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Bounded sociality: behavioural economists' truncated understanding of the social and its implications for politics

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ABSTRACT

Behavioural economics provides a more realistic model of man than neoclassical economics. But 'behavioural economic man' likewise has his shortcomings. An important aspect is the neglect of social contingency. This article sheds light on the conceptions of the 'social' invoked in different strands of behavioural economics and explores their policy implications. Based on different interpretations of the rational choice paradigm and deviations thereof, a distinction is drawn between mainstream approaches and alternative approaches to behavioural economics and within 'mainstream behavioural economics' between its cognitive and its social strand. Whereas the cognitive strand of behavioural economics has quite a limited understanding of the social, which yields a narrow form of behavioural politics, the social strand offers a richer account of social variability and dynamics, which in principle leaves more room for politics. However, both approaches lay emphasis on our human nature rather than the specificities of modern culture.

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1. Introduction: probing understandings of the 'social' within behavioural economics

A central tenet of behavioural economics is that it is more 'realistic' than the neoclassical economic mainstream. What this greater realism consists in can be condensed as follows. Whereas neoclassical economists take rational choice as axiomatically given, without necessarily interpreting this as a property of individual economic actors, behavioural economists seek to provide a psychologically more accurate account of economic decision-making. In other words, they aim to replace the analytical fiction of homo economicus with empirical findings about the decision-making of 'real human beings'.

To develop more realistic models of economic decision-making, behavioural economics can, in principle, import wisdom from across the behavioural and social sciences – from biology to sociology. In practice, it combines economic theory first of all with insights from cognitive psychology. As a consequence of this selectivity in borrowing from other disciplines, behavioural economics is characterised by a truncated understanding of the social. Behaviours that may look inefficient from an economic point of view are attributed to individuals rather than institutions and explained in terms of human evolution rather than modern culture. This leads to an underestimation of social contingency, which may have conservative policy implications.

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This article has a twofold aim. On the one hand, it seeks to understand the turn to 'behavioural economic man' in the larger context of developing homo economicus as a model of man and the rational choice approach as a unifying perspective in the social sciences (section 2).

For this purpose, the article briefly recounts the history of economic man in the economic discipline and, thereafter, expounds two intersecting projects in making economic man more realistic: 'mainstreaming behavioural economics' (section 2.1) and 'generalising the rational choice approach' (section 2.2).

Both are interdisciplinary projects, but they take different directions. The first project aims to open economics to the behavioural sciences and make use of behavioural experiments to improve core economic models. To structure this expanding field of scholarship, the article distinguishes between alternative and mainstream behavioural economics and within mainstream behavioural economics between its cognitive and social strand. The second project aims to promote the rational choice approach as a general theoretical framework and 'unifying' perspective across the social sciences. By reconstructing the development of the rational choice approach outside the economic discipline, it will be demonstrated how this project converges with but also complements key developments in behavioural economics. Taking both projects together gives a better understanding of the range of positions, which is available to create more realistic models of economic man: from a narrow understanding of bounded rationality to broader understandings of ecological and social rationality.

On the other hand, this article aims to shed light on the conceptions of the 'social' that are invoked or implied in behavioural economics and explore their policy implications, focusing on the cognitive strand and the social strand of mainstream behavioural economics (section 3).

To set the framework, the article briefly turns to the normative function of the rational choice approach and introduces the problem of the 'social' in the behavioural sciences in general terms. Subsequently, it exposes the limits of behavioural economists' understanding of the social both in the cognitive strand (section 3.1) and the social strand (section 3.2), including related policy applications.

What both strands of mainstream behavioural economics share is that they define the 'bounds of human nature' in terms that may lead to overemphasise behavioural invariants and neglect the contingency of social action. As a result, politics may be narrowed down to behavioural interventions in given institutional settings without any space for alternatives. The difference between the two strands is that the cognitive strand, which focuses on the cognitive biases in individual decision-making, reduces the social to context effects in the moment of decision-making, whereas the social strand, which is concerned with constellations of strategic interaction between two or more individuals, also allows for longer-term social influences which may shape individual preferences and identities. What emerges from the discussion is a map of 'bounded sociality' in behavioural economics, which illustrates the main roads taken but also points to the vast territory left aside.

2. Through thick and thin: the passages of homo economicus

Homo economicus has a long pedigree in economic thought. However, the substance of this concept has considerably changed over time. Overall, one can speak of a move from a relatively 'thick' or realistic description of economic man to much 'thinner' and more formalistic notions of the economic agent. In a nutshell, this meant stripping homo economicus off all his psychology. The recent rise of behavioural economics seems to mark a turning point in this development. At the same time, economic man's journey through other social scientific disciplines has changed his character. In this section, we will explore how the projects of mainstreaming behavioural economics and generalising the rational choice approach complement each other in making the model of economic man more 'realistic'. However, before turning to these academic movements, we will briefly sum up the evolution of homo economicus in his homeland.

The history of 'economic man' as a reference point for economic theorising spans over two hundred years from early classical to contemporary neoclassical economics. Over time, the core

features of this model have become increasingly generalised, idealised and abstract. Adam Smith's picture of economic man was still much richer in detail than contemporary notions (Morgan, 2006, pp. 2–4). It does highlight economic self-interest but along with other characteristics, such as differences in talent and the willingness to exchange and invest, which together further the division of labour and, ultimately, spur economic growth. Moreover, Smith's economic man does not simply represent reality but also fulfils a normative function, lending credibility to the 'doux-commerce thesis' which became prominent in eighteenth-century moral philosophy (Hirschman, 1982, pp. 1464–1466).

