

The Capability Approach: a theoretical survey

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Abstract This paper aims to present a theoretical survey of the capability approach in an interdisciplinary and accessible way. It focuses on the main conceptual and theoretical aspects of the capability approach, as developed by Amartya Sen, Martha Nussbaum, and others. The capability approach is a broad normative framework for the evaluation and assessment of individual well-being and social arrangements, the design of policies, and proposals about social change in society. Its main characteristics are its highly interdisciplinary character, and the focus on the plural or multidimensional aspects of well-being. The approach highlights the difference between means and ends, and between substantive freedoms (capabilities) and outcomes (achieved functionings).

Key words: Amartya Sen, Capabilities, Capability approach, Development, Functionings, Justice, Martha Nussbaum, Poverty, Well-being

Introduction

In the past decade, there has been an explosion of interest in the capability approach among researchers and policy-makers. Many have read something about the approach and want to know more. But the highly interdisciplinary nature of the capability approach has led to a literature that is scattered over a wide range of journals, which has created the need for a survey article.

This article aims to meet this need by providing an accessible interdisciplinary overview of the conceptual and theoretical foundations of the capability approach.¹ Note that this survey does not discuss measurement issues or the question of operationalizing and applications, which have been discussed elsewhere (for example, Brandolini and D'Alessio, 1998; Robeyns, 2000, pp.21–27; Saith, 2001; Alkire, 2002; Fukuda-Parr, 2003; Kuklys and Robeyns, 2004). Instead, this article will present a description of the capability approach, the concepts of

functioning and capabilities, the core differences between Sen's and Nussbaum's work on capabilities, the role of agency and public reasoning, the issue of whether capability theorists should endorse one particular list of capabilities, and the question whether the capability approach is too individualistic and pays insufficient attention to social structures and groups.²

What is the capability approach?

The capability approach is a broad normative framework for the evaluation and assessment of individual well-being and social arrangements, the design of policies, and proposals about social change in society. It is used in a wide range of fields, most prominently in development studies, welfare economics, social policy and political philosophy. It can be used to evaluate several aspects of people's well-being, such as inequality, poverty, the well-being of an individual or the average well-being of the members of a group. It can also be used as an alternative evaluative tool for social cost-benefit analysis, or as a framework within which to design and evaluate policies, ranging from welfare state design in affluent societies, to development policies by governments and non-governmental organizations in developing countries.

In academia, it is being discussed in quite abstract and philosophical terms, but is also used for applied and empirical studies. The capability approach has also provided the theoretical foundations of the human development paradigm (Fukuda-Parr, 2003; Fukuda-Parr and Kumar, 2003). Note that the capability approach is not a theory that can *explain* poverty, inequality or well-being; instead, it rather provides a tool and a framework within which to *conceptualize* and *evaluate* these phenomena. Applying the capability approach to issues of policy and social change will therefore often require the addition of explanatory theories.

The core characteristic of the capability approach is its focus on what people are effectively able to do and to be; that is, on their capabilities. This contrasts with philosophical approaches that concentrate on people's happiness or desire-fulfilment, or on income, expenditures, or consumption. Some aspects of the capability approach can be traced back to, among others, Aristotle, Adam Smith, and Karl Marx (see Nussbaum, 1988, 2003b; Sen, 1993, 1999a). The approach in its present form has been pioneered by the economist and philosopher Amartya Sen (1980, 1984, 1985a, 1985b, 1987, 1990b, 1992, 1993, 1995, 1999a) and has more recently been significantly further developed by the philosopher Martha Nussbaum (1988, 1992, 1995, 1998, 2000, 2003a, 2004, forthcoming), and a growing number of other scholars.

Sen argues that our evaluations and policies should focus on what people are able to do and be, on the quality of their life, and on removing obstacles in their lives so that they have more freedom to live the kind of life that, upon reflection, they have reason to value. The capability

approach has been advanced in somewhat different directions by Martha Nussbaum, who has used the capability approach as the foundation for a partial theory of justice. I will take Sen's capability approach as my starting point, and discuss Nussbaum's work when it criticizes, diverges from, or adds to Sen's work.

A key analytical distinction in the capability approach is that between the means and the ends of well-being and development. Only the ends have intrinsic importance, whereas means are instrumental to reach the goal of increased well-being, justice and development. However, in concrete situations these distinctions often blur, since some ends are simultaneously also means to other ends (e.g. the capability of being in good health is an end in itself, but also a means to the capability to work).

According to the capability approach, the ends of well-being, justice and development should be conceptualized in terms of people's capabilities to function; that is, their effective opportunities to undertake the actions and activities that they want to engage in, and be whom they want to be. These beings and doings, which Sen calls functionings, together constitute what makes a life valuable. Functionings include working, resting, being literate, being healthy, being part of a community, being respected, and so forth. The distinction between achieved functionings and capabilities is between the realized and the effectively possible; in other words, between achievements on the one hand, and freedoms or valuable options from which one can choose on the other. What is ultimately important is that people have the freedoms or valuable opportunities (capabilities) to lead the kind of lives they want to lead, to do what they want to do and be the person they want to be. Once they effectively have these substantive opportunities, they can choose those options that they value most. For example, every person should have the opportunity to be part of a community and to practice a religion; but if someone prefers to be a hermit or an atheist, they should also have this option.

Thus, the capability approach is clearly a theory within the liberal school of thought in political philosophy, albeit arguably of a critical strand. Note that the word 'liberal' in political philosophy refers to a philosophical tradition that values individual freedom, and should not be confused with the word 'liberal' in an everyday political sense.³ 'Liberal' in everyday use also has different political meanings in different countries, and can cover both the political right or left. It is often used to refer to neo-liberal economic policies that prioritize free markets and privatization of public companies (for example, Chomsky, 1999). In contrast, philosophical liberalism is neither necessarily left or right, nor does it *a priori* advocate any specific social or economic policies.

The capability approach evaluates policies according to their impact on people's capabilities. It asks whether people are being healthy, and whether the means or resources necessary for this capability are present,

such as clean water, access to doctors, protection from infections and diseases, and basic knowledge on health issues. It asks whether people are well-nourished, and whether the conditions for this capability, such as having sufficient food supplies and food entitlements, are being met.⁴ It asks whether people have access to a high-quality educational system, to real political participation, to community activities that support them to cope with struggles in daily life and that foster real friendships. For some of these capabilities, the main input will be financial resources and economic production, but for others it can also be political practices and institutions, such as the effective guaranteeing and protection of freedom of thought, political participation, social or cultural practices, social structures, social institutions, public goods, social norms, traditions and habits. The capability approach thus covers all dimensions of human well-being. Development, well-being, and justice are regarded in a comprehensive and integrated manner, and much attention is paid to the links between material, mental and social well-being, or to the economic, social, political and cultural dimensions of life. The following sections will describe the capability approach in somewhat more detail.

