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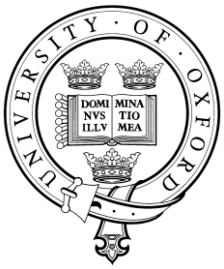
Oxford Department of International Development
Queen Elizabeth House (QEH), University of Oxford



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On the Possibility of Measuring Freedom: A Kantian Perspective

Sebastian Silva-Leander*

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Abstract

More than three decades after Sen's first formulation of the so-called "capability approach", practitioners have yet to measure a capability set. This raises fundamental questions about the empirical viability of Sen's approach. In this paper, we argue that Kantian philosophy may offer valuable insights into how to deal with this problem, as the methodological difficulty which has hampered the full operationalisation of the capability approach lies at the heart of Kant's philosophical system. In particular, we will argue that the Kantian notion of autonomy freedom may offer a viable alternative to Sen's notion of opportunity freedom for the operationalisation of an internally coherent normative framework that is compatible with Sen's representation of human nature. This allows us to propose an operationalisation strategy that focuses (1) on the normative content of choices, and (2) on the process of decision-making, rather than on the measurement of unobservable and counterfactual opportunities.

Keywords: Scientific methodology, Kant, Capability approach, Operationalisation strategy

JEL classification: B16, C18, D60

*Oxford Poverty & Human Development Initiative (OPHI), University of Oxford. Email address: sebastian.silva-leander@qeh.ox.ac.uk.

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> "You must bind me very tight, standing me up against the step of the mast and lashed to the mast itself so that I cannot stir from the spot. And if I beg and command you to release me, you must tighten and add to my bonds." (Homer, p. 161)

In his seminal paper, *Equality of What?,* Sen famously argued that existing consequentialist approaches to social evaluation ignored such essential differences as the one that separates a starving man from a fasting man, because they failed to look at the alternative options available in the chooser's opportunity set (Sen, 1980). Consequently, Sen suggested, we should look at the set or vector of achievable functionings[1], or capability sets, as opposed to simply achieved outcomes (Sen, 1987 c; Sen, 1988; Sen, 1982; Sen, 1985). Yet, in spite of the remarkable technical progress that has been made in the operationalisation of Sen's ideas over the last two decades (Alkire & Foster, 2011; Bourguignon & Chakravarty, 1999; Duclos, Shan, & Younger, 2006), applications of Sen's approach have effectively continued to focus on achieved functionings rather than capabilities – the most well-known of these being the Human Development Index (HDI), and the more recent Multidimensional Poverty Index (MPI) produced by the United Nations Development Programme (Alkire & Santo, 2010).

Some noteworthy attempts have been made in recent years to move beyond achieved functionings in the measurement of wellbeing and deprivation (Krishnakumar, 2007; Burchardt, 2006; Haverman & Bershadker, 2001; Alsop & Heinsohn, 2005)[2]. Notwithstanding the valuable insights that these studies provide into poverty, however, they have so far fallen short of a full estimation of capabilities (Kuklys, 2004). Beyond the technical challenges involved in capturing Sen's rich and complex concept of wellbeing, there is a fundamental methodological incompatibility between Sen's critique of neoclassical economics, in which he rejects the assumption of consistent utility maximisation (Sen, 1977; Sen, 1999, p. 272; Sen, 2002, p. 6; Sen, 1997), and the tools inherited from that tradition, which rely on the assumption of constant and predictable behaviour in order to infer unobservable capabilities from achieved functionings (Sugden, 2003).

In the face of these difficulties, several proponents of the capability approach have suggested that, for the sake of measurement, practitioners may have to "be content with achievements, instead of capabilities" (Brandolini & D'Alessio, 1998, p. 15; Sen, 2005, p. vii; Sen, 1999, pp. 81-82). However, as Alkire points out, such an approach "would be blind to people's 'agency' and to their opportunity freedom" (Alkire S. , 2006, p. 243; Sen, 1988). Furthermore, it is unclear what value-added a functionings-based interpretation of the capability approach could offer over existing approaches such as the basic needs approach (Streeten, Burki, Haq, Hicks, & Stewart, 1981). This begs the question of knowing whether Sen's capability approach can provide a viable operational alternative to neoclassical welfare economics, or whether it may just be, to paraphrase Atkinson, a powerful theoretical insight without real practical applications (Atkinson, 1999, p. 186). In this paper we will argue that Kant's philosophy may provide insights that could help us to avoid this impasse, not least because the methodological problem that has hampered the full operationalisation of the capability approach lies at the heart of Kant's philosophical project.

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[1] Functionings are defined as 'beings' (e.g. being literate) and 'doings' (e.g. riding a bicycle) that people have reason to value (Foster & Sen, 1997).

[2] For theoretical justifications of these various approaches to estimating capabilities, see (Ysander, 1993; Chiappero Martinetti, 1996; Sen, 1992, p. 52).

In the first section of this paper, we will review the compatibility between Sen's critique of the rational choice model and Kant's critique of naturalist[3] and rationalist[4] philosophies. In the second section, we look at the solutions that Kant developed in response to his critique. In particular, we will argue that in Kant's framework, the notion of autonomy freedom, which links freedom to morality via rational agency, played a key role in avoiding the methodological conundrum that has plagued the capability approach. In the third section, we propose an operationalisation strategy based on Kant's concept of autonomy freedom that focuses on the *intentional* achievement of *valuable* outcomes, rather than on opportunities, and we look at the conditions under which the proposed operationalisation strategy can be successfully implemented.