In contrast, John Stuart Mill's homo economicus was not meant to represent man as a whole but to focus on what mattered most from a theoretical point of view: his wealth-seeking behaviour (Morgan, 2006, pp. 4–6). This yields a relatively narrow concept of economic man, which is obviously less realistic. Another important step was made by William Stanley Jevons, whose main concern was with the utility of consumption. Drawing on the pleasure-and-pain principle, his model of man was inspired by 'hedonic psychology' (Angner & Loewenstein, 2012, p. 645) but its impetus was mathematical. The economic actor is depicted as 'calculating man' who compares the utility gains of different consumption options in order to maximise his utility (Morgan, 2006, pp. 10–13). In these 'utilitarian' models of man, economic self-interest is the defining, if not exclusive feature.

In the early twentieth century, economic man was equipped with characteristics that further detached him from reality, such as full information, perfect foresight, and independence from others (Morgan, 2006, pp. 14–16). These features were introduced to facilitate mathematical modelling, and not to capture any properties of real human beings. However, rationality could still be understood in terms of the maximisation of self-interest. In the mid-twentieth century, yet another abstraction took place: the constitutive feature of economic man was now seen in the consistency of choice given a set of alternatives (Morgan, 2006, pp. 18–21). Ultimately, then, we can speak of a shift from the relatively narrow maximisation approach, which still supposes a rational self-interest, to the wider consistency approach, which does not make any reference to human psychology (Giocoli, 2005).

Outside the neoclassical framework, there is a greater tendency to take homo economicus for real, that is, to commit the 'fallacy of misplaced concreteness'. Indeed, many critics of the rational choice approach seem to confound the neoclassical construction of the economic agent with a descriptive account of individual decision-making (Ross, 2012). Given the technicalities of the 'micro-foundation' of neoclassical economic theory, the frequency of this category error may not be surprising. More curious, perhaps, is that even among experts the debate about making economic models more realistic often centres around 'paleo-homo economicus' (Doucouliagos, 1994, p. 878), a narrow model of economic man as a rational egoist, and not on the state of the art of the consistency approach. But, in practice, neoclassical models often do include (auxiliary) assumptions of perfect knowledge and self-interest. The aim of the debate can then be boiled down to exchanging one 'thick' description for another to create a more realistic looking 'neo-homo economicus' (Doucouliagos, 1994, p. 881). In the following, we will analyse the two academic movements engaged in this venture – behavioural economics and rational choice theory – with regard to their conceptions of rationality.

2.1. Model-building in a world of bounded rationality: mainstreaming behavioural economics

If neoclassical economics is based on the premise of rational choice, or utility maximisation, in what way is this premise modified or replaced by behavioural economics? A simple answer seems to be that behavioural economics differs from neoclassical economics by turning from 'full rationality' to 'bounded rationality' (Heukelom, 2014, p. 172). However, the debate is complicated by the fact that there are different notions of rationality in standard economics, which do not necessarily exclude bounded rationality, and that there are different understandings of bounded rationality in behavioural economics. While it would be more accurate to consider research on bounded rationality

a subfield of behavioural economics (Mallard, 2016, p. 6), the terminology remains ambiguous even then (Cartwright, 2011, p. 10).

Overviews of the state-of-the-art in behavioural economics usually provide a list of theoretical and empirical contributions to various areas of research, without giving much attention to the systematisation of different approaches (Cartwright, 2011, p. 10). To give an example, Dhimi's (2016) comprehensive textbook covers behavioural approaches to judgment, decision-making, other-regarding preferences, time-discounting, learning, and emotions.

Altman (2017, p. 181) finds the 'different faces of behavioural economics' reflected in the 'bounded-rationality approach' on the one hand and the 'heuristics-and-biases approach' on the other. This distinction resonates with comparisons between 'old' and 'new' behavioural economics (Angner & Loewenstein, 2012). The older bounded-rationality approach goes back to Herbert Simon (1978), but variants of this agenda can also be found in contemporary scholarship (Gigerenzer, 2016). The somewhat newer heuristics-and-biases approach is based on the work of Daniel Kahneman and Amos Tversky (Kahneman, 2003), which was constitutive for 'building and defining' today's mainstream behavioural economics (Heukelom, 2014, chapter 6).

Whereas the heuristics-and-biases approach describes a specific research programme in behavioural economics, the concept of bounded rationality is sometimes used as a marker for the field as a whole. As a case in point, Kahneman depicts his joint work with Tversky as an attempt to provide 'a map of bounded rationality' (Kahneman, 2003, p. 1449). For Gigerenzer (2016, p. 56, note 2), whose work builds on old behavioural economics, such nods to Simon's work in the realm of new behavioural economics are no more than an 'afterthought'. With regard to neoclassical economics, the bounded-rationality approach and the heuristics-and-biases approach follow quite different paths: of disunity in the former case and rapprochement in the latter.

This duality of approaches may be useful to gain a first orientation in behavioural economics, but it leaves out an important part of the field, which is concerned with social preferences. In the remainder of this subsection, we will therefore develop an alternative approach to structure the field starting from the different notions and 'layers' of rationality that are invoked in neoclassical and behavioural economics. This helps to clarify in what way, or under what premises, the 'social' may come into play in behavioural economics, and thus lays the foundations for the following argument.

Practically speaking, the lowest common denominator of neoclassical and behavioural economics seems to be in some notion of 'instrumental rationality', which corresponds to an 'intentional' reading of the consistency approach (Blume & Easley, 2018). In the broader range of social science theories, this already presumes a focus on 'agency' instead of 'structure' (Walsh, 1998) and, within theories of (social) action, a focus on instrumentally rational action instead of other 'ideal-types', such as action motivated by norms, values or emotions (Weber, 1978). These broader rationalities are emphasised in the interdisciplinary field of socioeconomics (Etzioni, 2006) and partly also in sociological rational choice theory (Lindenberg, 2006).