An alternative framework for well-being and justice

The capability approach is primarily and mainly a framework of thought, a mode of thinking about normative issues; hence a paradigm — loosely defined — that can be used for a wide range of evaluative purposes. The approach focuses on the information that we need in order to make judgements about individual well-being, social policies, and so forth, and consequently rejects alternative approaches that it considers normatively inadequate; for example, when an evaluation is done exclusively in monetary terms. The capability approach also identifies social constraints that influence and restrict both well-being as well as the evaluative exercises. It can also be applied to efficiency evaluations. It can serve as an important constituent for a theory of justice but, as Sen (1995, p. 268; 2004a, p. 337) argues, the capability approach specifies an evaluative space and this does not amount to a theory of justice. Sen stresses that a theory of justice must include both aggregative considerations as well as distributive ones, whereas the capability approach does not specify an aggregative principle. Moreover, a theory of justice also requires procedural components, such as the principle of non-discrimination, which the capability approach is not designed to deliver.

The capability approach entails a critique of other evaluative approaches, mainly of the welfarist approaches in welfare economics and on utilitarian and income-based or resources-based theories.

Sen rejects welfarist theories because, whatever their further specifications, they rely *exclusively* on utility and thus exclude non-utility information from our moral judgements (for example, Sen 1979). Sen is

concerned not only with the information that is included in a normative evaluation, but also with the information that is excluded. The non-utility information that is excluded by utilitarianism could be a person's additional physical needs due to being physically disabled, but also social or moral issues, such as the principle that men and women should be paid the same wage for the same work. For a utilitarian, this principle has no intrinsic value, and men and women should not be paid the same wage as long as women are satisfied with lower wages. But it is counter-intuitive, Sen argues, that such principles would not be taken into account in our moral judgements. Thus the first strand of normative theories that Sen attacks are those that rely exclusively on mental states. This does not mean that Sen thinks that mental states, such as happiness, are unimportant and have no role to play; rather, it is the *exclusive* reliance on mental states that he rejects.

The capability approach also entails a critique of how economists have applied the utilitarian framework for empirical analysis in welfare economics. Economists use utility as the focal variable in theoretical work, but translate this into a focus on income in their applied work. While income generally is an important means to well-being and freedom, it can only serve as a rough proxy for what intrinsically matters, namely people's capabilities. There are some articles discussing the capability approach to mainstream welfare economics (Basu and Lopez-Calva, forthcoming; Kuklys and Robeyns, 2004), but the impact on the theoretical developments in welfare economics has been limited so far.

While Sen has often acknowledged his debt to the philosopher John Rawls (1971, 1982), he also criticizes Rawls's use of primary goods for interpersonal comparisons, because primary goods are means, and not intrinsic ends, and as a consequence would not be able to account for the full range of the diversity of human beings (Sen, 1980, 1992, pp. 81–87; 2004a, p. 332). If all persons were the same, then an index of primary goods would yield similar freedoms for all; but given human diversity, the comparisons in the space of social primary goods will fail to take note that different people need different amounts and different kinds of goods to reach the same levels of well-being or advantage. More recently, Martha Nussbaum has significantly extended the capability critique of Rawls by not only focusing on the difference between primary goods and capabilities, but also by examining the implications of the fact that Rawls's theory of justice belongs to the social contract tradition, whereas the capability approach does not (Nussbaum, 2004, forthcoming). However, the debate between Rawlsians and capability theorists is certainly not settled. Thomas Pogge (2002) recently has argued against the capability approach to justice, and in favour of a Rawlsian approach; it is clear that this debate does require further analysis (see also Brighouse, 2004; Robeyns, 2005). In a similar vein, Sen has criticized other resources-based normative theories, such as Ronald Dworkin's (1981, 2000) account of equality of resources, which has also generated a highly abstract philosophical debate on the

precise differences between these two theories (Sen, 1984; Dworkin, 2000, pp. 299–303; Williams, 2002).

The capability approach is sometimes understood as a formula for interpersonal comparisons of welfare. The focus here is on a *formula*, in the sense that the capability approach would provide a neat recipe or even an algorithm to carry out empirical exercises in welfare comparisons. Some economists have tried to read Sen’s writings on the capability approach looking for such a formula or algorithm, and criticized it based on such a specific and somewhat narrow interpretation (Sugden, 1993, pp. 1953–1954; Roemer, 1996, pp. 191–193). Similarly, some political philosophers misunderstand the capability approach as providing the foundations for a theory of equality or social justice *only* (Dworkin, 2000, pp. 299–303).

Means versus functionings

A crucial distinction in the capability approach is the distinction between the means, such as goods and services, on the one hand, and functionings and capabilities on the other hand, as represented in Figure 1.

Goods and services should not necessarily be thought of as exchangeable for income or money — as this would restrict the capability approach to analyses and measurement in market-based economies, which is not intended. A good has certain characteristics, which makes it of interest to people. For example, we are not interested in a bicycle because it is an object made from certain materials with a specific shape and colour, but because it can take us to places where we want to go, and in a faster way than if we were walking. These characteristics of a good enable a

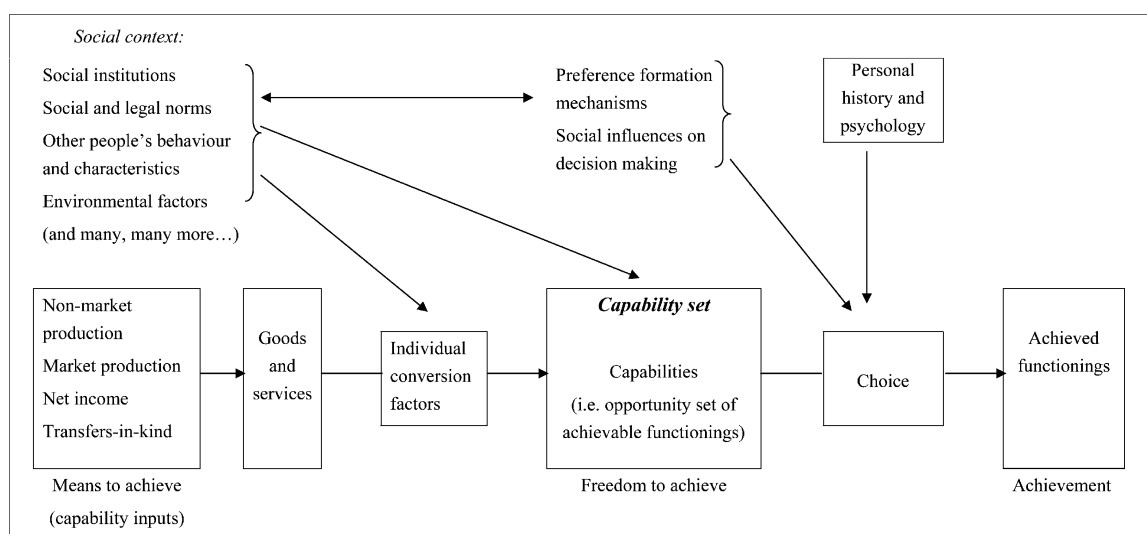


FIGURE 1. A stylised non-dynamic representation of a person’s capability set and her social and personal context.

functioning. In our example, the bicycle enables the functioning of mobility, to be able to move oneself freely and more rapidly than walking.

