Responsive environments: An outline of a method for determining context sensitive planning interventions to enhance health and wellbeing

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A B S T R A C T

Much thinking in planning for health and wellbeing is guided by a focus on the fair distribution of 'goods', such as proximity to accessible green space or the provision of facilities like outdoor gym equipment, cycleways and playgrounds. Less attention is focused on the aspirations which people seek these 'goods' to help realise. Hence, this paper presents and discusses an exploratory approach aimed at helping planning support user desires. It does so by advancing a method informed through the integration of the 'Capability Approach' and 'Affordances Theory'. The paper first identifies and summarises deficiencies in the prevailing approach to planning for health and wellbeing. The primary elements of the Capability Approach and Affordances Theory are then outlined and discussed as correctives to these deficiencies. How these inform the development of a method for planning more responsive environments is outlined and a description of this method is provided. The advantages of this method are subsequently illustrated through a review of its application to three exploratory case studies. The paper closes with some summary conclusions on the benefit of this approach in the context of the critique provided at the beginning of the paper, with specific reference to how it may complement rather than challenge the prevailing approach to planning for health and wellbeing.

1. Introduction

Recent years have witnessed a concerted desire by planning practitioners to address issues of health and wellbeing (Barton, 2017; Barton et al., 2015; Corburn, 2013; Coutts, 2016; Gardsjord et al., 2014; Pearce et al., 2013; Rydin et al., 2012; Thompson et al., 2010). This has included efforts to quantifiably assess the supply of environmental 'goods', such as proximity to green space or the availability of sports facilities, as a means for gauging improvements in the delivery of health and wellbeing enhancing environments (Beyer et al., 2014; Ngom et al., 2016; Ord et al., 2013; Thompson et al., 2014; van den Berg et al., 2015, 2010). Much thinking in this field is underpinned by efforts to give institutional expression to a Rawlsian-informed position on the equitable distribution of these 'goods', so that the impartial supply of interventions, and even positive bias in the geography of interventions that favour socially deprived neighbourhoods, have often eclipsed attention to the use desires of those who are deemed to benefit from such efforts (Cole et al., 2017). Therefore, while quantifiable measures of access are useful, this approach often fails to account for the health benefits afforded to different users by different *types* of green space distributions and configurations (Hartig et al., 2014; Bowler et al., 2010; Velarde et al., 2007; Jorgensen and Gobster, 2010).

Hence, although well intentioned, this approach often foregrounds 'means' (e.g. proximity to green space) over 'ends' (e.g. the varying aspirations of green space users) in the planning of interventions for health and wellbeing, thus risking that the contextual contingencies of user aspirations are overlooked (Edwards et al., 2014; Sugiyama et al., 2010; Kaczynski et al., 2009). Put differently, such a deontological approach grounded in the arguments of a Rawlsian-informed perspective on 'justice as fairness' is generally concerned with the distribution of 'good things' as a measure of an equitable distribution of opportunity, rather than in the *actual* role these good things may serve in providing people with the opportunity to realise *their* aspirations. Consequently, there is often a focus on ensuring equity in 'what' is introduced 'where', with less attention allocated to a detailed consideration on 'why' an intervention is introduced relative to the spatial aspirations of the users at 'whom' it is targeted (Lennon et al., 2017). In part, this may be attributed to problems in translating an abstract and institutionally focused political philosophy of justice into specific and applied planning and design practices (Campbell, 2006). Nevertheless, the ultimate consequence of this difficulty may result in the formulation of initiatives aimed at enhancing health and wellbeing that have little effect resultant from their lack of responsiveness to the use desires of the communities they are supposed to serve (Anguelovski et al., 2018).

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Therefore, what is required is a framework that respects and responds to contextual issues in the determination of what health and wellbeing interventions best serve the specific needs and desires of a community. One way to achieve this is by mobilising the application-focused philosophy of Amartya Sen in devising a method for determining user needs and desires.

Although often acknowledging his debt to the philosophy of Rawls[1] (Sen, 1992, 2004), Sen has been critical of the Rawlsian focus on 'means' ('goods') at the expense of 'ends', as he believes that such an approach 'seems to take little note of the diversity of human beings' (Sen, 1980: 215), and in particular, the variety of different 'ends' (aspirations) that people may hold. Indeed, in seeking to account for such diversity, Sen inverts the abstract and top-down philosophy of Rawls through proposing an alternative trajectory of bottom-up applied thinking that directly responds to the variety of human desires and capacities. Hence, whereas,

> Rawls's underlying question is "what would make human beings equal regardless of their residual diversity"; Sen's underlying question is "what would make human beings more equal in consideration of their inherent diversity." (Basta, 2016: 10)

It is in this context that Sen advances a 'capability approach' (CA) that focuses on the 'ends' people may hold in terms of their desired 'beings and doings' (Robeyns, 2005) expressed in general terms, such as 'being part of a community', 'being able to easily access a nearby pleasant environment' or 'being able to walk alone in a secluded green space'. Importantly, Sen does not view the CA as overturning the work of Rawls. Rather, he contends that the CA 'can be seen as a natural extension of Rawls's concern with primary goods, shifting attention from goods to what goods do to human beings' (Sen, 1980: 219). As such, the CA offers scope to address issues concerning the contextual responsiveness of planning interventions arising when the abstractions of Rawlsian theory 'walk into the world' (Basta, 2016: 8). Accordingly, this paper presents and discusses a CA-informed method for determining responsive planning interventions to enhance the health and wellbeing supporting qualities of residential environments. The next section thereby outlines the CA. A brief overview of affordances theory is then provided, and an explanation is supplied as to how these can be integrated in formulating a coherent conceptual framework. The CA-informed method is then detailed. Following this, the method is applied to three exploratory case studies as a means to illustrate its advantages. The paper closes with some summary conclusions on the benefit of this approach.

