maximization and Bayesian probability judgments, this literature evaluates the cognitive character of conformity or deviation from the benchmarks of strict rationality. One of its main achievements has been a clear separation between strict rationality as a normative yardstick against which actual decision making may be assessed, and models of boundedly rational decision making that seek to account for human decisions as empirical phenomena in need of causal explanation, whether they adhere to classical rationality postulates or not.

3 Bounded Rationality and Framing Effects

Bounded rationality is commonly defined on the basis of the cognitive limitations of decision-makers, both in terms of their limited knowledge, and limited 'computational capacity' (Simon 1987: 266). It has an internal and an external dimension. A decision maker with unlimited cognitive processing capacity may still struggle to measure up to strict rationality standards if living in an uncertain world. This uncertainty could be due to the stochastic or, as some would have it, non-ergodic nature of the environment in which decision making takes place. There may also be competing theories of rational decision making under such conditions. Conversely, a being of sufficiently limited cognitive capacity will, even if living in a completely deterministic environment, fail to display rational behavior.

Traditional approaches to decision making under uncertainty have concentrated on external bounds to rational decision making. Their main focus has been on how to conceptualize uncertainty in probabilistic terms to allow a rational evaluation of uncertain prospects. Expected utility theory has been the dominant approach here, following Bernoulli's (1738) seminal work. In short, knowing the payoff matrix of possible random outcomes, the assumption is that an individual will choose according to the expected utility of particular courses of action (rather than the expected payoff). This would of course depend on knowledge of the relevant probabilities.

One-off events that are not amenable to a frequentist interpretation of such probabilities initially seemed to fall outside such a framework of analysis. In economics, this prompted Knight (1921) to suggest a distinction between quantifiable risk, and unquantifiable uncertainty. Savage (1954) demonstrated however that as long as the preferences of a decision maker obey certain axioms, the behavior of this decision maker can be analyzed as if expected utility was maximized on the basis of subjectively assigned probabilities.

As it turned out, there are important decision problems that violate one or several Savage axioms. Take for example Ellsberg's (1961) paradoxes. Ellsberg identified a number of scenarios where adherence to the Savage axioms did not seem to be plausible. Here is one: Consider random draws from an urn of 90 balls. Each ball is colored red, black, or yellow. All you know is that there are 30 red balls in the urn. You are now faced with two sets of alternative bets, each time receiving the same given sum of money if you win. In set I, you either win if drawing a red ball (a), or if drawing a black ball (b). In set II, you either win if the ball you draw is red or yellow (c), or alternatively if it is black or yellow (d).

Most individuals Ellsberg consulted preferred bet (a) over bet (b), and bet (d) over bet (c). This choice behavior is inconsistent with expected utility theory. A preference of (a) over (b) indicates that the individual attaches a higher probability to drawing red than to drawing black. But this implies that the individual should also attach a higher probability to drawing red or yellow (c), compared to drawing black or yellow (d).

An individual preferring (a) over (b) while preferring (d) over (c) seems to have been guided more by the particular formulation of the decision

problem than by strictly rational considerations. As stated above, the choice problem allows attaching a known probability to only some of the alternative outcomes. Given that the number of red balls (a) and black and yellow balls (d) in the urn is known with certainty, individuals appeared to have selected against (b) and (c). In other words, if subjectively attached probabilities played a role at all, they did so in a weighted form, taking into account non-probabilistic aspects of the decision problem at hand.

Kahneman and Tversky (1974, 1979)² have taken this and similar observations that point to the moderation of probability assessments by context-specific weightings as the basis of what they call 'prospect theory'. Prospect theory purports to be an alternative theory of decision making under uncertainty where bounded rationality is operationalized by postulating various framing effects that influence the weightings moderating subjective probability assessment. In prospect theory, choice is conceptualized as a two-stage process. In the first stage, the choice problem is 'edited' or 'framed'. This occurs by taking the context and contingencies of how the choice problem presents itself into account. In the second stage, the framed alternatives are then evaluated. Contrary to traditional rational choice theory, Kahneman and Tversky's theory has no normative ambitions. Hence, explaining observed choice behavior takes precedent over adherence to the classical rationality postulates.