The relation between a good and the functionings to achieve certain beings and doings is influenced by three groups of *conversion factors*. First, *personal conversion factors* (e.g. metabolism, physical condition, sex, reading skills, intelligence) influence how a person can convert the characteristics of the commodity into a functioning. If a person is disabled, or in a bad physical condition, or has never learned to cycle, then the bicycle will be of limited help to enable the functioning of mobility. Second, *social conversion factors* (e.g. public policies, social norms, discriminating practises, gender roles, societal hierarchies, power relations) and, third, *environmental conversion factors* (e.g. climate, geographical location) play a role in the conversion from characteristics of the good to the individual functioning. If there are no paved roads or if a government or the dominant societal culture imposes a social or legal norm that women are not allowed to cycle without being accompanied by a male family member, then it becomes much more difficult or even impossible to use the good to enable the functioning. Hence, knowing the goods a person owns or can use is not sufficient to know which functionings he/she can achieve; therefore we need to know much more about the person and the circumstances in which he/she is living. The capability approach thus takes account of human diversity in two ways: by its focus on the plurality of functionings and capabilities as the evaluative space, and by the explicit focus on personal and socio-environmental conversion factors of commodities into functionings, and on the whole social and institutional context that affects the conversion factors and also the capability set directly.

Moreover, goods and services are not the only means to people's capabilities. As Figure 1 makes clear, there are other means that function as 'inputs' in the creation or expansion of capabilities, such as social institutions broadly defined. The material and non-material circumstances that shape people's opportunity sets, and the circumstances that influence the choices that people make from the capability set, should receive a central place in capability evaluations. For example, both Sen and Nussbaum have paid much attention to the social norms and traditions that form women's preferences, and that influence their aspirations and their effective choices (Sen, 1990a; Nussbaum, 2000). The capability approach not only advocates an evaluation of people's capability sets, but insists also that we need to scrutinize the context in which economic production and social interactions take place, and whether the circumstances in which people choose from their opportunity sets are enabling and just.

Note that a focus on functionings and capabilities does not have to imply that a capability analysis would not pay any attention to resources, or the evaluation of social institutions, economic growth, technical advancement, and so forth. While functionings and capabilities are of

ultimate normative concern, other dimensions can be important as well. Indeed, in their evaluation of development in India, Jean Drèze and Amartya Sen have stressed that working within the capability approach in no way excludes the integration of an analysis of resources or other means:

It should be clear that we have tended to judge development by the expansion of substantive human freedoms — not just by economic growth (for example, of the gross national product), or technical progress, or social modernization. This is not to deny, in any way, that advances in the latter fields can be very important, depending on circumstances, as ‘instruments’ for the enhancement of human freedom. But they have to be appraised precisely in that light — in terms of their actual effectiveness in enriching the lives and liberties of people — rather than taking them to be valuable in themselves. (Drèze and Sen, 2002, p. 3)

In summary, all the means of well-being, like the availability of commodities, social institutions, and so forth, *are* important, but the capability approach presses the point that they are not the ultimate ends of well-being.

Achieved functionings versus capabilities

Let us now look in more detail at the distinction between achieved functioning and capabilities. A first remark concerns the conceptualization of the term ‘capability’ in Sen’s earliest work, where each capability referred to one person, and vice versa. In this terminology a capability is synonymous with a capability set, which consists of a combination of potential functionings. Functionings could therefore be either potential or achieved. This kind of language is most familiar to social choice theorists, where the focus of much analysis is the opportunity set. A person’s capability is then equivalent of a person’s opportunity set. But many other scholars working within the capability paradigm, including Martha Nussbaum, have labelled these potential functionings ‘capabilities’. In that terminology the capability set consists of a number of capabilities, in the same way as a person’s overall freedom is made up by a number of more specific freedoms. One does not find this usage of capabilities (as being the individual elements of one person’s capability set) in Sen’s earlier writings, and in his later writings he uses both uses of the word capability interchangeably. The use of capabilities as a plural is widespread in the work of Sen’s commentators and the scholars who apply the capability approach. In my view, the latter terminology is more straightforward and less technical, but when reading Sen’s (earlier) work it is important to know that the term ‘capability’ started within a different definition.

A second terminological note concerns the meaning of the term 'basic capabilities'. In Sen's work, basic capabilities are a subset of all capabilities; they refer to the freedom to do some basic things that are necessary for survival and to avoid or escape poverty. The relevance of basic capabilities is "not so much in ranking living standards, but in deciding on a cut-off point for the purpose of assessing poverty and deprivation" (Sen, 1987, p. 109). Hence, while the notion of capabilities refers to a very broad range, basic capabilities refer to the real opportunity to avoid poverty. Basic capabilities will thus be crucial for poverty analysis and more generally for studying the well-being of the majority of people in developing countries, while in affluent countries well-being analysis would often focus on capabilities that are less necessary for physical survival. But it is important to acknowledge that the capability approach is not restricted to poverty and deprivation analysis, or development studies, but can also serve as a framework for, say, project or policy evaluations or inequality measurement in affluent communities.

In addition to these two terminological remarks, a few things need to be said about the use of functionings versus capabilities in evaluative exercises and policy design. First, we should note that there are cases and situations where it makes more sense to investigate people's achieved functionings directly, instead of evaluating their capabilities. For example, if we are focusing on the capability of bodily integrity, we will not be concerned with a boxer who deliberately puts his body at danger of being beaten up. He has the capability of not being attacked, but chooses to fight. But as far as domestic violence is concerned, we can use the very plausible assumption that no-one wants to be beaten up by another person in the household. If a person's achieved functionings of bodily integrity are harmed by domestic violence, then this is an unequivocal sign that the victim did not have the capability of being safe from bodily harm in the first place. Some people, like young children or the mentally disabled, might not be able to make complex choices, which should make the evaluation of their well-being in terms of achieved functionings often a sensible thing to do. Other areas where it makes more sense to focus on the achieved levels of functionings directly instead of on capabilities, are being well-nourished in countries fraught by hunger and famines, and all situations of extreme material and bodily deprivation in very poor societies or communities. In those situations it might be better to focus on functionings rather than capabilities, but we could conceptualize "being able to choose" as one functioning among others, as has been suggested by Frances Stewart (1995, p. 92).