2. The capability approach

The extensive publications and presentations by Sen (2001, 2005, 2009, 2013) and others closely associated with the CA (Nussbaum, 2000; Oosterlaken, 2015) may mislead one to assume that it wholly concerns poverty alleviation, development and human rights issues in the global south. However, there is conceptually or normatively no grounds to restrict the scope of the approach to such topics or these locations. Indeed, recent research has demonstrated the applicability of the CA to planning and design issues better aligned with experiences in more affluent countries (Basta, 2016; Wolff and De-Shalit, 2007). In this context, it is important to note that the CA presents a broad and flexible framework rooted in an attempt to acknowledge and respond to human diversity, rather than a precise political or moral theory of emancipation or justice (Hick and Burchardt, 2016; Qizilbash, 2012; Sen, 2002). Likewise, it is important to note that the CA is not intended as an 'explanatory' framework, as it does not seek to identify the determinants of a phenomenon. Instead, the CA furnishes a conceptual framework to

guide evaluative and normative analyses, wherein the consideration of relative values (e.g. better or worse) are used to inform prescriptive stances on what ought to be done and why (Robeyns, 2017). Specifically, 'The capability approach evaluates policies according to their impact on peoples' capabilities. It asks whether people are being healthy, and whether the means or resources necessary for this capability are present' (Robeyns, 2005: 95). From this examination, policies can be devised or revised to enhance the capability people have to be healthy. Hence, in the context of planning, 'thinking of capabilities *in* places means shifting from thinking in terms of *city* development to thinking in terms of *human* development' (Basta, 2016: 19). To realise this, the CA framework has a number of key conceptual elements. To the fore of these are 'functionings' and 'capabilities'.

As contended by Sen, 'The primary feature of well-being can be seen in terms of how a person "functions", taking the term in a broad sense.' (Sen, 1985: 197). For him,

> 'A functioning is an achievement of a person: what he or she manages to do or be. It reflects, as it were, a part of the 'state' of that person. It has to be distinguished from the commodities which are used to achieve those functionings…It has to be distinguished also from the happiness generated by the functioning…A functioning is thus different from (1) having goods (and the corresponding characteristics), to which it is posterior, and (2) having utility (in the form of happiness resulting from that functioning), to which it is, in an important way, prior. (Sen, 1999: 7)

Therefore, living in proximity to a green space is not a 'functioning', as it is not something that a person manages to do or be: it is simply the measure of a geographical relationship. In this case, a focus on 'functionings' would instead seek to evaluate the level of achievement (functioning) of a desired activity or state of being facilitated by living in proximity to a particular green space. Here we see the inversion placed by Sen on the Rawlsian focus on means-ends relationships in the distribution of 'goods'. For Sen, a focus on measuring the distribution of 'goods' risks generating a 'means-ends' policy focus (e.g. ensuring equity in proximity to green space) that masks the real benefits ('ends'/ 'functionings') that people seek from those 'goods' (e.g. birdwatching, jogging, picnicking). Sen thereby reasons that greater weight should be laid in policy formulation on identifying the contextually sensitive 'functionings' ('ends') people seek from 'goods'. On this basis, policy design should be orientated towards helping people realise these aspirations. In essence, he proposes reversing the direction of how policy is conceived from a 'means-ends' emphasis to an 'ends-means' trajectory (see Fig. 1).

Whereas functionings are the 'beings and doings' of a person (Robeyns, 2017: 91), Sen conceives somebody's 'capability' as 'the various combination of functionings that a person can achieve. Capability is thus a set of combinations of functionings, reflecting the person's freedom to lead one type of life or another' (Sen, 1992: 40). Thus, while a person's functionings and capabilities are closely related, they are viewed as conceptually distinct within the CA framework so as to assist in the development of coherent approaches to policy formulation. In this context, Sen explains that,

> A functioning is an achievement, whereas a capability is the ability to achieve. Functionings are, in a sense, more directly related to living conditions, since they are different aspects of living conditions. Capabilities, in contrast, are notions of freedom, in the positive sense: what real opportunities you have regarding the life you may lead. (Sen, 1987: 36)

Accordingly, the relationship between functionings and capabilities is one of that between outcomes and opportunities. As noted by Nussbaum, 'Functionings are beings and doings that are outgrowths or realizations of capabilities' (2011: 25). This conceptual framework allows Sen to delineate between, evaluate and prescribe policy aimed at what he terms 'well-being achievements' and 'well-being freedoms' (Sen, 1993). Specifically,

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[1] Sen dedicated one of his most famous works, *The Idea of Justice* (2009), 'In Memory of John Rawls'.