For the distinction between neoclassical and behavioural economics, and the relation of behaviourally-informed approaches to mainstream economics, the next step is important: whether utility maximisation is still assumed as the best way to approximate (average or aggregate) empirical behaviour or whether alternative modelling strategies are preferred, which may include other quantifiable mechanisms as well as more qualitative accounts of instrumentally rational action. One straightforward distinction on this level is to contrast neoclassical models of utility maximisation with behavioural models of bounded rationality (Harstad & Selten, 2013). Indeed, the concept of bounded rationality was originally introduced as an alternative to modelling decision-making processes in terms of utility maximisation, since the cognitive requirements of the latter seemed unrealistic (Simon, 2018). However, a prominent strategy in contemporary scholarship seems to be to introduce aspects of bounded rationality into a model of utility maximisation (Rabin, 2013). Within behavioural economics, such 'optimisation-based models' aim to improve existing neoclassical models (Crawford, 2013), which would ultimately make the distinction between neoclassical and behavioural economics obsolete.

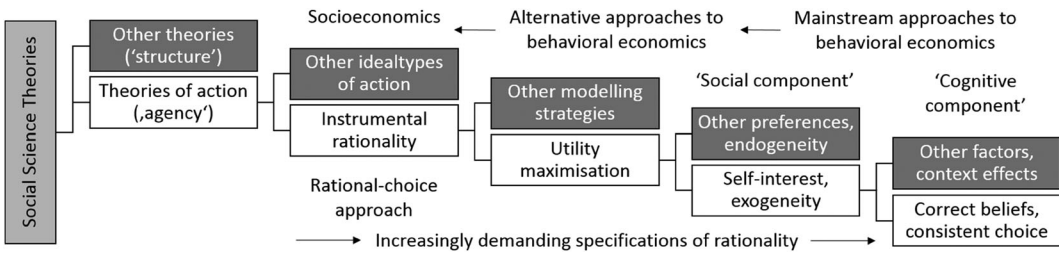


Figure 1. Different strands of behavioural economics related to the rational choice approach. Source: Author’s own.

Along similar lines, Dhami’s (2016, p. 2) definition of behavioural economics includes ‘[a]ny falsifiable theory that replaces/modifies any of the core features of neoclassical economics, by alternatives that have a better empirical foundation in human behaviour’. Consequently, behavioural economics is depicted as an ‘enhancement’ of neoclassical economics, and not as its ‘antithesis’ (Dhami, 2016, p. 2). We will refer to scholarship that is closely oriented towards neoclassical economics as ‘mainstream approaches to behavioural economics’ and to scholarship that is more critical with regard to neoclassical models of utility maximisation as ‘alternative approaches to behavioural economics’.

But even if utility maximisation is, in principle, taken as given, rationality can still be spelled out in different ways, imposing self-interest and/or full rationality. In response to these ‘unrealistic’ claims, which form part of the ‘typical practice of neoclassical economics’ (Dhami, 2016, p. 1; emphasis omitted), one can distinguish between two strands of (mainstream) behavioural economics that aim to modify different variables entering the hypothetical utility function. One strand mainly takes issue with (substantive) specifications of the rationality principle in terms of correct beliefs about the world and consistent choice between available alternatives. These assumptions are modified to account for cognitive illusions and context effects, which include common judgement errors (e.g. Mullainathan, 2002; Rabin, 2002) as well as situation- and time-dependent preferences (e.g. Loewenstein & Prelec, 1992; Tversky & Kahneman, 1991). The other strand distances itself from the axiom of self-interest in the maximisation approach, which is still a default in many neoclassical models, and emphasises social preferences instead (e.g. Falk & Fischbacher, 2006; Fehr & Schmidt, 1999). Relatedly, the assumption of exogenous preferences is modified to include endogenous preferences acquired by way of social learning (e.g. Bowles, 1998; Hoff & Stiglitz, 2016). Following Zari’s (2010) related distinction, we will refer to these divergent approaches as the ‘cognitive’ and the ‘social’ strand, or component, of behavioural economics.¹ (Figure 1 summarises the suggested classification of approaches.)

2.2. Between rational egoism and social rationality:² generalising the rational choice approach

Inasmuch as behavioural economics argues within the confines of the rational choice approach, it also relates to the project to generalise the rational choice approach from economics to other social scientific disciplines. This subsection is interested in how empirical applications of the rational choice approach outside economics proper may have come to be reflected in theory-building by moving beyond both the narrowly confined maximisation approach and the substantively empty consistency approach.

As before, we will focus on how rational choice is spelled out on different analytical levels, namely with regard to the principles of (1) utility maximisation, (2) self-interest, and (3) rationality (here understood in a narrow, cognitive sense). The following presentation does not aim to give a comprehensive account of generalised rational choice theory but draws on representative contributions to underpin the overall argument.

A good starting point is Gary Becker's 'economic approach to human behaviour', which rests on '[t]he combined assumptions of maximising behaviour, market equilibrium, and stable preferences' (Becker, 1976, p. 5), but does not hinge on 'narrow assumptions about self interest' (Becker, 1993, p. 385). The principle of utility maximisation allows including one's own valuation of others' outcomes, even though the perspective is necessarily self-centred in terms of whose utility function it is. Markets can exist or emerge anywhere, which includes 'social markets', such as the marriage market, the market for criminal offences, or the market for intellectual ideas. All of these could be analysed according to the logic of demand and supply, which affects the 'price' of certain behaviours. If preferences are considered to be fixed, a change in behaviour can unambiguously be attributed to a change in restrictions (such as in market prices, individual budget or legal framework). Overall, Becker seems not much concerned with the realism of his assumptions. His 'thin' notion of rationality is in line with the consistency approach. In this overview, his work is representative of generalising the rational choice approach by substantively broadening its area of application.