1.1 The Impossibility of Measuring Opportunity

1.1.1 Kant's Critique of Naturalist Philosophy

As Sen (Sen, 1987 b) has convincingly shown, the origins and development of classical economic theory are intimately linked with the development of utilitarian ethics. As such, neoclassical welfare economics can be seen as the continuation of a long tradition in moral philosophy, the so-called "naturalist" tradition of which utilitarianism is a part, the ambition of which was to model moral philosophy after natural sciences in order to, as Locke put it, "place Morality amongst the sciences capable of Demonstration" (Locke 1663 as quoted in (Rapaczynski, 1987, p. 18))[5].

Two centuries before Sen's critique of the rational choice model, this philosophical tradition had already come under scrutiny from Immanuel Kant. For the purpose of the present argument, we need only note that Kant's critique of naturalist philosophy was primarily a methodological critique of the scientific precepts that these philosophies sought to apply to matters of the mind[6]. In fact Kant dedicated the first two decades of his career almost entirely to the philosophy of science, particularly physics, and only developed his full-fledged ethical system towards the end of his career – almost as a by-product of the general theory of knowledge that he developed in his *Critique of Pure Reason* (Kant, 1781) in response to his methodological critique and subsequent synthesis of the two main philosophical strands of his time.

While Kant concurred with the naturalist view that rationalist philosophies had failed to meet the rigorous standards of empirical verifiability that were emerging in the natural sciences at the time, he argued that the naturalist philosophies of Hobbes and Hume had fared no better in this respect than the theories they sought to replace. Indeed, the starting point of all modern philosophy of science is "the doctrine of determinism within nature" (Ameriks, 2000, p. 22), which states "that every event in nature is determined to occur when it does in accordance with a law linking it to prior occurrence that necessitates

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3 We will refer to naturalist philosophy, following Prof. G.E. Moore's definition, as any philosophy that attempts to "reduce[e] ethics to psychology, sociology or any other branch of natural sciences" (Plamenatz, 1966, p. 5).

4 The term "rationalist" has also been used by Sen to describe a tradition, which he opposes to the utilitarian and neoclassical ones, that rejects the deterministic behavioural representation of human nature (Sen, 1999, p. 255).

5 This ambition is still very much a part of neoclassical welfare economics, as illustrated by the following passage entitled "The Calculus of Moral": "I believe that it is a feasible and even an orthodox scientific problem to ascertain a set of widely and anciently accepted precepts of ethical personal behaviour, and to test their concordance with utility-maximising behaviour for the preponderance of individuals" (Stigler, 1982, p. 36).

6 For Kant chemistry and psychology were two subjects that did not achieve scientific status because of their reliance on experience and introspection (Kant, 1781, pp. 470-476).

what follows." (Guyer, 2000, p. 228; Varela, 1999)[7]. This meant that in order to apply scientific methods to matters of the mind, naturalists had to arbitrarily subject human beings to the same constant and predictable behavioural patterns that guide all other natural phenomena[8].

In Hobbes' system, such behaviour was provided by the "self-evident proposition" that "every man (…) shuns death, and this he doth by a certain impulsion of nature, no less than that by which a stone moves downward" (Hobbes, 1949, p. 26). Though specific behavioural assumptions have changed through the centuries, the proposition of deterministic human behaviour has remained a constant in this philosophical tradition, from Smith's notion of 'self-interest' to the ubiquitous notion of utility-maximisation in contemporary economic theory[9]. Such assumptions, which had been necessitated by the constraints of predictability imposed by scientific methodology, were themselves unverified and thus violated one of the first principles of empiricism, namely the condition of descriptive accuracy and verifiability. For Kant, therefore, these philosophies failed on methodological grounds because they needed to rely on "monads" or "all-encompassing impressions", "determined ultimately by the philosophers alone, and in considerable contrast to the 'furniture' that ordinary scientists take themselves to be discussing" (Ameriks, 2000, p. 42).

But more importantly they also failed as a normative ethics, because of the internal contradictions generated by its untenable assumptions. As Rousseau had noted before Kant, freedom is the condition for the possibility of moral action (Rousseau, 1762, p. 51). Even if we accept that the human Will "is 'affected' by sensible impulses", the moral status of an action demands that it may not have been "causally determined by them" (Rosen, 1993, p. 64). For Kant, thus, the mechanically performed actions of compulsive death averters, or utility maximisers, could not be credited with any more moral worth than those of a robot that has been programmed to save lives: "All animals have the faculty of using their powers according to will. But this will is not free. It is necessitated through the incitement of stimuli, and the actions of animals involve *brutas necessitas*. If the will of all beings were so bound by sensuous impulse, the world would possess no value." (Kant, 1775-1780, pp. 121-122).