One should note that prospect theory does not aspire to a fully formulated theory of framing. Framing effects remain defined rather loosely: "Framing is controlled by the manner in which the choice problem is presented as well as by norms, habits, and expectancies of the decision maker." (Tversky and Kahneman 1986: S257). This apparent lacuna is openly admitted but not regarded as a weakness (*ibid.* S273). For the most part, Kahneman and Tversky restrict their analysis to relatively simple cases of framing, which remain associated with the linguistic presentation of a choice problem. They admit the further relevance of psychological framing effects that reach beyond the linguistic level. Rarely if at all do they engage with framing effects situated at the social level, such as the norms to which they refer above.

Kahneman and Tversky's attempts to broaden traditional conceptions of rationality are therefore biased towards the atomistic individualism of the logical action framework. Within the traditional dichotomy between logical and non-logical action, they rest content with incorporating merely non-social aspects of non-logical action into qualified notions of rationality. Hence Kahneman and Tversky's focus on presentational context and the individual's habits and psychological makeup, coupled with a reluctance of engaging with the possibility of a sociology rather than or in addition to a psychology of choice under uncertainty.

It is only recently that social framing has received more than passing attention in economic psychology and experimental economics. Carpenter, Burks and Verhoogen (2005) for example acknowledge that to establish the external validity of laboratory experiments, it is necessary to analyze the

² See also Kahneman, Slovic and Tversky (1982), Tversky and Kahneman (1981, 1986).

social context of individuals, even if they are placed in artificial laboratory scenarios. On the one hand, individuals are prone associating the laboratory context with a particular social context they prominently encounter in their daily lives. On the other hand, their behavior will be affected both by the social relationships between them and the other individuals they encounter in the laboratory context, and the relationships between them and the experimenter. Claims to any general validity of laboratory results must thus withstand variation in the social context of the experiment, or else be formulated as social frame specific.

There is a small but growing literature now exploring culturally specific framing effects (e.g. Henrich et al. 2001; Carpenter 2002). Nevertheless, behind this interest in social framing alongside framing effects associated with properties of the individual (such as habits, individual histories that shape subjective probabilities, etc) there still looms the traditional divide between logical and non-logical action.

Empirical studies may explain choice behavior in various proportions of individual and social framing effects. This by itself will do little however to advance a conceptual understanding of bounded rationality. A convincing theory of bounded rationality will have to confront the issue head on. Methodologically, this requires engagement with the thorny issue of human intentionality. If social norms are supposed to affect individual behavior directly, and not merely via the range of available courses of action open to individual choice, such intentionality seems compromised. Put differently, if the concept of bounded rationality, through incorporation of social framing effects, seeks to expand into the realm of non-logical action by reducing individual decision rules to social norms, it will become questionable whether that concept still constitutes a species of rationality, after all.

4 Economics and Transactional Framing

Let us consider how social framing effects may affect economic behavior by turning to an economic puzzle. The puzzle is centered on transactional contexts that, if seen from an individualist rational choice perspective, do not seem to require costly expenditure on the part of individuals while in practice, they will typically decide to incur such expenditure. The issue turns on apparently irrational behavior in non-repeated anonymous encounters (see Klaes 2002). While ad-hoc rationalizations of observed behavior abound, they stretch the traditional rational actor paradigm to its explanatory limits.

Imagine you are sitting in a cafe, in a city you are unlikely to visit again. Neither food nor service were particularly impressive. Nevertheless, when it comes to moving on, you feel a peculiar compulsion: somehow, it still seems proper and called for to leave a tip on the table. Your rational self simply wants to walk out. Yet, your inner voice begs to differ. Might not the wage of staff be set in expectation of your tip, at exceedingly low levels? What would the individual that served you think of you if you just walked off? Is the sum in question really worth the time pondering about all these issues? In the end you leave a modest token amount, not because you

found a good reason for doing so but because it simply struck you as what you should do. You have no rational explanation for it, and clearly, you could have acted differently. Neither did you act blindly, nor unintentionally. Still, your own standards of rationality had suggested a different course of action. In fact, your rational self still maintains that you should not have left that tip on the table. Maybe you followed a habit, but on reflection, and comparing it to what you would properly regard as habits of yours, you did not recognize it as such.