A key reference in sociological rational choice theory (Hechter & Kanazawa, 1997) is the work of James Coleman, whose ambition was to replace *homo sociologicus* with *homo economicus* as the reference point of sociological theory-building. Whereas the classical *homo sociologicus* depicts a socialised individual whose main driving force is to act in conformity with social norms, Coleman (1964, p. 167) starts 'with an image of man as wholly free: unsocialised, entirely self-interested, not constrained by norms of a system, but only rationally calculating to further his own interest'. In contrast to Becker, he explicitly takes 'selfish interests' as a starting point to theorise about questions of social order, such as the emergence of social norms (Coleman, 1990, p. 31). Analytically speaking, Coleman's notion of rationality is in line with the maximisation approach, which includes the (auxiliary) assumption that '[a]ctors are optimally informed rational egoists who care only for the tangible consequences of their actions' (Kroneberg & Kalter, 2012, p. 81). What is new compared to the neo-classical version of this approach is that the self-interest assumption is no longer confined to economic action, namely market behaviour, but substantively broadened to explain fundamental social dynamics.

However, in order to understand the development of generalised rational choice theory, it does not suffice to distinguish between 'thin' and 'thick' conceptions of rationality, but one also has to make a difference between 'narrow' and 'broad' conceptions of thick rationality. As a pioneer in this respect, Jon Elster (1983) contrasted 'thin' and 'broad' theories of rationality. Here, the 'thin' understanding of rational action is equated with the consistency approach and distinguished from a 'thicker' understanding of economic man as basically selfish (Elster, 1983, p. 10). In contrast to both, the 'broad' theory strives for a more substantive understanding of rationality in terms of the formation of reasonable beliefs and preferences, which can be defined as free from cognitive biases and conformist adaptation (Elster, 1983, pp. 15–26). Like Becker and Coleman, Elster extends rational choice theory into new areas of application, such as politics. However, he does not do so by postulating utility maximisation as a one-size-fits-all mechanism to explain human behaviour or by reconstructing the foundations of society in terms of individual self-interest, but by emphasising the material conditions of 'true' rationality. In his broad version of rational choice, the rationality principle is substantively reinforced.

Whereas the above extensions of the rational choice approach cannot easily be aligned with the advance of behavioural economics, the picture changes with the following adaptations. One strategy has been to relax restrictive assumptions about 'optimally informed rational egoists' who know everything and only care about themselves, and embrace the principles of bounded rationality and bounded self-interest instead. This basically means replacing the maximisation approach with another thick description. Another strategy is to '[go] beyond explaining behaviour solely in terms of maximising expected utility' and integrate alternative theoretical perspectives (Kroneberg & Kalter, 2012, p. 83). Utility maximisation is then no longer regarded as 'the' unifying approach.

The first strategy is evident in Gebhard Kirchgässner's (2008) 'economic model of behaviour', which differs from Becker's original version in that it has already internalised substantive criticisms

from outside the economic discipline. The two central assumptions are still considered to be self-interest and rationality, but both are substantively qualified. Kirchgässner (2008, p. 15) concedes that the “‘axiom [of self-interest]” is in fact an empirical assumption that in special situations has to be checked, modified or even rejected’. And he only invokes a ‘weak principle of rationality’, which seems general enough to include aspects of bounded rationality and rule-following behaviour (Kirchgässner, 2008, pp. 25–33).

Another example of this strategy is Karl-Dieter Opp’s (2013) approach, which models social norms as ‘incentives’ that motivate utility-maximising individuals to comply. In contrast to Coleman, who addressed similar questions, Opp adopts a wider version of rational choice theory, which substantively qualifies the assumption of self-interest. His model includes not only ‘external outcomes’, such as material benefits or social approval, but also ‘internal outcomes’, such as ‘internal satisfaction if a goal is realised’ (Opp, 2013, p. 388). This is based on the premise that social norms can be internalised and turn into personal goals, achievement of which yields intrinsic benefits (Opp, 2013, pp. 398–402). Once this happens, there is no conflict between following norms and maximising one’s utility anymore.

The second strategy, which takes the rational choice approach to its limits, is exemplified by the work of Siegwart Lindenberg (1990), whose ‘general model of man in the social sciences’, or socio-economic man, eventually became so general that utility maximisation got too narrow as a concept. Originally, the acronym RREEMM stood for ‘resourceful, restricted, expecting, evaluating, maximising man’ (Lindenberg, 1990, p. 739). More recently, Lindenberg (2000, p. 636, note 1) replaced ‘maximisation’ with ‘motivation’, because the former was ‘too much associated’ with the maximisation approach. Moreover, he added ‘meaning’ as a sixth substantive element, which highlights that all social action is premised on the definition (or ‘framing’) of situations (Lindenberg, 2000, pp. 652–654). In terms of ‘master frames’, which can be switched between roles and situations, the ‘gain frame’ of maximising income now stands next to other frames, such as the ‘hedonic frame’ of seeking comfort and the ‘normative frame’ of acting appropriately (Lindenberg, 2000, pp. 654–663).

These three approaches are representative of a generation of scholarship that modifies rational choice theory in line with the concerns of behavioural economists. It can be argued that such substantively enriched approaches, which qualify the assumptions of rationality and self-interest and even relativise the principle of utility maximisation, are indeed more ‘realistic’ in that they are more attuned to different empirical settings than the narrow maximisation approach and the empty consistency approach. However, the context dependency of rational (social) action also translates into a contingency of model specification (Kroneberg & Kalter, 2012, pp. 81–87). And, in the end, one might not even see a need to subsume everything under ‘rational choice’ anymore (Hedström & Ylikoski, 2014, p. 60).