1.1.2 Sen's Critique of Rational Choice

Despite the numerous and obvious differences, that exist between Kant's and Sen's frameworks[10], there is a fundamental commonality, which lies in the rejection of the deterministic model of human nature that underlies both neoclassical economics and the wider naturalist project in moral philosophy. In particular, Sen makes an important distinction between two aspects of rationality, defined as (a) the faculty to act "systematically" or with "internal consistency" and (b) the power to set goals and to

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[7] For a thorough methodological discussion on scientific prediction and inference, see (Popper, 1934; Popper, 1994, p. 21; Popper & Eccles, 1977, p. 28).

[8] "[W]e deal with beings that act freely, to whom one may be able to dictate in advance what they *must* do, but to whom one cannot *predict* what they will do" (Kant, 1798, p. 208).

[9] Sen points out (Sen, 1995), Smith's thought is probably the most nuanced of this long tradition. Smith, for instance, emphasises the importance of "self-command", which he opposes to our "own original and selfish feeling" (Smith, 1759, p. 34).

[10] The most notable of these differences is probably Sen's insistence on the need for a balanced consideration of process and outcomes (Sen, 1982, p. 16), which contrasts starkly with Kant's uncompromising deontological ethics. These differences need not undermine the present argument, however, since we are here concerned primarily with the opportunity-aspect of Sen's capability approach, which, in its original formulation, would not require us to take into account outcomes (Sen, 1980)..

determine the course of our own actions (Sen, 1987 a)[11]. Sen criticized the rational choice model for only acknowledging the existence of the former of these aspects, calling it a "wholly arbitrary limitation on the notion of rationality" (Sen, 1977). For Sen, rational agency[12] implies the power of "suspending calculations geared towards individual rationality" (Sen, 1973, p. 252), that is, to disregard one's own well-being by acting purely out of commitment when and if necessary (Sen, 1985, pp. 203-221; 1973, p. 68; 1992, pp. 56-57)[13].

Methodologically, this notion of rational agency thus *breaks* the causal link between inputs (income, consumption) and outputs (utility, functionings) that had enabled neoclassical economists to infer underlying preferences from observable choices (see (Samuelson, 1938; 1948)): Positively, rational agency implies the power to *initiate* a new causal series[14], by creating new rational goals. The spontaneous creation of valuable goals by a rational agent is analogous to what Popper calls an emergent or creative act, the occurrence of which has a probability zero of occurring at any given point in time. The probability of the emergence of life in the universe, for instance, "has always been and still is indistinguishable from zero" (Popper & Eccles, 1977, p. 28). The act of fasting, for instance, is not causally linked to any prior event or object; it is not necessitated by any external or observable force, such as the lack of food; it is self-contained in the sense of being caused only by the agent's own internal decision to pursue a religious goal. As such, it could not have been predicted by looking, for instance, at the person's food reserves[15]. Concretely, the capacity of rational agents to spontaneously create new options means that the full range of options open to a person at any given point in time is, if not infinite, at least not fully calculable and must therefore always be considered as an open set from the point of view of the scientific observer:

> "[T]he opportunities for a particular individual to act with originality cannot be public knowledge *ex ante*. Of course, we can always generate a list of apparently pointless ways in which a person can do what has never been done before. But originality (…) implies finding a new form of meaningful action. Such actions cannot be publicly identified in advance, because their originality resides in meanings that have yet to be publicly perceived." (Sugden, 2003, p. 804).

The problem is that all current attempts at operationalising the capability approach have had to rely on the methodological instruments inherited from the neoclassical traditions, which are designed to work with deterministic subjects: Since unchosen opportunities are not directly observable, opportunity sets

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11 For a formalisation of the "substantive" notion of rationality invoked by Sen and Kant, see (Dietrich & List, 2011).

12 Sen defines agency as the quality of "someone who acts and brings about change, and whose achievements can be judged in terms of her own values and objectives" (Sen, 1999, p. 19). This is not to be confused with the notion of agency employed in principal-agent theory to mean the 'instrument' or 'performer' of an action initiated by what is called a 'principal'. The word 'agency' comes from the Latin word *agere*, meaning 'to set in motion' or 'lead', as opposed to *gerere*, which means 'to carry through'. Classical Greek makes a similar distinction between *archein* ('initiate' and 'command') and *prattein* ('carry through' or 'draw to a close') (Arendt, 1958, p. 42).

13 Note that this argument is restricted to normative welfare economics. As far as positive economic theory is concerned, we would not question Friedman's claim that the validity of axioms is to be assessed by accuracy of the predictions they generate (Friedman, 1953). As such, the assumption of self-interested utility maximization will probably continue to constitute a valid simplifying assumption in most predictive models (see (Popper, 1934, p. 111) on scientific predictions in social sciences).

14 Where the term "initiate", from the Latin *initium*, is to be understood in the Augustinian sense of appearing, being where there was nothing before (as opposed to *principium*, which is used to designate the creation of the world, before which there were already angels) (Saint Augustin, p. 32).

