1 Introduction: social choice, agency, inclusiveness and capabilities FLAVIO COMIM, P. B. ANAND AND

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Social choice theory (SCT) is one of the least appreciated elements of Amartya Sen's capability approach. Not that he has not alerted us many times about the importance of SCT for his work. As he put it in his Nobel Prize lecture (Sen, 2002: 66-7), 'The Royal Swedish Academy of Sciences referred to "welfare economics" as the general field of my work for which the award was given, and separated out three particular areas: social choice, distribution and poverty. While I have indeed been occupied, in various ways, with these different subjects, it is social choice theory, pioneeringly formulated in its modern form by Arrow (1951), that provides a general approach to the evaluation of, and choice over, alternative social possibilities (including, inter alia, the assessment of social welfare, inequality and poverty).' SCT has also figured prominently in his work throughout the years, such as Collective Choice and Social Welfare (Sen, 1970), Choice, Welfare and Measurement (1982), Resources, Values and Development (1984) and Rationality and Freedom (2002), not to mention tens of papers on the theme. His expanded edition of Collective Choice and Social Welfare (2017) is also testimony to the importance of SCT to his work. Moreover, two of the key influences on Sen were social choice theorists, namely the Marquis de Condorcet and Kenneth Arrow, and several of his articles interact with leading social choice theorists such as Allan Gibbard, Wulf Gaertner, Peter Hamond, Eric Maskin, Prasanta Pattanaik, Maurice Salles and Kotaro Suzumura, to mention just a few.

But social choice is not an easy field, particularly because many of its issues are solved through axioms, lemmas, proofs, theorems and the use of a mathematical language (centred on analysis and topology) that makes it harder for scholars without this specific background to engage with it. A quick look at the Social Choice and Welfare journal should be enough to dispel any doubts about the mathematical hurdles it is necessary to overcome in order to be able to enter this

field. In addition, it is important to note that the links between Sen's own version of SCT and his 'welfare economics' are far from trivial. Sen is a thinker who has used his SCT to engage with political science, public economics and ethics, particularly theories of justice. He has pushed the boundaries of interdisciplinary work as very few have done in social sciences. His own SCT research agenda covers a wide range of issues, including variations of Arrow's theorem, such as the impossibility of the Paretian liberal, the role of rights, the use of different informational bases, equity rules, the role of different rules of aggregation on social outcomes, the importance of processes, etc. By engaging in these different aspects of social decisions with searching questions, Sen has enlarged the frontiers of social choice beyond the limits of its traditional domain. He has invited us to consider the role of individual agency, autonomy and moral sentiments in how collective choices are produced. This broader and interdisciplinary notion of social choice is the leitmotiv of this book.

Social choice is about how to arrive at a decision at the level of a collective or group of individuals when such individuals differ in how they prioritize the options available. From simple problems about two individuals who need to cooperate to solve a problem that affects both of them to problems at the level of teams, departments, neighbourhoods, communities, cities, provinces, nations and even globally, social choice situations occur everywhere. A deeper understanding of social choice helps us to appreciate the difficulties in solving coordination problems and why public and common good challenges often remain tricky, demanding or 'wicked' problems. We think social choice should be part of the core curriculum of all social sciences and policy sciences and in business schools for these powerful insights. We hope that the various chapters in this book contribute to unpacking some of this complexity and advancing our understanding of social choice.

The book is divided into three parts. The first part, titled 'Social Choice and Capabilities', sets the scene, interacting more explicitly with SCT, from its key elements towards a broader view of social choice embedded in human development. The second, called 'Inclusiveness, Social and Individual Agency', opens the black box of Sen's approach, delving into his discussions of moral and political philosophy and psychology to examine some of its key analytical categories. It includes contributions that expand the frontiers of Sen's approach. Finally, the third part, titled 'Social Choice and Capabilities in Action', shows how different empirical contexts can enlarge our understanding of social choice from a human development perspective.