3. Behavioural politics: defining the bounds of human nature³

Above we distinguished mainstream approaches from alternative approaches to behavioural economics and, within mainstream behavioural economics, between the cognitive strand, which is specifically interested in modelling bounded rationality, and the social strand, which is particularly concerned with modelling bounded self-interest. This section will take a closer look at the ‘social theory’ inherent in behavioural economics and what policy implications this may have (Micklitz, 2018). The main argument is that by defining the ‘bounds of human nature’ (Mullainathan & Thaler, 2001, p. 1095), behavioural economics furthers a limited understanding of the social, which also determines the range of behavioural politics.

Before exploring in more detail how behavioural economists represent the social world, it seems useful to go back to our analytical framework and consider in what way different specifications of the rational choice approach may already preconfigure political usages of behavioural arguments.

Following Hands (2012, p. 227; emphasis omitted), rational choice theory is ‘neither a positive/descriptive theory of real economic agents, nor an ethical theory about what such agents ought to do’. It is based on an axiomatic definition of what it means to be rational, which is used as ‘as if’ assumption in empirical applications (Friedman, 1953). However, in practice, the definition of what is rational and what is not is suggestive enough to turn into a normative ideal that guides economic behaviour and also informs economic policy.

This is the case in the cognitive strand, in which the rationality principle is interpreted as a ‘conventional behavioural norm’, deviations from which are conceived as ‘biases’ or ‘errors’ in need of correction (Altman, 2017, p. 182). In the social strand, the situation is somewhat more ambiguous since the rationality principle takes a more abstract form, with other-regarding preferences being *per se* no less rational than self-regarding preferences. This makes the rationality norm politically less instructive. As Zarri (2010, p. 566) puts it: ‘insofar as [behavioural economics] definition of “rationality” does not get violated, there is no room for paternalism’. At the same time, both approaches remain in the framework of utility maximisation, which suggests that different individual and social outcomes can be compared and ranked. In contrast, alternative approaches to behavioural economics take a different route. As a case in point, the bounded-rationality approach in the tradition of Simon starts from a ‘contextualised’ understanding of rationality, which takes individual and institutional ‘capabilities’ and ‘constraints’ into account (Altman, 2017, pp. 182–186). This does not easily translate into policy recipes. Constraints may be changed and capabilities improved, but there is no optimum to strive for (Altman, 2017, pp. 190–191). Individual behaviour and social environments are regarded as two sides of the same coin, none of which has analytical or normative primacy over the other.

The following argument focuses on ‘bounded sociality’: the ways in which behavioural economists’ understanding of the social is analytically truncated and what normative consequences this may have. To put the problem of the social in more general terms, we can claim that a core interest in the behavioural sciences is to find behavioural regularities that are universal or quasi-universal in character. In the realm of the human and social sciences, including behavioural economics, this regards the ‘invariants of human behaviour’ (Simon, 1990). However, such a ‘universalising’ research interest creates a tension with the principle of social contingency, which anthropologists and sociologists derive from the study of human culture. If it is true that many behavioural invariants are actually ‘social invariants’, which are ‘invariant only over a particular society or a particular era, or even over a particular social or professional group within a society’ (Simon, 1990, p. 16), one has to be cautious with scientific generalisations (Henrich, Heine, & Norenzayan, 2010). This caveat applies even more so to introducing purported laws of behaviour into politics. Arguably, ‘evidence-based policy-making’ that reckons with the invariants of human behaviour (Sibony & Alemanno, 2015, p. 5) leads to different policies than emphasising the ‘heterogeneity’, ‘versatility’, and ‘plasticity’ of people (Bowles & Gintis, 2006, p. 184).

The two strands of mainstream behavioural economics to be discussed next differ in whether the social is considered an influence in the moment of decision-making or whether it is considered to be of more durable influence (Hoff & Stiglitz, 2016). Whereas the cognitive strand is more concerned with the immediate context of economic action and relevant social cues, the social strand takes a longer-term perspective on the social context including aspects of individual and cultural development. In behavioural models, this difference is reflected in the distinction between situation-dependent and endogenous preferences (Bowles & Polanía-Reyes, 2012, pp. 373–375).

3.1. Quick fixes: the cognitive strand of behavioural economics and its policy implications

The cognitive strand of behavioural economics focuses on biases and errors in individual judgement and decision-making, which violate the rationality norm and lead to sub-optimal economic outcomes. It draws on ‘behavioural decision research’, a branch of psychology which emerged in the 1970s and attacked rational choice theory on empirical grounds (Angner & Loewenstein, 2012,

pp. 660–664). Kahneman and Tversky's work is rooted in this field, which Richard Thaler helped to popularise in the economic profession. As a result of this 'boundary work', behavioural economics today is closely linked with cognitive psychology. Simply speaking, cognitive psychology is concerned with the workings of our cognitive apparatus, which basically all human beings share. Accordingly, the emphasis of the cognitive strand of behavioural economics is on common mistakes which individuals make not as members of specific groups or collectives but as members of the same species. Indeed, the common denominator in this field seems to be that human beings are not rational by nature but that they are fallible. In Thaler and Sunstein's (2008, p. 7) words: 'They are not homo economicus; they are homo sapiens.'

However, there is no *a priori* reason to assume that all our cognitive biases are hard-wired (Streeck, 2010). Ghisellini and Chang (2018, pp. 98–101) distinguish between 'innate' biases that form part of the human condition, 'justifiable' biases that facilitate decision-making under time and information constraints, and 'real' biases. Only the latter would be problematic in an 'ecological' understanding of rationality (Gigerenzer, 2016). Moreover, another implication could be drawn as well: that we are rational only by culture. In this perspective, rational choice, or utility maximisation, is a cultural norm. Indeed, the decision-making problems studied in behavioural economics are typically related to living in a highly rationalised monetary and financial culture, in which calculative agency is key. What empirical findings suggest is that this rationality norm often goes beyond our individual cognitive abilities. However, rational behaviour can be institutionally supported. Çalışkan and Callon (2009, p. 380) speak of 'socio-cognitive prostheses that enable the (economic) formatting of individual behaviours'. These span from algorithms in our virtual environment to the material architecture around us.