15 Similarly, as Popper argues, "The creation of a new work, such as Mozart's G minor symphony, cannot be predicted, in all its details, by a physicist or a physiologist who studies in detail Mozart's body – especially his brain – and his physical environment." (Popper, 1994, p. 21).

have to be estimated by inferring latent, potential or unrealised opportunities from observable variables, such as resources, choices or functionings. In so doing, they have had to impose some specific behavioural model on the chooser, "which spells out the probability that a particular capability or capability set will manifest itself in certain observable achievements" (Robeyns, 2001). Such assumptions contradict one of the main tenets of Sen's critique of neoclassical economics, and the wider critique formulated by Kant against naturalist philosophies. In this perspective, Sen's critique of neoclassical economics may have contained the seeds of its own demise, since it would seem to invalidate many of the methodological instruments inherited from that tradition, which are required to operationalise his alternative capability approach.

1.2 The Possibility of Measuring Autonomy

1.2.1 Freedom as Morality

The normative framework that Kant developed in response to his analysis of the methodological and ethical shortcomings of naturalist philosophies, was based on a foundational distinction between what he called *Willkür* and *Wille*, which echoes Sen's distinction between the two types of rationality (i.e. consistency, and agency). The former term describes the capacity to define the means to achieve a pre-determined end, while the latter describes the ability to dictate laws, or categorical imperatives that contain both the end and the means towards that end (hypothetical imperative or maxim) (Kant, 1785, p. 6:226).

In Kant's framework, these two properties of rational agency (Kant, 1797 a, pp. 213-214) that had prevented the inference and prediction of capability sets – namely to make and break a causal series – together constitute the necessary and sufficient conditions for the possibility of moral worth (White Beck, 1993, p. 38): "Rational agency is nothing less than the power to create value *ex nihilo* by making objects into ends." (Guyer, 2000, p. 150) And because the Will satisfies the two conditions that are sufficient for the creation of moral value, in Kant's system, it follows that the only thing that is required for an action to be moral, is that it be Willed: "[W]hat makes the object of your rational choice good is that it is the object of a rational choice… rational choice has a value-conferring status." (Korsgaard, 1986, p. 196). It is for this reason that Kant's account "makes freedom itself the supreme moral value. Freedom is not only a necessary condition of the virtue in man; it is also its sufficient condition. (...) freedom is itself the right direction" (Rapaczynski, 1987, pp. 243-244).

This is a crucial conclusion which may hold the key to overcoming the methodological conundrum identified in section 1.1. For if the recognition of the reasonable nature of human beings impedes the application of certain tools inherited from the neoclassical tradition, it also opens up the possibility for recognising the inherently moral nature of human choice. In so doing it should allow us to bring morality back in an explicit way into assessments of welfare and deprivation, thus putting aside once and for all the false pretence of value-neutrality and positivism that has beset the economic discipline.

However, as Carter points out, by considering freedom in purely numerical quantitative terms, the opportunity-based interpretation of the capability approach, which has been dominant in the theoretical literature on social choice (Pattanaik & Xu, 1990), effectively perpetuates the quest for value-neutrality that has lied at the heart of the neoclassical-utilitarian project (Carter, 1999, p. 170). In fact, it could be argued that this "opportunity-centered" interpretation of the capability approach is not fundamentally different from the neoclassical conception of freedom, as expressed, for instance by Arthur Lewis: "The advantage of economic growth is not that wealth increases, but it increases the range of human choice –

the case for economic growth is that it gives man greater control over his environment and thereby increases his freedom" (Lewis, 1954).

Sen himself has recognised that a purely quantitative approach would be blind to the content of available options (Sen, 1993, pp. 34-35; Sen, 1990, p. 470), and other interpretations of his capability approach have been suggested and formalised in the literature (Puppe, 1996; Gekker, 2001; Van Hees & Wissenburg, 1999). In practical applications, however, these have either failed to capture the opportunity aspect of freedom (as in the case of the HDI), or have ended up violating even the most moderate conditions of liberty defined by Sen (Doyal & Gough, 1991, p. 156; Roemer, 1996, pp. 191-193; Qizilbash, 1996, p. 1212; Nussbaum, 1988, p. 176)[16]. This has led Sen to opt for an open-ended approach of his theory on the grounds that it would be paternalistic to predetermine what constitutes a good life (Sen, 1996 a, p. 116).

1.2.2 Autonomy as Purposeful Self-Restriction

The key to connecting freedom and morality in Kant's framework, without falling into the traps of moral scepticism and paternalism, lies in his concept of autonomy, which finds itself at the intersection between freedom, rational valuation and morality[17]. Autonomy, in this context, must be understood, not in its vague everyday sense as independence, but literally as self (*auto*) legislation (*nomos*) (Ameriks, 2000, p. 4); i.e. as the capacity of reason to assign value and dictate moral laws to the Will upon the basis of these values:

> "The will is (...) not merely subject to the law but it is subject in such a way that it must also be regarded as self-legislative and only for this reason as being subject to the law (of which it can regard itself as the author)." (Kant, 1785, p. 431).

The concept of autonomy is, in Kant's philosophy opposed, not to coercion or dependence, but to heteronomy (other-determined), i.e. subjection to laws dictated by others or by nature or by any force not pertaining to reason (e.g. fear, desires, necessity, etc.)[18]. This definition of autonomy implies that there are at least two conditions with four sub-conditions that must be fulfilled in the Kantian perspective for freedom to exist in a way that is relevant for social assessments[19]:

(1) Internal freedom: the individual must have ability to will reasonable objectives, that is to:

   a. (Positively) Have the information and rational capacity needed to formulate laws and define rational objectives,

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16 (Gravel, 1998) has formally demonstrated the incompatibility between opportunity-based assessments and assessments that take into account the content of opportunity sets. Carter has accused "[t]hose who adopt value-based freedom approach" of being "no more than normative specific freedom theorists in disguise." (Carter, 1999, p. 120).