Second, in real life two people with identical capability sets are likely to end up with different types and levels of achieved functionings, as they make different choices following their different ideas of the good life. As a liberal philosophical framework, the capability approach respects people's different ideas of the good life, and this is why in principle capability, and not achieved functioning, is the appropriate political goal. However, it is

also clear that, in real life, our ideas of the good life are profoundly influenced by our family, tribal, religious, community or cultural ties and background. There are very few children from Jewish parents who end up being Muslim, for example. One could question, therefore, to what extent this is a choice at all. If we label it as a choice, it would at the very least remain a constrained choice. This does not mean that these constraints always have to be negative or unjust; on the contrary, some people might find them very enabling and supporting. There is very little about these constraints that one could say in general terms, as they are so closely interwoven with a person's own history and personality, values, and preferences. It is, however, important to question to what extent people have genuinely access to all the capabilities in their capability set, and whether or not they are punished by members of their family or community for making certain choices of the kind of life they value.

Distinguishing well-being from agency

Another aspect of Sen's capability approach is the distinction between well-being and agency goals, and the possibility of narrowing down the concept of well-being to the standard of living. The main differences between these concepts can be summarized as follows. The standard of living is 'personal well-being related to one's own life'. If we add the outcomes resulting from sympathies (i.e. from helping another person and thereby feeling oneself better off), we measure well-being. If well-being is supplemented with commitments (i.e. an action that is not beneficial to the agent herself), then we are focusing on overall agency (Sen, 1987). Moreover, all of these concepts can be further specified as being either achieved outcomes, or the freedom people have to achieve these outcomes, independent of whether they opt to achieve them or not. The distinction between achievements and freedoms is important for well-being and agency, but discussions on standard of living focus primarily on achievement levels.

The distinction between agency and well-being and between freedom and achievement can be clarified with an example. Suppose two sisters, Anna and Becca, live in peaceful village in England and have the same achieved well-being levels. Both believe that the power of global corporations is undermining democracy, and that governments should prioritize global justice instead of the interests of global corporations. Anna decides to travel to Genova to demonstrate against the G8 meetings, while Becca stays home. At that moment Anna is using her agency freedom to voice some of her political concerns. However, the Italian police do not like the protesters and violate Anna's civil and political rights by beating her up in prison. Anna's achieved well-being has obviously been lowered considerably. Anna is offered to sign a piece of paper declaring that she committed violence organized by an extreme-left organization (which will

give her a criminal record and ban her from any further G8 demonstrations). If she does not sign, she will be kept in prison for a further unspecified time. At that moment, Anna has a (highly constrained) option to trade off her agency freedom for higher achieved well-being. Becca had the same agency freedom to voice her concerns and protest against either the G8 itself or the way the Italian police officers abused their power, but chose not to do so. She is concerned about the hollowing of democracy, and human rights violations, but does not want to sacrifice her achieved well-being for these agency goals.

Such an example shows that the distinctions Sen makes are important because in evaluative exercises one has to ask whether the relevant dimension of advantage is the standard of living, achieved well-being, agency achievement, well-being freedom, or agency freedom. The central claim of the capability approach is that whatever concept of advantage one wants to consider, the informational base of this judgement must relate to the space of functionings and/or capabilities, depending on the issue at hand. Sen's claim is that well-being achievements should be measured in functionings, whereas well-being freedom is reflected by a person's capability set. A focus on agency will always transcend an analysis in terms of functionings and capabilities, and will take agency goals into account. However, it is typical for Sen's work that he does not defend this as a closed theory or as a dogma: there can be good reasons to include other sources of information as well.

Some differences Between Sen and Nussbaum

While Amartya Sen introduced the capability approach in the 1980s, other scholars have developed it further in recent years. The most well known is the work of Martha Nussbaum. Sen's and Nussbaum's approaches are very closely related, and are allies in their critique of theories such as utilitarianism. However, Nussbaum and Sen also differ on a number of issues.⁵

First, and in my view most importantly, Nussbaum and Sen have different goals with their work on capabilities. They also have different personal intellectual histories in which their work needs to be situated. Nussbaum aims to develop a partial theory of justice, by arguing for the political principles that should underlie each constitution. Thus, Nussbaum enters the capability approach from a perspective of moral–legal–political philosophy, with the specific aim of arguing for political principles that a government should guarantee to all its citizens through its constitution. To perform this task, Nussbaum develops and argues for a well-defined but general list of 'central human capabilities' that should be incorporated in all constitutions. As such, her work on the capability approach is universalistic, as she argues all governments should endorse these capabilities.

Sen did not have such a clear objective when he started to work on the capability approach. On the one hand, he was interested in the ‘equality of what?’ question in liberal political philosophy, and argued that there are good reasons to focus on capabilities instead of Rawlsian resources or utility (Sen, 1980). On the other hand, Sen was doing some much more applied work on poverty and destitution in developing countries, in which he found empirical support for a focus on what people can do and could be instead of the measures that were more dominant in development economics in the early 1980s (for example, Kynch and Sen, 1983; Sen, 1985a, 1988). Finally, Sen was also working on social choice, the field that launched his academic career, and in this field formal, mathematical reasoning is the common language.

The upshot of these different biographies is that Sen’s work on the capability approach is closer to economic reasoning than Nussbaum’s, and is more attuned to quantitative empirical applications and measurement. It lies closer to those fields and paradigms that are characterized by parsimonious, formal, non-narrative, and axiomatic modelling. Nussbaum’s work, on the other hand, is much closer to traditions in the humanities, such as narrative approaches. Her work engages more with the power of narratives and poetic texts to better understand people’s hopes, desires, aspirations, motivations and decisions.

How do those differences translate in the kind of capability approach that Nussbaum and Sen have developed? First, whereas in Sen’s work the notion of capabilities is primarily that of a real or effective opportunity (as in social choice theory), Nussbaum’s notion of capability pays more attention to people’s skills and personality traits as aspects of capabilities. Some scholars therefore favour Nussbaum’s approach over Sen’s. For example, Des Gasper and Irene van Staveren (2003) argue that Nussbaum’s approach has more potential to understand actions, meanings and motivations. But because Sen’s approach lies closer to economic theory, many economists find his approach more attractive, and the UNDP’s (1990–2004) *Human Development Reports* have also been built on Sen’s version.