Social choice is a demanding field, but Wulf Gaertner (also known for his outstanding A Primer in Social Choice Theory, 2009) puts us at ease and brings us to the heart of the subject in an engaging but sympathetic manner with his chapter 'The many facets of social choice theory', allowing us to understand how Sen's work fits this very complex research agenda. One can appreciate the debates about the impacts of different aggregation methods, contextualizing the links between individual rights, the concept of freedom and the choice of functioning bundles. An important, though unsettling, conclusion that emerges from this literature is that there are no ideal aggregation rules for collective choice. Gaertner also shows how SCT can be applied in the generalized game form to take into account the issue of the interdependence of actions and strategies between different individuals. More importantly, he examines a typical element of Sen's SCT related to the procedural nature of individual and social choice, discussing Sen's (1997) concepts of 'chooser dependence' and 'menu dependence'. This contribution would already be invaluable but he pushes further the boundaries of the discipline by adding an original proposal for comparing and measuring capability sets.

This chapter should be enough to convince readers that Sen's capability approach has a very specific function within SCT, namely to broaden informational spaces in normative evaluations that, as such, cannot encompass Sen's thought – a point also highlighted by Mozaffar Qizilbash and Flavio Comim in this book. Comim in his chapter, entitled 'Beyond capabilities? Sen's social choice approach and the generalizability assumption', links Sen's social choice roots to his motivational and informational pluralism and argues for the importance of explicitly acknowledging the need to work more systematically with the different informational spaces. In particular, he shows how there is a generalizability assumption behind Sen's principle of working with broad informational spaces, and puts forward a simple method to compare and conciliate different informational spaces as part of a coherent evaluation story. By doing so, it is possible to see how separated critiques of different informational spaces make an operationalization of the approach much harder, and how putting them together makes this task more manageable. The use of a method does not mean that practical judgement and contextual deliberation should be excluded from the picture; quite the opposite. It allows the informational conditions for handling them in a systematic and fair way.

Shailaja Fennell in her chapter, 'Examining the challenge of communication in diffusing innovative education programmes: an analysis drawing on public choice, social choice and capability framings', shows how SCT can be seen from both a narrow and a broader perspective, depending on whether we take the structure of preferences as given or as codetermined. She analyses an empirical case of an innovative educational policy intervention (the Activity Based Learning [ABL] programme in Tamil Nadu, India) that was not able to successfully scale up due to its particular collective choice mechanisms. This empirical illustration allows her to demonstrate how successful policy diffusion depends on how political and economic features shape social choice mechanisms. In the real world, social choice might involve different stakeholders, and their agendas and motivations play an important part in whether an intervention succeeds. In this case it included the large number of state and local officials, led by the education commissioner and supported by trained teachers, teacher training institutes, the city corporation, local schools, and education officers of UNICEF India. Context also matters. Issues of communication, consensus building, freedom and institutional change might define whether social choice can be emancipatory, as usually assumed by Sen, or oppressive. Thus, a well-designed programme might not be able to be scaled up due to particular features of the social choice mechanisms in question.

Cities can play an important role in promoting freedoms and capabilities. However, cities can also magnify and ratchet up inequalities. In the context of Sustainable Development Goal 11, P. B. Anand argues in his chapter, 'Nudging the capabilities for a sustainable city? When the libertarian paternalist meets the Paretian liberal', that framing the issues of sustainable cities to be essentially problems of social choice is fundamental. The chapter builds on the idea of the Paretian liberal and identifies six key types of injustices or impossibilities that must be addressed in the pursuit of becoming a sustainable city. Three of these are intra-generational and the other three are inter-generational. One concerns the injustices within the current boundaries of the city; another set concerns injustices caused by the city's ecological and resource footprint on regions beyond the city; and the third set of injustices concerns the transfer of impacts around the world due to global supply chains. After setting up the social choice approach to understanding these six injustices or impossibilities, Anand develops two lines of critical enquiry: one focuses on the idea of smart cities and the ethical and procedural challenges to social choice, and the second on the idea of nudges from the behavioural public policy themes influenced by the work of Richard Thaler and Cass Sunstein, who describe nudges as a part of policy interventions rooted in libertarian paternalism. Various examples of nudges are briefly discussed. Drawing from the conditions of Sen's social choice theory, the chapter calls for a multidimensional and pluralist approach, called the PULSE approach, for cities in their pursuit of becoming sustainable and to address these six injustices: P stands for the Pareto requirement that, if a citizen prefers X to Y, then the society must also prefer X to Y; U is unrestricted domain; L is liberalism: S stands for society, meaning a concern for the freedoms and well-being of other members of the society: and E is a concern for environmental ethics and a commitment of fairness to future generations.