If the above example seems excessively contrived consider a variation. You flag down a taxi. Upon completion of the journey the driver points to the meter, and before getting off the car you settle the outstanding amount. But why? What would have prevented you from simply leaving the taxi without paying? Conversely, assume that you have just handed over the sum indicated by the meter. What prevents the taxi driver from pretending that payment is still due?

The only way out consists of allowing for some mechanism of contract enforcement. The problem with this solution to the *ex post* bilateral bargaining problem resides in the dilemma that conceding either party any means of enforcement that will render the other compliant will offer this same party the opportunity to defect on its part. If the passenger pays under the impression of the driver's biceps and pecs³ instead of leaving the car right away, the driver should use the physical advantage to extort a second payment. Similarly, if the driver's fear of the passenger's angry response or threat of legal action prevents a second demand for payment, this same response or threat could be used by the passenger in the first place to claim that payment had been made already.

There is no straightforward solution to the bilateral bargaining problem in this and similar scenarios. More generally, the rationalist mechanism stipulated by Coase (1960, 1981) to yield a solution to the problem cannot be relied upon if there is a danger of opportunistic exploitation (cf. Schlicht 1996). Nevertheless, we witness countless successfully completed 'taxi ride' transactions of the type described above in our daily lives. So how credible is the physical threat of the taxi driver's biceps in the first instance? And are there any deterrents to keep taxi drivers themselves in check?

While there certainly are reported cases of passengers simply leaving the car without paying after having arrived at the desired destination, typically, the driver – instead of resorting to physical means of enforcing payment – would alert colleagues and the police of the incident, with good chances for the perpetrator being apprehended shortly afterwards.⁴ The existing institutional context seems to provide a sufficient deterrent for the passenger to honor the initial contract. Similarly, the legal system could plausibly be argued to enforce compliance on the part of the driver. If a

³ On the way to the airport, I once took the opportunity to politely discuss the enforcement problem with a female taxi driver in downtown New Orleans. She calmly drew my attention to a hand gun underneath her seat. She also stressed that she would only pick up passengers from major inner-city hotels.

⁴ I learned this from a judge involved in such cases.

'double payment' case went to court, and both parties issued conflicting statements, the judge would decide on the basis of internal consistency and plausibility of the statements. If there turned out to be an accumulation of similar cases on the driver's record, their credibility would be seriously undermined. In addition, any conviction would endanger continuation of the taxi license and thus the driver's livelihood. Again, the institutional context of the taxi ride transaction seems to provide a sufficient deterrent against *ex post* opportunism on the part of the driver.

Institutional context, and thus social norms and the social framing of economic action, is crucial for the successful bilateral completion of 'taxi ride' type transactions. This is of course no novel insight (cf. Polanyi 1944; Granovetter 1985). But again, taking instances of non-logical action of this kind seriously in economics tends to be hampered by the fact that it is always possible *ex post* to construct an individual cost-benefit calculus that explains compliant behavior. The limits of such an approach in the context of social framing are obvious. Boundedly rational agents are simply not able to generally engage in the purported assessments and calculations that ensure compliance. Does this mean that we should conceptualize them as social drones who blindly enact social rules? Yet again, if they are to be preserved as intentional agents, their intentionality requires more deeply probing foundations than those offered by Pareto's dichotomy.