Second, Nussbaum develops three categories of capability that are different from Sen’s. *Basic capabilities* are innate abilities (and thus, as discussed earlier, used in a very different meaning from Sen’s use). *Internal capabilities* are states of a person that enable him/her to exercise a specific capability, *if* the circumstances and constraints allow this exercise. *Combined capabilities* are the internal capabilities together with the external provisions that effectively enable the person to exercise the capability (Nussbaum, 1998, p. 775; 2000, pp. 83–85). But while their categories and terminology somewhat differ, both Sen and Nussbaum hold that politics should focus on combined capabilities.

Third, Nussbaum proposes a concrete list of capabilities, which is composed of the following 10 categories: (1) life; (2) bodily health; (3) bodily integrity; (4) senses, imagination and thought; (5) emotions; (6)

practical reason; (7) affiliation; (8) other species; (9) play; and (10) control over one's environment. She has specified this list in more detail in several recent publications (Nussbaum, 2000, 2003a). The list is always open for revision, hence one needs to look at the most recent version of her list. In addition, Nussbaum argues that if Sen's capability approach wants to have any bite with respect to justice, he too will have to endorse such a list. However, Sen has always refused to endorse one specific well-defined list of capabilities, for reasons that will be discussed in the next section.

Fourth, Nussbaum explains her work on capabilities as providing citizens with a justification and arguments for constitutional principles that citizens have a right to demand from their government (Nussbaum, 2003a). Sen's capability approach, in contrast, need not be so focused on claims on the government, due to its wider scope. Indeed, one can discuss inequality in capabilities without necessarily knowing how these inequalities can be rectified, or without assuming that all redistribution, rectification or social change have to be done by the government. Nussbaum has been criticized for her belief in a benevolent government, especially from authors who are more situated in the traditions of post-structuralism, post-colonialism, post-modernism and critical theory (Menon, 2002). In liberal Anglo-American political philosophy, it is commonplace to discuss issues of social and distributive justice in terms of what the government's responsibilities are to do justice, but in other paradigms there is no such focus, or perhaps even a belief, in the actions of government.

Finally, Nussbaum does not endorse the agency–well-being distinction that Sen advocates. Nussbaum argues that “all the important distinctions can be captured as aspects of the capability/functioning distinction” (2000, p. 14). Some critics suggest that her theory does not sufficiently allow for agency in its diverse manifestations (for example, Menon, 2002; Crocker, 2004). However, Nussbaum has argued that practical reason has an architectonic role in her approach — it has a role that goes beyond its direct contribution to well-being. Thus, the exercise of practical reason is probably a main site of agency in Nussbaum's approach, but it remains to be further explored how the concepts of agency differ in Sen's and Nussbaum's work.

The question of the list

There are many theoretical issues currently being discussed in the capability literature. In this and the next section, I will take up the two issues that currently generate most discussion at research seminars and conferences: the question of which capabilities count, and the question whether the capability approach is not too individualistic and should instead pay more attention to groups and social structures.

The first question on which capabilities matter, or how, when and who is to determine which are the relevant capabilities, is often discussed

under the heading ‘what capabilities will there be on the list?’ As discussed in the preceding section, Martha Nussbaum has distinguished her own version of the capability approach from Sen’s in several ways, but above all by her specific proposal of a list of capabilities that she developed over the years. Recently, Nussbaum (2003a) has argued that Sen’s capability approach does not have any bite as long as he does not endorse a particular list of capabilities. She argues that as long as Sen does not commit to a particular list of capabilities, any capability could be argued to be valuable, including, for example, the capability to abuse one’s power or consume so much that it harms others. Some economists, too, have argued that we need to know how to select (or, as they sometimes put it, ‘identify’) the relevant capabilities for the capability approach to become operational.

Sen (2004b) has responded to these criticisms by pointing out that the problem is not with listing important capabilities in themselves, but with endorsing one predetermined list of capabilities. He argues that this is not the task of the theorist. For Sen, the selection of capabilities is the task of the democratic process. We cannot make one final list of capabilities, as these lists are used for different purposes, and each purpose might need its own list. For example, the founders of the *Human Development Reports* decided to operationalize this by including in their index those dimensions that they thought was appropriate for the purpose at hand; namely, universal basic capabilities for inter-country comparisons. Moreover, we use lists of capabilities in different social, cultural, and geographical settings, which will also influence the selection. Finally, Sen stresses that public discussion and reasoning can lead to a better understanding of the value and role of specific capabilities. Nussbaum (2000, 2003a) has, however, always stressed that her list is a list of highly general capabilities, which should be made more specific by the local people.

Sen and Nussbaum’s different ways to list or select the relevant capabilities both seem to run into dangers that are intrinsically related to democratic decision-making. In Sen’s case, it is not at all clear how these processes of public reasoning and democracy are going to take place, and how we can make sure that minimal conditions of fair representation are guaranteed. Moreover, not all applications of Sen’s capability approach allow for fully democratic discussions among all those affected. Hence more work is needed on the principles or procedures that should be used to select capabilities in those circumstances. Some of this work has recently been taken up by other scholars (for example, Alkire, 2002; Robeyns, 2003a). Note that these problems arise not only for Sen, but also for Nussbaum’s version. Most of Nussbaum’s capabilities are at such a high level of generality that undemocratic local decision-making can lead to problematic lists.

Nussbaum’s list of capabilities is endorsed by some as being a source of inspiration or a useful guidance. However, some worry about the lack of democratic legitimacy in the construction of her list (Robeyns, 2003a), or

the too limited role of democratic agency in her approach (Crocker, 2004). Mozaffar Qizilbash (2002) notes that many of the existing lists of capabilities (and indeed other lists of closely related dimensions of well-being) are reconcilable. He seems to suggest, as several scholars have mentioned in discussions at the international capability conferences, that the issue of how to specify the list gets too much attention. Perhaps this is true, but at present not enough work seems to have been carried out on the kind of democratic institutions that the 'capability approach in practice' would require, nor on methodologies to guide social scientists who want to empirically assess capability or functioning levels.