17 "[A]utonomy provides a certain value to one's action by linking in a coherent fashion one's achievements with one's preferences, as part of a process of self-conscious creation. In the ideal autonomous life, what is achieved must have been chosen, what is chosen must have been preferred and preferences must be 'of one's own' (not borrowed, for example, or hetero-directed)." (Bavetta & Guala, 2003, p. 428).

18 Autonomy is, as White Beck points out, the prerogative of man alone, as it stands at the intersection between freedom and morality: "If he were a beast, he could neither create nor obey laws; were he a god, he could create them without having to obey; were he a slave, he would have to obey but could not create laws." (White Beck, 1993, p. 46).

19 On the difference between negative and positive freedom in Kant's framework, see (Van Hees, 2003). On the distinction between internal and external freedom in Sen's framework, see (Nussbaum, 1988).

b. (Negatively) The willpower and rational consistency to resist external pressures (e.g. desired, fears, inclinations) to abide by those laws in the pursuit of rational objectives.

(2) External freedom: he must have the ability to act on his objectives, that is to:

a. (Positively) Have the resources (physical, financial, social, etc.) required to realise his objectives,

b. (Negatively) Not be subjected to coercion or constraints that prevent him from utilising those resources in the pursuit of his objectives.

If an individual is experiencing internal freedom without being able to act upon it externally (e.g. a prisoner composing the *opus magnum* of his life in his thoughts while being chained to a wall), there is no way in which this can be assessed by an external observer, and thus no way it can be made to count in social assessments of freedom. Similarly, an individual who is endowed with enormous external freedom in the form of power and resources, but lacking the intellectual ability, moral rectitude and self-control to put these endowments to good ends, would, at best, be wasting his resources on meaningless acts, and, at worse, risk becoming a slave to passions, ignorance and greed.

Rousseau's revolution in moral philosophy consisted precisely in recognising that it is man's capacity to restrict his natural impulses, rather than his power to execute their dictates, that makes him free: "Man acquires with civil society, moral freedom, which alone makes man master of himself; for to be governed by appetite alone is slavery, while obedience to law one prescribes to oneself is freedom." (Rousseau, 1755, pp. 364-365).

From the point of view of autonomy, therefore, freedom is ultimately realised in the world when it is exercised through an act of will that discards available opportunities in order to pursue valuable objectives. In recognising his weakness to the song of the Sirens, and acting to restrain his own natural impulses by tying himself to the mast, for instance, Ulysses might be restricting his opportunity set. But in so doing, he is also exercising the greater freedom of agency to determine a purposeful course of action. Similarly, individuals often weigh different factors (ethical, political, religious or personal, as well as financial) when making life choice decisions about careers or studies. At the aggregate level, societies similarly, through the democratic process, trade off economic growth (opportunity expansion, for short) against environmental, social or political objectives (e.g. to reduce greenhouse gases or institute a minimum wage). As long as such restrictions are self-imposed, and obedience chosen out of free will, man is not rejecting his freedom, but exercising it.

This simple but groundbreaking insight of Kantian philosophy has fundamental implications for the purpose of evaluating freedom: If the act of choice is understood as a voluntary restriction of one's opportunity set for the attainment of valuable goals, it is not the range of choice per se, but rather the ability to act in accordance with one's reasonably held values that should constitute the measure of an individual's – and by extension, a society's – freedom. In many cases, a lack of resources will constitute a restriction on a person's ability to achieve her rational goals[20]. But in others, an opportunity set may be valued precisely because it is limited. Mother Teresa's Missionaries of Charity, for instance, consider that their greatest act of freedom is realised the day they make their vows of poverty and decide to desist all material possessions in order to serve the poorest of the poor.

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20 "First of all, choice necessarily implies the possibility of alternatives, the ability to have chosen otherwise. There is a logical association between poverty and disempowerment because an insufficiency of the means for meeting one's basic needs often rules out the ability to exercise meaningful choice." (Kabeer, 1999, p. 437).

Insofar as we consider these fundamental life choices that individuals and societies make to be at least partially irreversible, we must accept that the exercise of freedom may materialise through valuable objectives rather than through opportunity – notwithstanding the fact that the initial existence of the option to have chosen otherwise constitutes an inalterable condition for the possibility of assigning moral worth to observed action.

1.3 Operationalisation Strategy

1.3.1 Value and Intentionality

Looking at the question of autonomy from the vantage point of the outcome of choice, it would be a logical truism to state that in the case in which an individual has willed a rational objective and been able to realise it – i.e. when he *intentionally* achieves a *valuable* objective – the resulting choice will constitute a tangible embodiment of the chooser's internal and external freedoms. This does not mean, however, that we will readily be able to construct an operationalisation strategy based on the observation of individual choices, as Samuelson had been able to do in neoclassical economics. Indeed, in Kant's non-consequentialist framework, it is not the value of the achieved outcome, *per se*, that determines moral worth, but whether or not the maxim that motivates the action that leads to the outcome is compliant with the moral law.