5 Rationality and Intentionality

The rational actor paradigm at the core of modern economics is not usually discussed in the context of human intentionality. If it is ever put into a broader perspective at all, then as part of the recent literature on economic psychology that emerged from the bounded rationality literature. Yet, given that rational choice theory traditionally conceived does not necessarily purport to be a psychological theory, it seems more than apt to pursue the bounded rationality theme into philosophical debates on practical reasoning. Intentionality as a technical term addresses the 'aboutness' of mental states such as beliefs, hopes, desires, fears, love and hatred. To the extent that a mental state is directed at anything beyond itself, it has an intentional aspect. Often, the content of an intentional state can be expressed as a full proposition. For example, I may believe (hope, desire, fear, etc) that P, with P standing for a particular proposition like 'It will rain tomorrow'.⁵

Beliefs and desires are intimately connected to accounts of rational action. Consider my desire that it should not rain tomorrow, coupled with my belief that it will in fact rain tomorrow if I am going to leave the house in the morning without my umbrella. Given my belief and desire, it would be subjectively rational for me to take my umbrella with me when I go out that day. In fact, I would, if challenged as to why I had taken my umbrella with me, cite both as reasons for my behavior. Intentional states are candidate reasons for action. They 'rationalize' a particular behavior.

⁵ Intentional states of this kind are also known as 'propositional attitudes'. Note that intentions themselves are only one particular kind of intentional state.

One could carry this example one step further (e.g. Searle 1983: 160-79), by approaching meaning itself as an intentional phenomenon. In the umbrella example, there is a difference between me just uttering the words 'It will be raining today' when I leave the house without my umbrella, and my uttering these words *and meaning them*. What I will have done in the case of the latter is intentionally impose the conditions of satisfaction of an intentional state, i.e. my belief that it will rain under these circumstances, on a particular act (of utterance), to use Searle's terminology. Meaning in this context has an indexical aspect, which adds an intentional dimension to the physical act of mere utterance.

Questions regarding rationality and meaning are therefore closely related. Searle (2001: 109, 22-24; 1983) for example argues that any account of rationality should address rationality as a faculty of human beings based on their ability to reason about their actions. And this reasoning activity is tied to language and communication. Once I give a good reason for a particular intentional phenomenon, I may be said to have provided an explanation for it. Whether this explanation is convincing or acceptable is another matter, of course. If you ask me in our umbrella example 'Why do you believe that it will rain if you leave your umbrella at home?' I will be hard pressed to provide you with a rational justification for my belief. Nevertheless, I can give you a convincing reason, by referring to a particular superstitious compulsion of mine when it comes to umbrellas and rain.

For Searle, rationality is not a separate human faculty. It is implicit in human intentionality as such, since intentional states give us reasons for our actions. Why did I take the umbrella? Because I believed that if I did not take it, it would rain with certainty. As soon as we seek for reasons however, we subject our intentional states to the constraints of rationality. These constraints can be very real, otherwise I should have no trouble convincing you that my umbrella superstition is rationally justified. Holding a belief means being open to the challenge by others to justify that belief, and a prominent way of justification consists of appealing to commonly accepted standards of rationality.

Here however lies the crux of the matter, and the weakness of Searle's account of rationality. He himself refers to a striking example of how prone we are to assume shared standards of rationality where in fact, no such common standards prevail. Searle (2001: 6) recounts visiting a high ranking US defense official during the Vietnam War. Searle tried to convince him that the strategy of bombing North Vietnam was irrational. As a response, the friend drew a diagram comparing the marginal utility of resistance to the marginal (dis)utility of being bombed. At the point where the two curves intersected, the enemy was bound to give up according to the defense official's analysis: 'All we are assuming is that they are rational.' Bombing would therefore be a winning strategy. The irony that shows up in Searle's discussion is that whenever one seeks to make the alleged constraints of rationality explicit, they become subject to debate, the same debate in fact that, in his account, makes rationality an intentional faculty. If anything, drawing attention to the intentional nature of rationality only serves to underline the social framing of rationality.