Individuals, groups and social structures in the capability approach

A second major area of dispute among capability theorists relates to issues of individualism, groups and social structures. While some of these debates are publicly available (Gore, 1997; Robeyns, 2000, pp.16–18; 2003b; Deneulin and Stewart, 2002; Sen, 2002b; Stewart, 2004), most of these discussions take place at seminars and conferences. From these written and oral debates, three claims can be distilled:

- Claim 1: The capability approach is too individualistic. It does not consider individuals as part of their social environment, as socially embedded and connected to others. Instead, the capability approach works with a notion of atomised individuals.
- Claim 2: The capability approach does not pay sufficient attention to groups.
- Claim 3: The capability approach does not pay sufficient attention to social structures.

In what follows, I will analyse each of these claims in turn. I will argue that Claim 1 is wrong. Claims 2 and 3 are neither right nor wrong, as they are evaluative judgements, not factual judgements. Groups and social structures can easily be accounted for in the capability approach, but scholars disagree whether that is sufficiently done.

The capability approach is too individualistic

To scrutinize the critique that the capability approach is too individualistic we must distinguish between ethical individualism on the one hand, and methodological and ontological individualism on the other. Ethical individualism makes a claim about who or what should count in our evaluative exercises and decisions. It postulates that individuals, and only individuals, are the units of moral concern. In other words, when evaluating different states of social affairs, we are only interested in the (direct and indirect) effects of those states on individuals. Methodological individualism is often the term used for what, strictly speaking, is

explanatory individualism, the view that everything can be explained by reference to individuals and their properties only. In contrast, ontological individualism states that only individuals and their properties exist, and that all social entities and properties can be identified by reducing them to individuals and their properties. Ontological individualism hence makes a claim about the nature of human beings, about the way they live their lives and about their relation to society. In this view, society is built up from individuals only, and hence is nothing more than the sum of individuals and their properties. Similarly, explanatory individualism is the doctrine that all social phenomena can in principle be explained in terms of individuals and their properties.

To assess Claim 1, it is crucial to understand that a commitment to ethical individualism is not incompatible with an ontology that recognizes the connections between people, their social relations, and their social embedment. Similarly, a social policy focusing and targeting certain groups or communities can be perfectly compatible with ethical individualism.

The capability approach embraces ethical individualism, but does *not* rely on ontological individualism. On the theoretical level, the capability approach does account for social relations and the constraints and opportunities of societal structures and institutions on individuals in at least two ways. First, by recognizing the social and environmental factors that influence the conversions of commodities into functionings. A person living in a safe area has a much greater capability to leave the house than a person who lives in a town with high levels of criminality and theft. The second way in which the capability approach accounts for the societal structures and constraints is by theoretically distinguishing functionings from capabilities. More precisely, choosing functionings from one's capability set requires an act of choice. As Figure 1 makes clear, the capability approach takes into account the influence of societal structures and constraints on those choices.

It is difficult to see how the capability approach can be understood to be methodologically or ontologically individualistic, especially since Sen himself has analysed some processes that are profoundly collective, such as his analysis of households as sites of cooperative conflict (Sen 1990a). The following quote should hopefully clear away any remaining misunderstandings:

The [capability] approach used in this study is much concerned with the opportunities that people have to improve the quality of their lives. It is essentially a 'people-centered' approach, which puts human agency (rather than organizations such as markets or governments) at the centre of the stage. The crucial role of social opportunities is to expand the realm of human agency and freedom, both as an end in itself and as a means of further expansion of freedom. The word 'social' in the expression 'social opportunity' (...) is a useful reminder not to view individuals and

their opportunities in isolated terms. The options that a person has depend greatly on relations with others and on what the state and other institutions do. We shall be particularly concerned with those opportunities that are strongly influenced by social circumstances and public policy... (Drèze and Sen, 2002, p. 6)

Thus, I conclude that the capability approach does not rely on ontological individualism, while it does embrace ethical individualism. Once the analytical distinction between ethical versus ontological and explanatory individualism is clarified, virtually all critics of individualism accept that ethical individualism is a worthwhile endeavour.⁶

The capability approach does not pay sufficient attention to groups

The second claim can come in a weaker or a stronger version. A stronger version of that claim would be that the capability approach *cannot* pay sufficient attention to groups. But that claim is obviously false, because there exists much research that looks at the average capabilities of one group compared with another; for example, women and men (Kynch and Sen, 1983; Sen, 1995; Nussbaum, 2000; Robeyns, 2003a). Capability theorists have also written on the importance of groups for people's well-being, like Nussbaum's (1998, 2000) discussion of women's collectives in India. Several lists of capabilities that have been proposed in the literature include capabilities related to community membership: Nussbaum (2000) stresses affiliation as an architectonic capability, Alkire (2002) discusses relationships and participation, and Robeyns (2003a) includes social relationships. The UNDP (1995, 2004) has produced *Human Development Reports* on both gender and culture, and thus also research based on the capability approach can focus on groups.

The weaker claim states that the present state of the literature on the capability approach does not pay *sufficient* attention to groups. I agree that contemporary mainstream economics is structurally unable to account for group membership on people's well-being, and does not acknowledge the limits of individual rational agency. But is this also the case for the capability approach? While some capability theorists, like Sen (1999b, 2002a), have a great belief in people's abilities to be rational and to resist social and moral pressure stemming from groups, other writers on the capability approach pay much more attention to the influence of social norms and other group-based processes on our choices and, ultimately, on our well-being (for example, Alkire, 2002; Nussbaum, 2000; Iversen, 2003; Robeyns, 2003a). There is thus no reason why the capability approach would not be able to take the normative and constitutive importance of groups fully into account. To fully understand the importance of groups, the capability approach should engage more intensively in a dialogue with disciplines such as sociology, anthropology, history, and gender and cultural studies. Disciplinary boundaries and

structures make this kind of dialogue difficult, but there is no inherent reason why this could not be done.

The capability approach does not pay sufficient attention to social structures

Finally, the third claim states that the capability approach does not pay sufficient attention to social structures. The analysis of this claim follows the same format as the claim that the capability approach would not pay sufficient attention to groups. Figure 1 shows that the social structures and institutions can (and generally do) have an important effect on people's capability sets. In addition, the parameters that policy or social change can influence are the means of the capabilities, and hardly ever the capabilities directly. So, for political and social purposes it is crucially important to know the social determinants of the relevant capabilities, as only those determinants (including social structures and institutions) can be changed. Thus, the capability approach includes these structures in its conceptual framework, although with the clear recognition that these are the means and not the ends of well-being. There is a potential to use the capability approach more in relation with an analysis of institutions, which again would require the approach to reach out into disciplinary terrains that are so far under-explored.