If our cognitive capacities are shaped by our culture, this should include our ability to act rationally as much as our failures to do so. Put differently, deviations from economic rationality may well be caused by other rationalities of (social) action, which are likewise institutionalised. However, the question in what way seemingly irrational behaviours are institutionally embedded is usually not raised in the cognitive strand of behavioural economics. To give an example, experimental research has established a difference between the price offered to buy an item ('willingness to pay') and the price requested to sell it again ('willingness to accept'), which cannot be rationally explained: the so-called 'endowment effect' (Kahneman, Knetsch, & Thaler, 1991). This seems to reflect the phenomenon of ownership, be it 'psychological' or 'legal' (Reb & Connolly, 2007). But related research in behavioural economics and economic psychology shows little interest in how ownership is institutionalised and how this institution is internalised by individuals. Given that private property is constitutive for market economies, this is a curious neglect. From a sociological point of view, it seems plausible to assume that the endowment effect reflects prevailing notions of ownership and cannot simply be boiled down to, say, instinctual territorial behaviour.

Inasmuch as the cognitive strand of behavioural economics is characterised by an implicit or explicit focus on our universal human nature, whereas the cultural contingency of much, if not most, of our behaviour is not discussed, we can speak of a 'naturalist bias'. This is the first and foremost way in which the social is truncated in respective scholarship. To compare, the bounded-rationality approach of old, or alternative, behavioural economics takes a broader perspective on the 'ecological rationality of heuristics' (Gigerenzer, 2016, p. 40). This is characterised by the mutual adaptation of environment and cognition, 'without implying that all or even the majority of heuristics represent evolutionary adaptations' (Hertwig & Herzog, 2009, p. 668). Instead, heuristics can also be the result of individual and social learning, which suggests that they can be 'unlearned' as well. Arguably, this leaves more room for social contingency, which may also be preserved in policy applications.

A second way in which the social is contained in the cognitive strand of behavioural economics is by reducing it to social influences in the moment of decision-making. This is in line with a definition of bounded rationality in terms of incorrect beliefs and inconsistent choices, while preferences are generally taken as given and considered as self-regarding. Actual deviations from the self-interest assumption can then be modelled as situational context effects that 'bias' individual decision-

making. Old behavioural economics seems to take a slightly different approach in that social influences are considered more constitutive. Given ‘that other people often create the most important aspects of a person’s environment’, ecological rationality naturally includes ‘social heuristics’ (Hertwig & Herzog, 2009, pp. 663 and 680).

A third aspect to be considered is the role that the social plays in behavioural experiments. The question where cognitive biases stem from may not seem of much relevance if and as long as they can be replicated in behavioural experiments with many different subjects and across different social groups. However, to some extent, this ‘robustness’ may also be an artefact of experimental settings which produce compliant individuals aiming to act in conformity with expectations – also implicit ones (Böhme, 2016). This caveat concerns experiments in both strands of mainstream behavioural economics, but might be less reflected in the cognitive strand (Henrich, Heine, et al., 2010, p. 79) than in the social strand (Bowles & Polanía-Reyes, 2012, p. 411).

The constitutive role of institutions in promoting economic rationality is acknowledged in the most prominent political spin-off of behavioural economics, libertarian paternalism. The very idea of ‘nudging’ or ‘choice architecture’ (Thaler & Sunstein, 2008) is to provide institutional remedies for irrational behaviours, which are part of human nature. More specifically, libertarian paternalism can be understood as a new mode of governance which basically consists in ‘debiasing’ individual decision-making with the help of regulatory tricks (Jolls & Sunstein, 2006). However, ‘governance by nudges’ is not just a solution to a problem that would be undeniably given, but it actually defines the problem as one of cognitive failure, attributes it to individual human beings, and offers a technical solution which keeps the market environment intact.

In Mehta’s (2013, p. 1252) terms, this only reveals the ‘historically contingent set of values, beliefs, attitudes and concerns of the [respective] discourse community’. This worldview presupposes the institutional and regulatory ideal of rational choice as much as the individualised and normalised ‘reality’ of cognitive biases. Old-style regulation is considered too heavy-handed (Fine, Johnston, Santos, & Van Waeyenberge, 2016, p. 655), education as hopeless (Gigerenzer, 2015, p. 362), and genuine empowerment, perhaps, as unwanted (Leggett, 2014, p. 10). And even though one could argue that the manipulation of choice architecture is as much about shaping individual behaviour as about changing social institutions, it actually consists in modifying ‘minor’ institutions in order to safeguard ‘major’ ones (Santos, 2011, p. 715). An example is the regulatory nudge furthering automatic enrolment in retirement saving plans (Thaler & Sunstein, 2008, pp. 115–116). By adjusting certain institutional parameters (e.g. changing the default in employers’ pension plans from ‘opt-in’ to ‘opt-out’), individual behaviour can be geared towards the challenges of a complex institutional environment (e.g. a pension system that increasingly rests on private investment rather than tax revenues), which is taken for granted or considered without alternative. Put differently, the market environment is taken positively and normatively as given, while boundedly rational individuals are equipped with socio-cognitive prostheses enabling them to act ‘in their own best interest’.

Moreover, where libertarian paternalism explicitly deals with the social, this is reduced to a context factor among others, which may shape preferences in the moment of decision-making. Accordingly, Thaler and Sunstein’s (2008, pp. 53–71) ‘social nudges’ work by ‘informing’ the target subjects about what other people do and think or by ‘priming’ them into the expected behaviour. In other words, the desire for social conformity is treated as just another form of cognitive bias, which can be induced or counteracted by subliminal interventions in the choice architecture.