6 Essential versus Non-essential Social Framing

In effect, Searle's argument, carried to its conclusion, amounts to the assertion that rationality, as a set of standards of human behavior, is a social institution (Searle 1995: 59-78). This brings us back to the same threat to intentionality that we have already identified in our discussion of boundedly rational agents, whereby intentionality risks being compromised by social structure. If the very capacity of rational decision making is intrinsically social, would this not risk falling victim to precisely that social drone so rightly criticized (Wrong 1961)? One helpful starting point for answering this question is Pettit's (1993) distinction between individualism versus collectivism on the one hand, and holism versus atomism on the other hand (see also Tuomela 1994). Pettit rightly points out that we are not faced with a simply dyadic opposition between individuals and social structure, but with two separate issues that need to be disentangled.

On the one hand, the interrelation of individual intentionality and social structure is of a 'vertical' nature. If one grants social entities existence in their own right one needs to confront the question of whether these entities in fact compromise or override individual intentionality. For Pettit, this turns on whether one takes an individualist or a collectivist perspective. On the other hand, social entities relate individuals to each other in a 'horizontal' way. The question here is to what extent individuals depend on other individuals for some distinct capacities, or whether all essential capacities of an individual can be properly understood by considering individuals in separation from others. Adopting Pettit's terminology, atomists will deny that any such capacities exist, while holists will argue in their favor.

We arrive thus at four different positions that one may hold regarding the nature of social entities in their relation to individual intentionality. Atomist individualism will deny any ontological status to social entities, regarding them as mere epiphenomena of individuals and their interaction with each other. Atomist collectivists, in contrast, will accept the existence of social regularities in their own right in that they have the potential of overriding individual intentionality. Holist collectivists will add to the atomist collectivist position that some characteristics essential to individual intentionality are inherently social in nature, while individualist holists will deny that social regularities compromise individual intentionality in this way.

Pettit himself defends an individualist holist position, but his classification has broader application. Like Searle, he regards human intentionality as invariably tied to rationality criteria. Without such criteria, we would have no way of systematically linking certain of our intentional states, notably intentions, to desirable outcomes. But to the extent that one allows departures from the atomist individualist position, one accepts that rationality is socially framed.

Pettit's terminology enables us to distinguish between non-essential and essential social framing in boundedly rational conceptions of individual decision making. The claim that social institutions influence the choice context for rational decision making, and that social entities, like natural enti-

ties, enter such decision making, is largely uncontroversial. To allow for such influence is fully compatible with atomist individualism. Let us therefore define social framing to be essential if it amounts to a position different from atomist individualism within Pettit's fourfold differentiation. To arrive at such a position, we have to either relax atomism, or individualism

Essential Framing: Atomism Relaxed

The question of atomism - Pettit's horizontal issue - turned on whether or not individuals relied, for at least some of their core characteristics, on others. To clarify what is at stake with this question, consider a Hobbesian account of a social contract entered into by autonomous individuals. Such an account relies on the possibility of essentially a-social, atomistic individuals. A social holist will deny this possibility, by calling into question a purely individualist capacity of individuals to meaningfully follow even simple rules.

Rules can be understood in two different ways. Meaning determinists (Bloor 1997: 3) hold that what we do when we follow a rule is to 'grasp' its meaning. Once we have grasped a rule, we would, so the suggestion, know how to apply it to future instances. Take the example of the sequence of even numbers. This sequence is a result of following the rule 'add 2'. A meaning determinist would hold that once the meanings of 'add' and '2' are fixed, possibly together with auxiliary concepts such as 'sequence', it seems fully clear what we must do to follow the original rule. However, this confronts us with an infinite regress, because all we have done is to shift attention to the meaning of these newly brought in concepts. Eventually, meaning will have to be fixed by different means (cf. Klaes 2006; Kripke 1982). A meaning determinist would solve this problem by pointing out that once we have grasped a concept there is a specific mental content which guides us through new cases. The ability to follow rules, in this account, amounts to a purely individualist capacity since rules are reduced to specific mental content.