Identity perceptions are key to social choice, as shown by Michael Watts, Nafisa Waziri and Oladele Akogun. In their chapter, 'Social choice and research capacity strengthening in Nigeria: insights from the field', they evaluate an educational project in Nigeria that provides a different context from that assessed by Fennell. The focus here is on the conditions that prevail in many developing countries: low status of the teaching profession, unqualified teachers struggling with limited incentives and poor education standards. Moreover, social choice mechanisms have been characterized by mutual intra-sectoral mistrust, little intra-sectoral collaboration and the prevalence of stereotypes. The authors show that the feeling of belonging to social groups is important for granting individuals a sense of their own social worth that is fundamental to the way that they establish individual and social priorities. Together with Fennell's contribution, they demonstrate how Arrow's distinction between tastes (individual preferences about their own good) and values (their collective choice about the social good) is more complicated than it seems on paper. In order to define their values, people go through different processes of social categorization and distinctions (for instance, between in-groups and out-groups). Social identities influence social choices through mechanisms of participation in collective decision-making processes.

The issue of inclusiveness is at the centre of this debate, and it impacts not only on the kinds of arguments that should be privileged in characterizing social choice mechanisms but also on the use of indicators for evaluating their results. The second part, entitled 'Inclusiveness, Social and Individual Agency', looks more deeply at Sen's approach, investigating his analysis of moral and political philosophy and psychology and unpicking some of its key ideas. Mozaffar Qizilbash discusses in his chapter, 'In defence of inclusiveness: on sustainable human development, capability and indicators of progress', the concept of inclusionary strategies. He argues that these strategies are important as a means to a basis of agreement between people who hold different views. He explains that a view can be inclusive either by adopting vague terms, which can be completed by different people, or by being open-ended, or by accommodating particular views under a general framework or by focusing on overlaps between different views. It seems that, in the cases reported by Fennell and Watts, Waziri and Akogun, there were elements that prevented reasoned consensus, not because of people's different views but because of the characteristics of the social mechanisms in place. Qizilbash illustrates the importance of inclusiveness for the cases of sustainability challenges and the Human Development Index (HDI), demonstrating how the capability approach incorporates some of the inclusionary strategies described by him. He also refers to 'Sen's desire to be inclusive' and to 'Sen's anti-exclusionary tendency'. This illuminates the place and the role of the capability approach within Sen's larger SCT. The debate on inclusiveness owes as much to Kenneth Arrow as it does to John Rawls. It is hard to imagine what we might be discussing today if they, together with Sen, had not participated in a joint seminar at Harvard University back in 1968/69.

Sen's desire to be inclusive is clearly manifested in his informational pluralism and in his willingness to talk about a richer picture of individuals' moral sentiments. Gay Meeks delves into the roots of Sen's pluralism in her chapter, entitled 'Exploring Sen on self-interest and commitment', by analysing one of the core conceptual distinctions in Sen's work, namely between self-interest and commitment. One might speculate whether SCT should always see individuals as grounding their actions in self-interested behaviour (even when they might consider how the welfare of others impacts on their welfare) or, rather, should allow space for them to pursue goals beyond their own welfare. Understanding this distinction is not trivial. It is worth emphasizing that the categories of commitment are important to Sen's work because acts grounded in commitment are pursued independently from the promotion of one's welfare (differently from acts grounded in sympathy or other forms of self-interest). She offers the examples of a 'dating conundrum' and of Brexit to show how these different concepts can be applied. It is clear from this discussion that individual and social choice depend on our moral sentiments and our emotions, and that the way that individuals and societies combine them is like a recipe for a complicated dish.