This will impose a number of specific requirements on the way in which we assess the underlying level of internal and external, positive and negative freedoms available to the individual from the observation of his choices. Concretely, in order for an achieved objective to inform us of underlying freedoms, the following two conditions would have to be satisfied:

(1) The achieved objective must be such that it can have been motivated by a maxim that is compliant with the universal law, i.e. it must be *valuable*[21], and

(2) The achieved objective must have been the one intended by, or predictably resulting from, the maxim that motivated action, i.e. it must be *intentional*[22].

The first of these conditions will be the easiest to meet. Indeed, as pointed out by Sen on many occasions, the problem of normative valuation is not specific to the capability approach, as all metrics involve some element of valuation (either explicit or implicit). Even the seemingly neutral price-valuation provided by the market involves – contrary to claims by (Srinivasan, 1994) and others – strong ethical statements of value[23]. The important thing, therefore, in any type of valuation, will be to ensure (1) that the valuation is "explicit, discussed, and defended", and (2) that the method is justified ("clarifie[d] and scrutinize[d] as appropriate for the issue at hand") (Robeyns, 2003, p. 70). There are several alternative

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21 In Kant's non-consequentialist framework, this may include bad outcomes in cases in which such outcomes could be shown to be unavoidable in order to uphold a universal law. A famous, but controversial, example of such a case is presented in Kant's example of the murder at the door (Kant, 1797 b).

22 The latter may include a consideration of opportunity freedom to determine whether the individual had the option to act otherwise.

23 "Any measure that values a gun several hundred times more than a bottle of milk is bound to raise serious questions about its relevance for human progress." (Haq, 1995, p. 46; Sugden, 1993, p. 1954).

types of normative standards that have been used in the capability-based literature to determine weights and objectives[24]. The most interesting method, from the perspective advocated in this paper, would probably be the so-called rights-based approach, which uses agreed normative standards, such as human rights conventions, or constitutions to determine weights and objectives (Vizard, 2006). This method presents the advantage of involving a process of inter-subjective or inter-rational validation that can allow us to reach contingent and transitory, but nonetheless objective, normative conclusions (Sen, 1985, p. 184) (this is discussed in more detail in section 1.3.3 below).

The second condition – asserting intentionality –will prove significantly more challenging to meet. Given that moral worth is, in Kant's framework, determined by the motives behind actions and not by the outcome of these actions, it will not be sufficient to look at the compliance of the outcome or even the action with the standard of value. An act may be in external conformity with the moral law, without for that reason being based on a recognition of duty under the moral law (Kant, 1790, p. section 87). An individual may, for instance, perform a seemingly moral act instinctively (e.g. mother-child relation), or (s)he may be acting on the basis of cold calculations of interests (e.g. charitable donations aimed at securing loyalty). Finally, her acts could be motivated by the prospect of recognition and praise by her peers. In all these cases, as Kant points out, the motivation for action is not compliance with the moral law per se, but some external source of perceived value. In other words, in all these cases, the motive for conduct is *heteronomous*, in the sense that there is an external "interest as a stimulus or compulsion to obedience" (Kant, 1785, pp. 432-433). Hence, even though these acts are in external compliance with the requirements of morality, they do not reflect the individual's internal freedom, but rather his/her subjection to the forces of instinct/interest/praise.

The problem is that preferences – i.e. that which is revealed to us through choice – are composed of both reasoned valuations, which are the source of moral worth, and psychological and other factors, for which the individual may or may not be responsible (See Sen's discussion on adaptive preferences (Sen, 1984))[25]. It is not possible to know from the external observation of a person's overall preferences whether the individual is acting *autonomously*, i.e. on the basis of rational moral law such as a universal categorical imperative, or whether (s)he is acting *heteronomously*, i.e. on the basis of the law of self-interest, or on inclinations, fear, prejudice, etc (Barrotta, 2008, p. 158).

Only the individual herself can know whether she is truly acting in good faith, that is, on the basis of commitment to rational goals she has set for herself, or whether she is acting on the basis of interest, superstition, etc[26]. And even then, we cannot be sure, as the true motives for action may sometimes be hidden even from the agent herself, as the mind has many subterfuges designed to enable individuals to cope with hardship by rationalising their own circumstances. What an individual may consider as a genuinely held motivation may in fact be conditioned by repressive social structures, fear and prejudices that have gradually been internalised and come to be an integral part of the person's own value system. Archaic and deeply coercive practices, such as female genital mutilation, are often supported and even

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24 The most commonly used methods include the use of expert opinion (Chowdhury & Squire, 2006), participatory methods (Chakraborty, 1996), survey based methods (Oishi, Diener, Lucas, & Suh, 1999; Welzel, Inglehart, & Klingemann, 2003), and statistical methods (Cahill & Sanchez, 2001; Kuklys, 2005, pp. 37-38; Betti & Verma, 1998).

25 There is a large literature that has developed around the issue of Subjective Well-Being measurement, where various instruments and techniques have been developed to deal precisely with the measurement problems related to the use of subjective survey data. See (Comim, 2005) for a discussion on the synergies between the subjective well-being literature and the capability approach.