Bloor, following Wittgensteinian 'private language' arguments (cf. Kripke 1982), is highly skeptical of giving mental content such a prominent role in concept application, due to cognitive limitations. Instead he suggests an alternative account which he calls 'meaning finitism'.⁶ In the meaning finitist account of rule following and concept application, the move to the next instance is not intuitive or interpretive but 'blind' (Bloor 1997: 19). This blindness is a logical blindness. There is nothing in a given rule that logically or semantically compels us to a particular next step. Instead, the factors at work have a causal psychological or instinctive origin: "When we are confronted with a finite set of examples we do not extract from them any general idea, rather, we instinctively pass on to what strikes us as the next step or the next case." (Bloor 1997: 14). Our response is due to an 'in-

⁶This terminology is inspired by Mary Hesse's (1974) account of classification within her network model of scientific theories.

nate but socially educated' tendency to perceive similarities (see also Schlicht 1998, Klaes 2002).

Up to now, meaning finitism departs from meaning determinism only to the extent that the individual's ability to apply a particular rule is explained differently. The next instance of rule application is arrived at instinctively, not because we have grasped a particular content. So far, atomism would remain intact. But the finitist account of concept application allows for factors other than just instincts and habits to influence how we extend past conceptual usage to new instances. Contrary to meaning determinism, meaning finitism demands that each new application is determined afresh by the factors and contingencies operative at that time. But these factors need not be limited to the psycho-biological make-up of the individual. Bloor suggests a second set of influences that we should assume to be operative, which are inherently social in character. Correct concept application should be understood as agreement in action: "To make a 'wrong' move is ultimately to make a move that leads the individual along a divergent path. To be wrong is to be deviant" (Bloor 1997: 16).

Following a rule therefore does not reduce to mental content but to being aligned in certain ways with the members of a given community. Contrary to the meaning determinist account however, this implicit consensus is open ended, since it only ever stretches across a subset of past concept applications that finds its boundary in the status quo, whereas in meaning determinism, mental content also fixes future instances.

While Pettit himself follows a slightly different line of argument, he arrives, like Bloor along Wittgenstein's private language argument (see Kripke 1982), at essentially the same conclusion. In order to be able to follow rules, individuals rely on social interaction in a constitutive sense. In Pettit's terminology, both he himself and Bloor assume a social holist position, which extends to rationality, too: they both hold that the normativity of the rules of rational conduct can only be grounded in interaction.

We therefore end up with a social holist argument for regarding social framing as essential for the constitution of human intentionality, and rational decision making in particular. Rules of what counts as rational conduct need to be understood in a finitist way. This makes their application to the next instance open-ended. Whether or not behavior is rational only ever emerges in the normativity conferred by the continuous interaction of fellow individuals.

Essential Framing: Individualism Relaxed

Let us now turn to the second possibility of moving from non-essential to essential social framing of intentional behavior, by exploring whether a commitment to social holism prejudices in any way Pettit's vertical issue, that between individualism and collectivism. Pettit (1993: 172-75) himself is adamant that it does not. In fact, his chief motivation of having distinguished the horizontal from the vertical issue consists in establishing the compatibility between social holism and an individualist perspective which

leaves individual intentionality intact in respect to any overriding or transforming influences of social entities.

What then is the case against collectivism? To begin with, acknowledging that social properties such as an individual's status within a given group impact on the intentional responses of other individuals does not commit oneself to a collectivist position. After all, social entities are not the only entities to influence our intentional responses in this way: they do so alongside non-social entities such as natural objects or human artefacts. All that we require of social entities, for them to be able to exert such an influence, is that they exist mind-independently in quite the same way as non-social entities do. Brute facts, such as the concrete wall that stands in our way, affect our intentional responses to our environment because they exist independent of that intentionality. We cannot wish them away. Social facts share this inertness *vis-à-vis* individual intentionality. True, social facts are contingent in certain ways on mental entities. They presuppose human intentionality. But social institutions such as the status of an individual within a group are not dependent on a particular intentional response of any one group member. It is only in their collectivity that group members sustain the institution of status.