John Cameron argues just that in his chapter, 'Incorporating an emotional dimension in the capability approach', namely that emotions matter for our individual and collective choices and that, as such, the capability approach should acknowledge it more extensively. We can appreciate his argument both as a continuation of Meeks' analysis and Oizilbash's plea for inclusiveness. Indeed, if we were to omit the emotional dimension of our individual and collective decision making, we would get to an incomplete account of a fully human existence. Cameron explores in his chapter five views of emotions: (1) as another reality; (2) as the key to progress; (3) as an obstacle to progress; (4) as essential to being a communicating human; and (5) as key to understanding power. The importance of communicative agency cannot be overstated. Indeed, emotions are an essential aspect of human communication, essential for public reason and collective choice. In several examples discussed in this book emotions are an essential ingredient of the social choice mechanism behind certain public policies. At the very end, Cameron offers a framework to integrate an emotional dimension into the capability approach. He shows how emotional interactions may either enhance or inhibit collective decision making.

One of the key concepts in this debate is about human dignity. Several concerns raised above about informational pluralism, inclusiveness, agency, moral categories (such as commitment) and the role of emotions in our individual and social choices can be materialized when examining the concept of human dignity. Taking categories of rights into SCT, as explained by Gaertner, might be a complex conceptual issue when operationalized into criteria of basic needs or subsistence. This is no different for the issue of human dignity. One question that illustrates this complexity is: should human dignity concentrate on the lowest ends or at the highest ends of human existence? Jay Drvdyk argues in his chapter, entitled 'Sufficiency reexamined', that public reason and social choice should not be limited to the issue of what priorities are defined by different societies but at which levels they should be established. This is not a minor issue. Indeed, Drydyk suggests that standards should be optimal rather than minimal. He puts forward the concept of the 'optimum social capability' to signal the highest zones of the most valuable capabilities that can be provided by any given society, given its productive capacity. This debate about the threshold for sufficiency can provide a point of focus for the reasons that people have to support not only those below certain threshold levels but those above them. This is a key issue in a world of informational pluralism, whereby some people might be seen as being above certain thresholds (say, resources) but not others (such as rights or capabilities). This can also raise a debate about the so called 'diminution thesis', according to which, once people have enough, our reasons to support them are weaker.

The fact is that individual and social choice can be much more complex when confronted with all the peculiarities and subtleties offered by real-life contexts. This is certainly the case when some psychological aspects related to individual and social choices are taken into account. Psychology is little acknowledged by SCT, which takes it for granted that people are more often than not aware about the outcomes of their choices. However, adaptative preferences and internalization processes can bias people's judgements and their corresponding tastes and values. Tadashi Hirai in his chapter, 'Adaptive preferences versus internalization in deprivation: a conceptual comparison between the capability approach and selfdetermination theory', invites us to consider how people form goals according to their intrinsic or extrinsic objectives by comparing the use of subjective information in the capability approach vis-à-vis self-determination theory (SDT). He finds that there are important parallels between SDT's notions of autonomy and relatedness and Martha Nussbaum's central capabilities of practical reason and sense of affiliation. Thus, a refined concept of internalization allows us to distinguish the cases in which people's extrinsic motivation is due to their will compared to cases of compliance to external regulations. This means that the perceived locus of causality is key to characterize people's choices. Moreover, Hirai shows that people facing external deprivation can also satisfy psychological needs in their search for a eudaimonic life. It seems that inclusiveness strategies need to examine the psychological aspects of the poor and the non-poor in the processes of collective choice.

It is also important to note that social choice does not take place in a social vacuum. It depends on the particular social structures in which individuals are embedded, and, as argued by Hirai, it also depends on how individuals internalize them. However, these structural elements are normally ignored by the ethical individualism cultivated by SCT and the capability approach. Ina Conradie disputes this standard narrative in her chapter, 'Enriching agency in the capability approach through social theory contributions', advocating the use of social theory for better exploring the links between agency, moral sentiments and collective choices. She argues for an enriched view of agency (as does Meeks, although they follow different strategies), taking into account how people's objectives depend on their autonomy and personal liberty. She criticizes Sen for not conceptualizing the notion of 'interconnectedness between individuals' (a recurrent critique of the capability approach, it has to be said) and searches for alternatives in Anthony Giddens' structuration theory, Margaret Archer's morphogenesis, Pierre Bourdieu's habitus and Jürgen Habermas's communicative action. It is clear that the relational ontology of the capability approach is in tension with its SCT roots. One possible way forward is through the concept of reflexivity, which can be used to better characterize agency.