26 As Sen himself notes: "empirical evidence for this cannot be sought in the mere observation of actual choices, and must involve other sources of information, including introspection and discussion." (Sen, 1977).

perpetrated by women, who have themselves been victims of similar abuse[27]. It is not clear if and how this problem can be resolved at the individual level, and it may prove to constitute an insurmountable impediment to a full operationalisation of a freedom based approach in the context of inter-individual comparisons of welfare.

1.3.2 Political Action and the Institutionalisation of Freedom

The above conclusion on the impossibility of asserting intentionality at the individual level, will not translate into an impossibility at the aggregate or social level[28]. The reason is that collective decision-making processes are external and therefore observable. The argument runs as follows:

Because of the unobservability of intentions, one cannot know whether a seemingly ethical act is motivated by adherence to universal law or subjection to the law of self-interest. Consequently, the performance of an 'ethical' act by an individual does not in any way constitute a guarantee that this individual will act ethically in the future. If compliance with the moral law is motivated, not by compliance with moral law *per se*, but by some external source of value, such as self-interest or praise, it means that she would act in violation of duty next time around, if the structures of rewards were so disposed as to recompense wicked acts, rather than morally valuable acts (Herman, 1981). At the individual level, morality is thus thoroughly unsystematic and unpredictable.

In order to combat the ephemeral and unpredictable nature of moral actions, communities have had to introduce systems that lastingly alter the interest structure of individuals to ensure that they recurrently act in compliance with the moral law, regardless of their underlying motivations. Political action[29] ensures that individual acts of freedom become part of a permanent (or at least lasting) institutional structure that transcends the individual who performs the action. As pointed out by Hannah Arendt, the "function of the polis (...) was to offer a remedy for the futility of action and speech" (Arendt, 1958). The moral condemnation of theft may, for instance, be translated, through collective action, into juridical laws that prohibit and punish theft.

By voluntarily subjecting herself to such a law, the individual guarantees that even if she were to fall back into immorality tomorrow, her actions would now be permanently constrained by the collective decision that has been made to restrict the opportunity set in such a way as to ensure that valuable objectives are safeguarded. Consequently, insofar as the collective decision to permanently restrict the opportunity set has been free and fair, she can be regarded as the author of those decisions, even if indirectly so, and hence these should be regarded as purposeful self-restrictions and expressions of her internal agency freedom or autonomy[30].

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27 Similarly, as Engerman notes, after the abolition of slavery, there were instances of freed slaves (especially by older free 'blacks', and women with young children) petitioning southern courts to be returned to slavery (Engerman, 2003, p. 195).

28 Of course, the use of such a strategy will be limited to those cases in which we are comparing nations or social structures that possess political institutions (and, arguably, these would have to be comparable political structures).

29 Here we refer to political action in the classical sense of "public exercise of reason", the "*sharing* of words and deeds". This definition of politics thus encompasses art, science, public debate, all of which aim to generate lasting transformations of our environment.

30 "The idea of the self leads, then, inexorably to an understanding of the polity in which citizens are at once the authors and the subjects of the law, in which (…) the properties of the self shape the properties of the political community." (Beiner & Booth, 1993, p. 4)

From this perspective, the punishment attached, for instance, to the option "theft" should not be considered merely as a restriction of the opportunity set, but as the social equivalent the agency freedom to exercise self-restraint[31]: "subjection to law [is] the public confirmation, rather than the denial, of one's status as a free being" (Weinrib, 1987, p. 29). In the same way as an individual moral act could be said to reflect the individual's freedom (internal freedom to determine and pursue rational objectives, as well as the external freedom to act upon those objectives), the collective freedom of the political community will thus be contained in the valuable political actions (laws, institutions and choices) of that community: "the institutionalised justice of the republic constitutes the habitualized morality of the individual" (Kersting, 1992, p. 161). It is in this perspective that laws (and more widely "rational social institutions") can be considered what Hegel called "material embodiments of freedom" (Neuhouser, 2000).

1.3.3 Process Freedom vs. Intentionality

Crucially, in the case of juridical laws and collective choices the question of observability of intentions will not be posed. For Kant, justice is defined as "the aggregate of those conditions under which the will of one person can be combined with the will of another in accordance with a universal law of freedom (…). Hence, the concept of justice does not take into account the matter of the will" but is concerned only with the "form of the relation between wills insofar as they are free" (Kant, 1797 a, p. 230).

The function of the democratic political system, in this perspective, is to extend the legitimacy that autonomy confers the moral law into the realm of external juridical laws. It is "the prism that diffuses the requirements of practical reason into the external relationship of law" (Weinrib, 1987, p. 29). It does so by ensuring that all those who will be subjected to the law have given their consent to it: "only the united and consenting Will of all – that is, a general united Will of the people by which each decides the same for all and all decide the same for each – can legislate" (Kant, 1797 a, pp. 313-314)[32]. The moral status of the law will thus be determined, not by the source of motivation, but by the adequacy of the procedures of externalization, by the quality of the process of consent and inter-rational validation of objectives by those who will be subjected to them.