This feature of social entities such as status has given rise to a theory of social institutions which regards them as communal performatives (see Barnes 1995, Bloor 1997, Searle 1995, Kusch 2002; cf. Austin 1956). They are constituted of utterances that are self-realising: If a group, in their collective practices, ascribe a status to a particular individual, this individual will through those actions have acquired the status in question. The performatives are also self-referring. A particular member of the group is its leader because it is taken to be the leader.

The question now is whether these performatives that constitute social entities pose a threat to the position of the individualist. Take for example the opinion of a high-status individual within a group. The opinion of this individual tends to exert a significant influence on which opinions other group members hold. The individual's status is a social entity, and what we have just described is a regularity on the social level, or social regularity in short. And this social regularity impacts on the intentional regularities as we find them for example in the responses of other group members. Does it thus undermine their primacy?

As long as we can identify some form of continuity between the intentional level and the level of social regularities, the answer is negative. The regularity in the above example is causally continuous with the intentional level since we can express this influence on the basis of causal regularities of group behavior. At worst, the opinions of some individuals will be swayed in ways that these individuals would resist under certain favorable conditions, conditions which would ensure rational responses. High status individuals do therefore not undermine the possibility of an autonomously intentional response as such.

Likewise, there are regularities which, while not causally continuous with individual intentional regularities, are nevertheless logically continuous with them. Logical continuity is a common relationship between micro-

and macrophenomena. Consider Schelling's (1969) neighborhood segregation models. In these models, individuals have a preference for not being in a local minority: they will move elsewhere if this condition is no longer fulfilled. This regularity at the micro level results in complete segregation at the macro level, even for the case that each and every individual is opposed to macro-level segregation as an outcome. We do not therefore have strict causal continuity between individual intentional regularities and the obtaining macro regularity. But the macro regularity will obtain in all possible worlds in which the intentional regularity obtains. It is therefore logically continuous with it.

Let us, with Pettit, refer to the social regularities considered so far as social-intentional regularities. This is to distinguish them from Pettit's social-structural regularities. Social-structural regularities are causally discontinuous with the intentional level, as in the two preceding examples. But they are also logically discontinuous with intentional regularities. In other words, given a particular intentional make-up, we can imagine a world in which the social regularity obtains just as well as one in which the regularity does not obtain. In other words, the intentional level fails to fix social-structural regularities. Imagine for example a world in which certain gate-keeping arrangements ensure that only certain types of behavior are tolerated in a given group (Pettit 1993: 124). The obtaining social regularities as they relate to this group will, given a particular intentional make-up, obtain in all possible worlds in which the gate-keeping arrangement holds. They are thus contingent on this boundary condition. Without it, the intentional level will not fix the social regularity: it may obtain in some worlds, but not in others.

Now consider the case of a particular candidate for a social-structural regularity: that of the 'folk psychology' at the root of our intentional responses. What if this folk psychology may actually be best understood as a social-structural regularity? This possibility would amount to standing Pettit's overall framework on its head, which seeks to ground social regularities in intentional regularities. But as Paprzycka (1998) has pointed out, Pettit's arguments in favor of an individualist perspective on folk psychology and thereby individual intentionality is at best ad hoc. Once a collectivist interpretation of folk psychology is acknowledged in Pettit's analysis, one gets invariably drawn towards either atomistic or holist collectivism overall.

Among the various proposals of a collectivist interpretation of folk psychology, that of Kusch (1997) is particularly relevant for our discussion since it draws on Bloor's social ontology. Kusch argues that 'I-talk' and thereby 'the self' as it is conventionally understood, is a social institution in the sense of the collective performatives that we have introduced above. The only way we make sense of our own intentionality and mental experience is through this 'I-talk'. The key step in Kusch's argument is the realization that "I", our first-person expression, is a self-referring expression. He argues that it is self-referential in two ways: First, as a concept, along the lines considered above when we discussed meaning in terms of rule following. Second, 'I-talk' is not only self-referential on the level of the collective,

it is so on the individual level, too. If an individual engages in 'I-talk', what they refer to is not a mysterious 'self' but other 'I-talk' that they engage in.