Among the most important structural factors we find those related to the economy and technological progress. As Jonathan Warner discusses in his chapter, 'Creativity and capabilities: a problem of change and uncertainty?', technological change influences the kind of productive effect that people have, and, as such, it has the potential to shape people's identities (a discussion that overlaps with the one suggested by Watts, Waziri and Akogun, and is also discussed with regard to smart cities by Anand). Together, the economy and technological change open up new perspectives about what becomes valuable in our lives. More specifically, for Warner, innovation might render some valuable kinds of lives unfeasible. As he asks, 'If redundancy, deskilling and automation make many types of work superfluous, what will a valuable and meaningful life look like?' Should artificial intelligence turn large shares of human labour into an obsolete factor of production, humanity would have to stop to discuss all over again the meaning of a productive and useful life. Warner invites us to consider a paradox, asking how human creativity (no doubt an expression of human agency) can influence technological change, which, ultimately, can undermine the types of lives that we might have reason to value, eroding agency as we know it. If current technological progress, based on advances in process automation, machine learning and deep learning, revolutionizes labour markets and the workplace in a decade, how can we resignify the meaning of autonomy and the values behind our collective choices?

Some of these questions are meant to stimulate further reflection and are not intended to produce definite answers. But they do provide a broad picture about the sorts of elements that could be considered in a broader view of SCT and the capability approach applied to the social, economic and political issues that are key for human development. Once these conceptual elements have been explored we then move on to the last part of the book, 'Social Choice and Capabilities in Action', which offers a rich discussion of emblematic cases that provide different answers to social choice challenges.

Hideyuki Kobayashi and Reiko Gotoh in their chapter, 'Measuring the independence of "dependent" persons based on the capability approach', examine the individual and social choices involved in the context of elderly people who are living in local communities or are dependent on home-caring services in Japan. The collective choice problem involved in providing social services for the elderly, taking into account ideals of equality, respect for people's existential independence and an acknowledgement of human suffering vis-à-vis the costs of diseases and disabilities, is far from trivial. This problem is not simply about efficiency but about distribution: how should these costs be distributed between individuals and society? In order to address this problem they develop a 'fractal structure of capability', together with iso-cost curves mapped against the space of sub-functionings. They show how the choices involved depend on people's utilization abilities and their corresponding capability frontiers. Kobayashi and Gotoh push the analytical boundaries of the capability approach to demonstrate what the core analytical parameters might be that could enter the arena of the public debate. How these arguments would perform would depend on how they were phrased, what concepts would be used to communicate them to the public, their cultural context, levels chosen, etc.

One context in which cultural values can be very influential in shaping collective choices is the context of some indigenous populations in the Andean region, in Latin America. Ana Estefanía Carballo in her chapter, 'Indigenous challenges to the capability approach: a relational ontology of community and sustainability', examines the case of 'buen vivir' ('good living', in Spanish), which represents a strong communal dimension in defining social values and collective decisionmaking. It brings to the front the concept of the good life as an ethics of sufficiency (differently from what was argued by Drydyk) and an ethics of sustainability, based on the centrality of the notion of community. She argues how our preferences and tastes (in the Arrowian sense) depend on institutions such as collective/private ownership or property rights or the characteristics of the current system of exchange of a certain society. From this perspective, there are intangible elements of social choice that belong to an imaginary collective space from which individuals can assess their development alternatives. In the case of these indigenous groups, she shows how their cosmovision and relational ontology are intensive in interconnectedness, explaining how they attach importance to values of sufficiency and sustainability. There is also a key temporal dimension whereby several key individual capabilities are the result of past collective choices that were originally produced as a balance between individuals' positions in society.