In addition, Sen (2002a, pp. 583–658; 2004a, pp. 336–337) has pointed out that the capability approach can only account for the opportunity aspect of freedom and justice, and not for the procedural aspect. In other words, institutions and structures need to be also procedurally just, apart from the outcomes they generate. For example, global trade agreements should not benefit primarily the most powerful nations, or people should not be discriminated on the labour market based on irrelevant characteristics. These procedural aspects of justice and freedom are very important, and the capability approach is not equipped to account for them.

Conclusion

At present, the literature on the capability approach is scattered. The interdisciplinary exchange is larger in the capability literature than in most other literatures, but still poses a challenge to many readers, students and scholars of the approach. Sen's writings have been gradually developed over the years, and are not neatly presented in one survey article or book. Moreover, the literature on the capability approach has been growing exponentially in recent years. All this makes it hard for newcomers to grasp the core ideas of this literature.

This survey article has therefore tried to present the core conceptual and theoretical aspects of the capability approach in an accessible way. The

main characteristics of the capability approach are its interdisciplinary character and the focus on the plural or multidimensional aspects of well-being. The approach highlights the difference between means and ends, and between substantive freedoms (capabilities) and outcomes (achieved functionings). The capability approach is not a panacea for research on development, poverty, justice, and social policies, but it can provide an important framework for such analyses.

Acknowledgements

This article has benefited from comments from, and discussions with, a large number of people over the past couple of years. The author wishes to thank in particular Bina Agarwal, Sabina Alkire, Enrica Chiappero-Martinetti, David Crocker, Nicolas Farvaque, Nancy Fraser, Sakiko Fukuda-Parr, Jane Humphries, Serena Olsaretti, Anne Phillips, Roland Pierik, Mozaffar Qizilbash, Amartya Sen, Elaine Unterhalter, Robert van der Veen, Frances Woolley, and two anonymous referees. The author also wishes to thank the Cambridge Political Economy Society Trust, and the Netherlands Organization for Scientific Research (NWO) for financial support.

Notes

- 1 For more bibliographical references than those provided in the text and footnotes, see online (www.capabilityapproach.org).
- 2 It is impossible to address all theoretical and conceptual questions related to the capability approach in the space of one article. Some other key issues not discussed in this survey are the precise nature of the concept of freedom in Sen's capability approach (Cohen, 1993; Pettit, 2001; Olsaretti, forthcoming), and the question whether the capability approach is sufficiently critical and able to provide a radical critique of power relations in society (Hill, 2003; Koggel, 2003; Robeyns, 2003b), among others.
- 3 For a discussion of the different strands of liberal political philosophy, see Nussbaum (1999), Swift (2001) and Kymlicka (2002).
- 4 More precisely, the capability approach asks whether people have the substantive opportunity to be healthy and well-nourished. At the individual level there may always be individuals who have the effective opportunity to be healthy and well-nourished but opt not to be so; for example, if they fast or are on a hunger strike. For large numbers, however, we can safely assume that virtually all people who have the capability of being healthy and well-nourished, would also opt to effectively be so.
- 5 See also Crocker (2004) and Gasper (2004, chapter 7).
- 6 See Pogge (2002) for ethical individualism in theories of justice, and Robeyns (2003b) for a further defence of ethical individualism in the capability approach.

References

- Alkire, S. (2002) *Valuing Freedoms. Sen's Capability Approach and Poverty Reduction*, Oxford University Press, New York.

- Basu, K. and Lopez-Calva, L. (forthcoming) 'Functionings and capabilities', in K. Arrow, A. Sen and K. Suzumura (Eds.), *Handbook of Social Choice and Welfare*, volume 2, Elsevier Science, North Holland.
- Brandolini, A. and D'Alessio, G. (1998) 'Measuring well-being in the functioning space', unpublished paper, Banca d'Italia, Roma.
- Brighthouse, H. (2004) 'Primary goods, capabilities, and the problem of the public criterion of justice', paper presented at the *Annual Meetings of the American Political Science Association*, Chicago, 2–5 September.
- Cohen, G.A. (1993) 'Equality of what? On welfare, goods and capabilities', in M. Nussbaum and A. Sen (Eds.), *The Quality of Life*, Clarendon Press, Oxford.
- Chomsky, N. (1999) *Profit over People. Neoliberalism and Global Order*, Seven Stories Press, New York.
- Crocker, D. (2004) 'Deliberating global development: ethics, capability and democracy', unpublished book manuscript, University of Maryland.
- Deneulin, S. and Stewart, F. (2002) 'Amartya Sen's contribution to development thinking', *Studies in Comparative International Development*, 37(2), pp. 61–70.
- Drèze, J. and Sen, A. (2002) *India: Development and Participation*, Oxford University Press, Oxford.
- Dworkin, R. (1981) 'What is equality? Part 2: equality of resources', *Philosophy and Public Affairs*, 10, pp. 283–245.
- Dworkin, R. (2000) *Sovereign Virtue: The Theory and Practice of Equality*, Harvard University Press, Cambridge, Mass.
- Fukuda-Parr, S. (2003) 'The human development paradigm: operationalizing Sen's ideas on capabilities', *Feminist Economics*, 9(2/3), pp. 301–317.
- Fukuda-Parr, S. and Shiva Kumar, A.K. (2003) *Readings in Human Development*, Oxford University Press, Delhi.
- Gasper, D. (2004) *The Ethics of Development*, Edinburgh University Press, Edinburgh.
- Gasper, D. and van Staveren, I. (2003) 'Development as freedom — and as what else?', *Feminist Economics*, 9(2/3), pp. 137–161.
- Gore, Ch. (1997) 'Irreducible social goods and the informational basis of Amartya Sen's capability approach', *Journal of International Development*, 9(2), pp. 235–250.
- Hill, M. (2003) 'Development as empowerment', *Feminist Economics*, 9(2/3), pp. 117–135.
- Iversen, V. (2003) 'Intra-household inequality: a challenge for the capability approach?', *Feminist Economics*, 9(2/3), pp. 93–115.
- Koggel, Ch. (2003) 'Globalization and women's paid work: expanding freedom?', *Feminist Economics*, 9(2/3), pp. 163–183.
- Kuklys, W. and Robeyns, I. (2004) 'Sen's capability approach to welfare economics', *Cambridge Working Paper in Economics 0415*, Cambridge University, Cambridge.
- Kymlicka, W. (2002) *Contemporary Political Philosophy. An Introduction*, 2nd edition, Oxford University Press, Oxford.
- Kynch, J. and Sen, A. (1983) 'Indian women: well-being and survival', *Cambridge Journal of Economics*, 7, pp. 363–380.
- Menon, N. (2002) 'Universalism without foundations?', *Economy and Society*, 31(1), pp. 152–169.
- Nussbaum, M. (1988) 'Nature, functioning and capability: Aristotle on political distribution', *Oxford Studies in Ancient Philosophy, Supplementary Volume*, pp.145–184.
- Nussbaum, M. (1992) 'Human functioning and social justice. In defense of Aristotelian essentialism', *Political Theory*, 20(2), pp. 202–246.
- Nussbaum, M. (1995) 'Human capabilities, female human beings', in M. Nussbaum and J. Glover (Eds.), *Women, Culture and Development*, Clarendon Press, Oxford.
- Nussbaum, M. (1998) 'Public philosophy and international feminism', *Ethics*, 108, pp. 762–796.