By being self-referential in these two ways, our 'I-talk' assumes a self-realizing and self-sustaining nature. In other words, it stabilizes the 'I' as a social institution. In a similar vein, Kusch regards mental states such as beliefs or desires as social artefacts which, while grounded in biological universals, are shaped and sustained collectively. If this is indeed the case we should expect to find cultural and historical variability of this institution. Kusch accepts this implication of cultural and historical contingency of folk psychology. He points to anthropological studies of societies whose folk psychology appears to lack concepts we regard central, including 'belief' or the self (Needham 1972, Lienhardt 1961, Howell 1981), or to the conceptual histories of Annales historians such as Febvre (1942) or Bloch (1936).

The upshot of Kusch's position is the possibility of a collectivist holist position within Pettit's typology. If folk psychology is a social institution, then human intentionality is in fact constituted as a social-structural regularity. This provides the strongest possible case for essential social framing of boundedly rational behavior. In such behavior, seeking to incorporate the potential influence of shifting social context must, for the collectivist, amount pursuit of a red herring, since rationality itself is a cultural entity that it will be difficult to consider in separation from what, for the individualist, would merely appear its social context.

7 Conclusion

We started out with a discussion of the rational choice paradigm in the social sciences, as brought to the point by Pareto's distinction between logical and non-logical action. Traditional rational choice theory suffers from an intrinsic tension between descriptive and normative ambitions when it comes to account for human decision making. Recent developments in behavioral and experimental economics have sought to differentiate these two dimensions by working towards a descriptively accurate theory of decision making, reserving normative claims to the traditional model.

One of the key conceptual developments in these new approaches to the study of individual choice has been the emergence of a range of bounded rationality notions both in economics and allied social sciences. This chapter has been concerned with the nature of these bounds. One finds in the bounded rationality literature ready acknowledgement of the crucial influence of social factors on individual decision making. In particular, the external validity of some findings from experimental economics is difficult to establish without reference to social framing effects.

But once it is acknowledged that social structure, as captured in the concept of social frames, genuinely impacts on individual choice, one finds oneself confronted precisely with Pareto's divide between logical and non-logical action, and between the primacy of individual rationality versus the primacy of social entities such as institutions. Behavioral economists have to date largely restricted themselves to psychological models of human de-

cision making. Given that the disciplines of economics and psychology share a common methodologically individualist outlook, this comes as little surprise. Nevertheless, once social framing effects are allowed to play an essential role in bounded conceptions of rationality, the implied theory of the social requires careful spelling out.

Pettit's distinction between the horizontal and the vertical issue in social ontology allows to address the implicit philosophical commitment of current attempts to operationalize bounded rationality in behavioral economics. Due to its individualist foundations, the rational actor paradigm in economics lacks a theory of the social that would reach beyond the acknowledgement of inter-individual exchange of signals. In Pettit's terms, it amounts to the atomist individualist stance in social ontology. Conceptualizing social framing effects along these lines amounts to acknowledgement of inessential social framing in the terms of the present chapter.

By contrast, we defined as essential social framing any allowance for departures from the atomist individualist stance, either by relaxing the atomist presumption towards a holist position, or by relaxing the individualist presumption towards a collectivist position. In fact, once one accepts arguments for a holist stance towards social objects such as institutions, assuming an individualist or collectivist holist position turns precisely on whether folk psychology is construed in individualist or collectivist terms. For collectivist holists such as Bloor or Kusch, both Pettit's individualist holism, and atomist collectivism as the other 'mixed' position in Pettit's classification, must appear as inconsistent intermediate positions. While they acknowledge the essentially social nature of institutions in some respects, they fail to grasp the full import of this social dimension.

For our discussion of the framing of rationality, this means that while the arguments in favor of both holism and collectivism independently establish the essentially social nature of such framing, they should be seen in conjunction. Embracing such holist collectivism amounts to the recognition of the fundamentally social nature of human intentionality and thus to a sociological and institutional reconstruction of folk psychology.

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