In practice, of course, democracies operate in ways that fall short of the Habermasian ideal of rational argumentation. Even in the most advanced democratic systems, outcomes of political elections are sometimes far from being representative of the "united will" of the people due to low voter turnout, lobbying and other distortions that can skew the political process in favour of sometimes small but influential interest groups. Such procedural imperfections will need to be taken into account in our assessment of social outcomes, in order to determine whether and to what extent these can be said to reflect the underlying "united Will" of the people. However, unlike in the case of inter-individual comparisons, they should not constitute a fundamental, conceptual impediment to the operationalisation of the proposed strategy since all of these constraints and imperfections are external and therefore observable. This is the fundamental difference between individual and collective decision-making.

Furthermore, it is important to note that, in order to go down this route, it will be necessary to recognize the collective as a legitimate evaluative entity, distinct from its composing members. In this view, the

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[31] "external compulsion to a juridical duty is morally possible, whereas a duty of virtue is based on free self-constraint" (Kant, 1797 a, p. 383).

[32] This includes those who vote against the law, for, as Rousseau argued, "even if I do not agree with the law, I am still obeying my own law, for I have willed a regime in which the majority determines the law" (Aron, 1965, p. 78). If the laws that were being instituted by the majority were entirely unacceptable to the minority, it is reasonable to presume that the political community would eventually break down as the minority would revolt or secede.

aggregate political will of a society is more than the mere sum of its parts and has a moral 'worth', which, while derived from the individual wills of its citizens, is qualitatively distinct from it (Kabeer, 1999, p. 438; List & Pettit, 2011). This implies a potentially significant departure from methodological individualism (Basu, 2010), which may not fit easily with current doctrines in welfare economics, and may or may not be compatible with Sen's own position on this issue (Sen, 1999, p. 142; Sen, 2004, pp. 336-337; Drèze & Sen, 2002, p. 6)[33].

Finally, as in the case of individual choices, we will need an objective standard of value against which to assess collective choices. There is, of course, no universally valid standard against which to objectively judge political actions, any more than there is such a standard for individual actions. In both cases we will have to content ourselves with the transient and contextual objectivity conferred by the process of inter-rational validation[34]. As a general rule we may say that the standard against which a policy or law is assessed must have gone through a more demanding process of inter-rational validation that the object of assessment. National laws and policies may, for instance, be assessed against the nation's constitution, insofar as the constitution is protected by a number of additional procedural guarantees as compared to regular laws (e.g. qualified majority, double majority, etc.). Similarly, international human rights conventions constitute objective benchmarks of value, endorsed by practically all nations, against which national policies can be assessed for the purpose of international comparisons of social outcomes. If we are assessing lower level political action, we may content ourselves with less demanding standards of right, such as national or even sub-national policies or conventions (the precise way in which these standards can be constructed has been studied in a different paper (Silva-Leander, 2011).

1.4 Conclusion

Existing operationalisation strategies for Sen's capability approach have typically aimed at measuring opportunity freedom but have ended up settling for achieved functionings, which do not offer any clear advantage over existing frameworks, such as the Basic Needs approach. In this paper, we have suggested that Kant's concept of autonomy – defined as self (*auto*)- legislation (*nomos*) – can help us to overcome the *defacto* operationalisation impossibility faced by the capability approach, by linking freedom to morality via rational choice.

The resulting operationalisation strategy would focus on the *intentional* achievements of *valuable* objectives, rather than on unobservable and counterfactual opportunities. This conclusion has far-reaching but precise implications for operationalisation:

1. Ethical valuation of achieved outcomes should become an explicit and integral part of the assessment exercise: Freedom should be measured through achieved social outcomes to be

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[33] (Gore, 1997) has argued that Sen's approach is essentially individualistic, whereas Grasso and Di Giulio have argue that his "moral individualism" does not translate into an "ontological individualism" that would "reduce society to the mere sum of individuals and their properties" (DiGiulio & Grasso, 2003, p. 6).

[34] Popper's analogy of the swamp to describe the nature of scientific knowledge is probably the best definition we can find of the partial 'objectivity' we are looking for: "The empirical basis of objective science has (…) nothing 'absolute' about it. Science does not rest upon solid bedrock. The bold structure of its theories rises, as it were, above a swamp. It is like a building erected on piles. The piles are driven down from above the swamp, but not down to any natural or 'given' base; and if we stop driving the piles deeper, it is not because we have reached firm ground. We simply stop when we are satisfied that the piles are firm enough to carry the structure, at least for the time being." (Popper, 1934, p. 111).

selected based on, and assessed against, objective or commonly accepted standards of value, such as those provided, for instance, by international human rights instruments.

2. The decision-making process or process freedom becomes an indispensable part of the assessment exercise: In the Kantian framework, moral worth is not determined by the value of the outcome, but by the motivation behind the action that produced the observed outcome. Therefore, the focus on achieved outcomes, as opposed to opportunity sets, makes it indispensible to take into account the process through which the outcome has been achieved, to assert that they reflect a free and deliberate choice.

Importantly, we have argued that although it may not be possible to reliably assert intentionality at the individual level, due to the fact that the individual decision-making process is internal and therefore unobservable, the question of intentionality will not be posed at the aggregate or political level, where the process of decision-making is external and therefore visible to all. Hence, it will be possible to apply the proposed operationalization strategy in comparisons of political entities (e.g. countries) at national, sub-national or international level.

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