3.2. The long road: the social strand of behavioural economics and its policy implications

Whereas the cognitive strand of behavioural economics is preoccupied with bounded rationality, the social strand is primarily concerned with bounded self-interest, or the prevalence of other-regarding preferences. The main approach to studying other-regarding preferences is behavioural game theory, which differs from analytical game theory in that it draws on experiments and from behavioural

decision theory in that it focuses on decision-making in interactive situations, such as the ultimatum game, the dictator game, public goods games with and without punishment, and gift exchange games. Related scholarship takes issue with the self-interest assumption of the maximisation approach but usually remains within the consistency approach (Zarri, 2010). Along with recent developments in sociological rational choice theory, which relax the self-interest assumption to better account for norm-oriented behaviour, scholars in the social strand of behavioural economics may allow preferences (1) to be not self-regarding only but also other-regarding, (2) to be not outcome-oriented only but also process-oriented, and/or (3) to be not exogenously given but endogenously developed (Bowles & Gintis, 2006, pp. 172–173). The result is a more ‘realistic’ model of man, according to which individuals are not only interested in their own material outcomes but also in the results of others as well as in the quality of the interaction and their own role in it. Moreover, preferences are not independent but interdependent within games and can also change over time as the result of social learning.

In order to distinguish different approaches within the social strand of behavioural economics, time seems to be the decisive factor. One can either assume that social preferences are static or dynamic. In the first case, other-regarding preferences would be considered as stable and given, just as self-regarding preferences are under the self-interest axiom. If this proposition is taken literally, it suggests that people are other-regarding by nature. In the second case, preferences can be understood to change in the short run or in the long run. The short-term perspective includes situation-dependent preferences, which are subject to social framing (referred to as ‘social nudges’ above), as well as interdependent preferences, meaning that individual decision-makers respond to other decision-makers’ actions. In this perspective, the social is basically condensed to herding behaviour and reciprocation strategies. The long-term perspective includes both ‘ontogenetic’ models of preference formation, which extend to the lifetime of an individual, and ‘phylogenetic’ models, which span the history of humankind, as well as models of preference development under conditions of market integration, which can be located somewhere in-between. All these models can be covered in terms of endogenous preference formation, in which culture has a role to play. But what is dynamic from an evolutionary point of view, which goes back 1.6 million years (Bowles & Gintis, 2011, p. 17), may seem static from a political point of view, which aims at economic and social development today (OECD, 2017; World Bank, 2015).

To illustrate, phylogenetic models of gene-culture coevolution may explain how the modern human species (*‘homo sapiens’*) came into being and why a propensity to cooperate proved to be advantageous in the struggle for survival (Bowles & Gintis, 2011). Building on this, Fehr and Gintis (2007, p. 45) offer a model of society, which ‘not only rejects the selfishness assumption routinely made in economics, but also suggests an alternative view about a basic predisposition of humans: strong reciprocity’. While this at first looks like substituting one thick assumption for another, the model actually combines the two. More specifically, Fehr and Gintis (2007, p. 45) distinguish between two types of actors – ‘rational egoists’ and ‘strong reciprocators’ – whose interaction ‘drives the emergent patterns of social cooperation and social exchange’. This means that human sociality is ultimately described in terms of the properties and predispositions of individuals again. However, this ‘unrealistic’ assumption (Bowles, 2016, p. 209) is counterbalanced with institutional arguments, namely the absence or presence of a ‘punishment opportunity’, which would support the proliferation of cooperative behaviour (Fehr & Gintis, 2007, p. 50 and 53). While the identification of two different types of human beings with fixed, either self- or other-regarding, preferences may have an ‘essentialising’ effect, the intended lesson of this model seems to be a different one: that ‘institutions matter’. A change in the institutional framework can induce the same group or mixture of people to either free-ride or cooperate, leading to different macro-social equilibria (Fehr & Gintis, 2007, pp. 47–51). Which equilibrium is preferred – the one with more free-riding or the one with more cooperation – is, ultimately, a political question, or, perhaps, a question of tradition.

In contrast, an ontogenetic perspective on preferences formation would focus on ‘enculturated actors’ (Hoff & Stiglitz, 2016), whose take on the world develops in the process of socialisation and

may change with varying life circumstances and social belongings. Hoff and Stiglitz' (2016) review of respective studies lays emphasis on 'deep social determinants' not only of preferences but also of perception and cognition, which suggests that our social environment affects not only what we want but also what we think. Respective scholarship is less interested in individual properties than in 'social identities', which determine who we are and how we make sense of the world: 'society creates identities, worldviews, and other mental models that individuals use to process information and interpret the world' (Hoff & Stiglitz, 2016, p. 36; original emphasis). Instead of cognitive biases, which everybody is supposed to share, we may speak of cultural lenses, which systematically vary within and between societies, and which can change or be changed over time. This takes us to the question of policy implications, or possible interventions in the process of preference and identity formation. While the models used may still employ the framework of utility maximisation, this does not suffice as a normative benchmark: 'When utility functions can change as a result of policy, which utility function should be used?' (Hoff & Stiglitz, 2016, p. 51) What is required is a vision of a 'good society' (Hoff & Stiglitz, 2016, p. 51), which cannot be derived from the modelling strategy as such.