- Nussbaum, M. (1999) 'The feminist critique of liberalism', in her *Sex and Social Justice*, Oxford University Press, New York, pp. 55–80.
- Nussbaum, M. (2000) *Women and Human Development: The Capabilities Approach*, Cambridge University Press, Cambridge.
- Nussbaum, M. (2003a) 'Capabilities as fundamental entitlements: Sen and social justice', *Feminist Economics*, 9(2/3), pp. 33–59.
- Nussbaum, M. (2003b) Interview. *Ethique économique/Ethics and Economics*, 1(1), on-line journal, http://mapage.noos.fr/Ethique-economique/html_version/Nussbauminterview.pdf
- Nussbaum, M. (2004) 'Beyond the social contract: capabilities and global justice', *Oxford Development Studies*, 32(1), pp. 3–18.
- Nussbaum, M. (forthcoming) *Frontiers of Justice. Disability, Nationality, Species Membership*, Harvard University Press, Cambridge, Mass.
- Olsaretti, S. (forthcoming) 'Endorsement and freedom in Amartya Sen's capability approach', *Economics and Philosophy*.
- Pettit, Ph. (2001) 'Capability and freedom: a defense of Sen', *Economics and Philosophy*, 17, pp. 1–20.
- Pogge, T. (2002) 'Can the capability approach be justified?' *Philosophical Topics*, 30(2), pp. 167–228.
- Qizilbash, M. (2002) 'Development, common foes and shared values', *Review of Political Economy*, 14(4), pp. 463–480.
- Rawls, J. (1971) *A Theory of Justice*, Harvard University Press, Cambridge, Mass.
- Rawls, J. (1982) 'Social unity and primary goods', in A. Sen and B. Williams (Eds.), *Utilitarianism and Beyond*, Cambridge University Press, Cambridge, pp. 159–186.
- Robeyns, I. (2000) 'An unworkable idea or a promising alternative? Sen's capability approach re-examined', *CES discussion paper 00.30*, Katholieke Universiteit, Leuven.
- Robeyns, I. (2003a) 'Sen's capability approach and gender inequality: selecting relevant capabilities', *Feminist Economics*, 9(2/3), pp. 61–92.
- Robeyns, I. (2003b) 'The capability approach: an interdisciplinary introduction', teaching material for the training course preceding the 3rd International Conference on the capability approach, Pavia, September.
- Robeyns, I. (2005) 'Assessing global poverty and inequality: income, resources, and capabilities', *Metaphilosophy*, 36(1/2), forthcoming.
- Roemer, J. (1996) *Theories of Distributive Justice*, Harvard University Press, Cambridge, Mass.
- Saith, R. (2001) 'Capabilities: the concept and its operationalisation', *Queen Elizabeth House Working Paper 66*, Oxford University, Oxford.
- Sen, A. (1979) 'Personal utilities and public judgements: or what's wrong with welfare economics?', *The Economic Journal*, 89, pp. 537–558.
- Sen, A. (1980) 'Equality of what?', in S. McMurrin (Eds.), *The Tanner Lectures on Human Values*, Salt Lake City, Utah.
- Sen, A. (1984) 'Rights and capabilities', in *Resources, Values and Development*, Harvard University Press, Cambridge, MA.
- Sen, A. (1985a) *Commodities and Capabilities*, North Holland, Amsterdam.
- Sen, A. (1985b) 'Well-being, agency and freedom', *The Journal of Philosophy*, LXXXII(4), pp. 169–221.
- Sen, A. (1987) 'The standard of living', in G. Hawthorn (Ed.), *The Standard of Living*, Cambridge University Press, Cambridge.
- Sen, A. (1988) 'The concept of development', in H. Chenery and T.N. Srinivasan (Eds.), *Handbook of Development Economics*, Elsevier Science Publishers, Amsterdam.
- Sen, A. (1990a) 'Gender and cooperative conflicts', in I. Tinker (Ed.), *Persistent Inequalities*, Oxford University Press, New York.
- Sen, A. (1990b) 'Justice: means versus freedoms', *Philosophy and Public Affairs*, 19, pp. 111–121.
- Sen, A. (1992) *Inequality Re-examined*, Clarendon Press, Oxford.

- Sen, A. (1993) 'Capability and well-being', in M. Nussbaum and A. Sen (Eds.), *The Quality of Life*, Clarendon Press, Oxford.
- Sen, A. (1995) 'Gender inequality and theories of justice', in M. Nussbaum and J. Glover (Eds.), *Women, Culture and Development: A Study of Human Capabilities*, Clarendon Press, Oxford.
- Sen, A. (1999a) *Development as Freedom*, Knopf, New York.
- Sen, A. (1999b) *Reason before Identity*, Oxford University Press, Oxford.
- Sen, A. (2002a) *Rationality and Freedom*, Harvard University, Cambridge, Mass.
- Sen, A. (2002b) 'Response to commentaries', *Studies in Comparative International Development*, 37(2), pp. 78–86.
- Sen, A. (2004a) 'Elements of a theory of human rights', *Philosophy & Public Affairs*, 32(4), pp. 315–356.
- Sen, A. (2004b) 'Capabilities, lists, and public reason: continuing the conversation', *Feminist Economics*, 10(3), pp. 77–80.
- Stewart, F. (1995) 'Basic needs, capabilities and human development', *Greek Economic Review*, 17(2), pp. 83–96.
- Stewart, F. (2004) 'Groups and capabilities' paper presented at the *4th International Capability Conference*, Pavia, 5–7 September.
- Sugden, R. (1993) 'Welfare, resources, and capabilities: a review of *Inequality Reexamined* by Amartya Sen', *Journal of Economic Literature*, 31, pp. 1947–1962.
- Swift, A. (2001) *Political Philosophy: A Beginner's Guide for Students and Politicians*, Polity Press, Cambridge.
- UNDP (1990–2004) *Human Development Report*, Oxford University Press, Oxford.
- Williams, A. (2002) 'Dworkin on capability', *Ethics*, 113, pp. 23–39.

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