The more sceptical among us might argue that what applies to indigenous populations in Latin America might not apply to contemporary Western societies, but this case should be understood as a benchmark against which we can see the interplay of different influences that might even operate at different levels, as happens inside families. In fact, families play an important role in shaping people's individual and social priorities, as well as their capabilities and choices. For this reason, Claudine Sauvain-Dugerdil and Siaka Cissé suggest in their chapter, 'Situating the family within the capabilities framework: a collective conversion factor. The role of the household configuration in the quality of life in Mali', that we can see families as 'collective conversion factors'. Of course, this will depend on the context and on the individuals' life course stage. But how can families work as social choice mechanisms? Do they follow rules, established conventions or traditions? How do families affect the perception of individual and social needs? As the authors explain, different types of families develop distinct subsistence strategies, providing different mechanisms for people to cope with life uncertainties. Family values can be seen as meta-values, shaping one's identity (on the lines argued by Watts, Waziri and Akogun) and individual and social choices. These values can also affect the kind of agency (weak or strong) that individuals might develop with their corresponding responsibilities and commitments. They illustrate this discussion with an example from Mali, where different families chose different schooling strategies.

Another paradigmatic field of application is offered by Jacques Tamin in his chapter about disabilities, entitled 'An ethical perspective on the United Kingdom's *Improving Lives: The Future of Work, Health and Disability*'. There are evident parallels between his arguments and those offered earlier by Kobayashi and Gotoh, whereby contextual differences can highlight the essentiality of the issue of agency for human development. In this chapter Tamin examines the issue of disability and the UK government's policy of creating 1 million job opportunities for disabled people by 2027. He shows how different choice mechanisms can allow disabled people to enjoy different health capabilities – or not. Ultimately, it depends on how broad the informational scope of this policy is. In particular, it depends on how this policy can respect the agency of disabled individuals, valuing their choices in relation to the job options.

The last chapter, 'Public services as conversion factors: exploring the theory and practice', by Richard Brunner and Nick Watson, provides a rich illustration from a public service reform in Scotland. Their discussion encapsulates much of the debate on social choice and individual values, given that different mechanisms of collective choice are usually decisive for the definition of distinct public service programmes. They examine two projects: one about an anti-gang initiative, the other about a family meal scheme with a homework club. Both were motivated by a reform agenda focused on those in greatest need, and follow a collaborative governance model. The results, as they report, are very positive, increasing community capacity and allowing people to act collectively as an agent. Certain parts of the discussion overlap with Carballo's account of how a sense of interconnectedness might be conducive to more effective collective agency. Taken together, these empirical chapters illustrate how the scope of a broader notion of social choice can be relevant to a wide variety of situations.

This book invites its readers onto a long interdisciplinary journey: from an initial acknowledgement of the SCT features in Sen's work to rich analytical categories that expand the core of SCT towards new forms of social theorizing. More specifically, it includes a review of the main features of Sen's SCT and discussion of a wide range of issues related to collective choices and individual values, such as those of communication, consensus building, institutional change, identity perceptions, inclusiveness, richer notions of agency, the role of moral sentiments and emotions in shaping social choice, an ethics of sufficiency versus an ethics of optimal social capability, the influence of psychological aspects on individuals' choices, and the role of social structures, such as those given by technological change, in shaping people's social priorities. The discussion also includes some analytical proposals, such as capability models with a fractal structure, a model for comparing capability sets and a proposal for the generalizability of informational spaces, among others. It covers a wide range of empirical cases, including about the youth, the elderly, families, educational authorities, people from developing and developed countries. Taken as a whole, the book advances a proposal for a broader notion of social choice that can be richer, more interdisciplinary and more useful to human development theory and policies.

References

Arrow, K. J. (1951) Social Choice and Individual Values. New York: Wiley.

- Gaertner, W. (2009) A Primer in Social Choice Theory. Oxford: Oxford University Press.
- Sen, A. K. (1970) Collective Choice and Social Welfare. San Francisco: Holden-Day.
 - (1982) Choice, Welfare and Measurement. Oxford: Blackwell.
 - (1984) Resources, Values and Development. Oxford: Blackwell.
 - (1997) Maximization and the act of choice. Econometrica, 65 (4): 745-79.
 - (1999) Development as Freedom. Oxford: Oxford University Press.
 - (2002) Rationality and Freedom. Cambridge, MA: Harvard University Press.
 - (2017) Collective Choice and Social Welfare, expanded edn. London: Penguin.