This does not mean that normative guidance is missing in the social strand of behavioural economics. Most generally, the lesson seems to be that, if preferences are endogenous, politics cannot hide behind the liberal principle of non-interference, or preference neutrality (Bowles, 2016, pp. 168–169). Hoff and Stiglitz (2016, pp. 49–50) refer to identities and institutions that hinder economic and social progress as 'societal rigidities'. Bowles emphasises the contribution of informal social norms to the functioning of the market economy where its formal rules end (Bowles, 2016, p. 35). This is against the backdrop of research on the interaction of 'economic incentives and social preferences' (Bowles & Polanía-Reyes, 2012). Accordingly, an overreliance on economic incentives may lead to other-regarding preferences being replaced with self-regarding preferences in the process of 'preference-updating', or social learning. Bowles (2016, p. 222) concludes that 'good policies [...] are those that support socially valued ends not only by harnessing self-interest but also by evoking, cultivating, and empowering public-spirited motives'. Relatedly, evidence from cross-cultural experiments (Henrich et al., 2005, 2010) is interpreted in terms of the civilising effect of market exchange, which would further, as well as depend upon, the 'endogenous evolution of social preferences' (Bowles & Polanía-Reyes, 2012, p. 410). Bowles' (2016) view of the 'moral economy' has been linked with 'neoliberalism as a programme of institutional and individual transformation geared towards the political and moral promotion of the ideal of market competition' (Santos & Rodrigues, 2014, p. 521). Taken to this end, the policy implications of the social strand of behavioural economics would not differ much from the cognitive strand. However, in the social strand taking a realistic approach to 'men as they are' (Bowles, 2016, p. 7) goes along with pointers to social complexity and contingency, which generally creates space for politics, and does not preclude any alternative options.

4. Conclusion: behavioural economics between 'realist fallacy' and 'contingency trap'

This article explored conceptions of the 'social' in behavioural economics against the backdrop of two interrelated projects: to make economics more realistic and to generalise the rational choice approach. For this purpose, we followed homo economicus through his travels outside his neoclassical homestead: into the borderlands of economics with psychology and sociology.

What we found is that the rational choice approach is still well and alive, but that there is much experimentation going on with the attributes of economic man, with scholars testing out alternative thick descriptions, which go beyond both the narrowly confined maximisation approach and the substantively empty consistency approach. Applications of this model in mainstream behavioural economics and rational choice sociology frequently qualify the conventional assumptions of rationality and self-interest, and at times even question the principle of utility maximisation, which practically changes economic man beyond recognition.

Our specific interest was in how this new model man – homo economicus behavioralis – accommodates the ‘social’ and what policy implications this may have. Ideally, the different variants of this model can be positioned between the ‘undersocialised’ conception of the classical homo economicus and the ‘oversocialised’ conception of the classical homo sociologicus (Granovetter, 1985). With increasing ‘socialisation’ of the economic agent, the analytical focus switches from the decisions of individuals with given preferences to the preference-shaping function of the context of decision-making. This includes the immediate context, in which preferences may be evoked or activated by social cues, as well as the longer-term context, in which individual preferences, or identities, evolve as the result of social learning.

Closer to the undersocialised pole, the cognitive strand of mainstream behavioural economics focuses on social influences in the moment of decision-making, which can be exploited or counteracted, just as any other distorting factor. Overall, this yields a rather static vision of behavioural economic man, whose cognitive biases are considered part of the human condition, which makes it difficult to meet the rationality norm stipulated in neoclassical economics.

Somewhat higher on the socialisation scale, the economic agent in the social strand may be conceived as an average or ideal type of the ‘cooperative species’ or even as an enculturated individual who learns from others and adapts to different social contexts. This offers a more dynamic vision of behavioural economic man, even though research interests may still vary between defining man as such and capturing the cultural heterogeneity and variability of human behaviours.

Regarding the policy implications of the different understandings of the social, behavioural economics seems to be caught between ‘realist fallacy’ and ‘contingency trap’: the tendency to attribute deviations from rationality to our human nature and fight common biases with social technologies, instead of questioning larger institutional frameworks, and the risk to open up too many alternatives which may all seem equally rational and can, as such, only mark the beginning of a political process, instead of offering simple policy recipes to be implemented here and now.

Against this backdrop, it does not surprise that the social strand of behavioural economics is less visible in debates about the normative relevance of behavioural findings, whereas the political implications of the cognitive strand are widely discussed. Arguably, this difference directly reflects the observed variance in the social complexity of the underlying models.

Notes

1. Similar distinctions are provided by Hertwig and Herzog (2009, p. 663), who speak of ‘two blows to homo economicus: cognitive illusions and other-regarding preferences’, and Santos and Rodrigues (2014, p. 515), who also explore the policy implications of the two approaches. Hoff and Stiglitz (2016, pp. 28–29) compare two strands of behavioural economics, one of which focuses on context effects in the moment of decision-making, while the other emphasises ‘deep’ or ‘durable’ social influences. Ultimately, it is a question of perspective whether the distinction between the cognitive and the social strand of behavioural economics is considered analytically meaningful or not. My impression is that this view is easily shared by representatives of the social strand (e.g. Bowles, 2016, pp. 7–8), whereas representatives of the cognitive strand may prefer to speak of extensions of, or additions to, the original heuristics-and-biases programme (Heukelom, 2014, chapter 6).
2. This subheading is inspired by Lindenberg (2000), who contrasts the ‘thick’ theory of rational egoists with a ‘thick’ understanding of social rationality in a wide reading of the rational choice approach, which harbours both variants (and more).
3. This subheading is inspired by Mullainathan and Thaler (2001, p. 1095), who build their case for libertarian paternalism upon ‘three bounds of human nature’ which neoclassical economics neglects: ‘bounded rationality’, ‘bounded willpower’ and ‘bounded self-interest’. In my distinction between the cognitive and the social strand of behavioural economics, phenomena of bounded rationality (as in situation-dependent choice) and bounded willpower (as in time-dependent choice) are both regarded as deviations from the rationality assumption, which postulates consistency of choice, whereas phenomena of ‘bounded self-interest’ are considered as deviations from the self-interest assumption.

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