

From contest to context: urban green space and public policy

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Citation:

DOBSON, Julian (2018). From contest to context: urban green space and public policy. *People, Place and Policy Online*, 12 (2), 72-83. [Article]

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From contest to context: urban green space and public policy

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Summary

The role of urban green spaces in supporting mental and physical wellbeing is well evidenced. At a time when mental ill-health is seen as a major factor limiting the life chances of the poorest groups in society, the case for the provision and protection of natural urban environments would appear indisputable. Yet establishing direct causal links between natural environments and specific health outcomes is complex and problematic. Different green spaces contribute to experiences of wellbeing in different ways for different people. Public policies that seek to employ green space to achieve health objectives through 'interventions' or 'prescriptions' are thus fraught with difficulties. Rather than seeing green space as an instrumental factor or 'dose' in improving wellbeing, this paper, based on emerging findings from research in Sheffield, UK, argues that policymakers need to think of multifunctional natural environments as essential contexts for the promotion of wellbeing. Urban austerity, however, acts as a countervailing context-changing driver, reframing wellbeing within a narrative of public service cost control.

Keywords: Green space; wellbeing; urban austerity; valuing nature; policymaking.

'There is no wealth but life', John Ruskin famously observed. Yet life is seldom regarded as wealth in public policy. A stroll through one of the many urban parks or woodlands in British cities will reveal people enjoying life: using natural urban spaces for leisure, a sense of relaxation and restoration, physical exercise such as walking, running or cycling, or simply watching the world go by.

What value do policymakers put on such wellbeing effects? This policy commentary, informed by emerging research at the University of Sheffield, argues that the attempt to put a price on nature, and on the wellbeing effects of nature, tends to lock policymakers into a rationality of 'austerity urbanism' (Peck, 2012) in which what matters is what reduces pressure on publicly funded services. Such reasoning leads to a quest for a holy grail of austerity policymaking, a formula that conclusively proves that investing in green and natural spaces produces 'value' that can bring about real and measurable financial savings for public institutions. Such an approach, it is argued, is fundamentally misguided because it is based on a misunderstanding both of how institutions such as local government work and how the benefits of green spaces are realised.

This is not to say that researching the wellbeing effects of urban nature is unnecessary. A better understanding of how natural spaces contribute to human wellbeing can inform enhanced design and maintenance regimes, a more sensitive mix of activities and events in open spaces, and improved urban planning. It can also influence healthcare and therapeutic practices, potentially reducing reliance on more invasive interventions such as medication or surgery. To suggest, however, that such research should be used instrumentally as a tool to achieve cash savings is problematic.

This article considers the relationship between improved understandings of the wellbeing effects of natural spaces, and policy choices in the context of austerity urbanism. I briefly introduce the existing research on green space and wellbeing. I then highlight the policy dilemma (Bevir and Rhodes, 2005) in which academic knowledge finds itself situated.

In the following section I present some emerging findings from Improving Wellbeing through Urban Nature (IWUN), a three-year research project based in the city of Sheffield. Discussing these findings, I argue that policies that seek to use green spaces as an instrument for wellbeing have fallen prey to a misunderstanding of the relationship between natural spaces and good physical and mental health. Rather than generating causal chains, natural spaces provide better conditions in which humans can flourish. Policies should thus consider natural spaces as vital infrastructure generating the context for good health. I conclude with reflections on the treatment of urban natural spaces within a climate of austerity, which itself provides an overarching context-changing mechanism.

Greenspace and wellbeing: the evidence

The role of urban green spaces in supporting mental and physical wellbeing is well evidenced (Douglas et al., 2017; Pretty et al., 2005). At a time when mental ill-health is seen as a major factor limiting the life chances of the poorest groups in society and is a greater risk in highly urban areas (De Vries et al., 2003) the case for the provision, care, and increased experience of natural urban environments would appear irrefutable. Academic recognition of the therapeutic role of green spaces stretches back to Ulrich's work (1984) on the benefits to hospital patients of views of green spaces from their wards, and Kaplan and Kaplan's study (1989) on the psychologically restorative effects of natural environments. Green infrastructure provides a supporting framework for human life through the provision of ecosystem services, from soil formation to the cleansing of pollutants and the cultural values attributed to 'nature' by humans (Tzoulas et al., 2007).

Wellbeing is not simply a question of low incidences of ill-health. Policymakers have for some years been aware of the need to promote and measure the positive feelings that enable individuals to cope with and enjoy life. Work by the Scottish Government in the early years of the 21st century led to the development of the Warwick-Edinburgh Mental Wellbeing Scale (Tennant et al., 2007). The scale measures participants' responses to 14 questions about their thoughts and feelings, measured on a 1-5 Likert scale of strong agreement to strong disagreement. From this an overall score is derived from which the participant's state of wellbeing may be measured. A recent study in Australia (Wood et al., 2017) found a positive correlation between the quantity of nearby green space and participants' sense of wellbeing. For every additional park within 1.6km of participants' homes, their wellbeing scores increased by 0.11 points. Wood and colleagues concluded (p. 67) that this supported the notion of a 'dose-response relationship' between the quantity of nearby green space and feelings of

wellbeing. Such findings reflect a growing interest in quantifying and specifying the rules of practice that planners and urban designers have followed more or less intuitively for nearly two centuries in including green spaces within the urban realm.

The benefits of green spaces and natural environments for mental health and wellbeing are well evidenced, and are both general and particular. They are available to anybody in an area that chooses and is able to engage with natural environments, whether through looking at a view or choosing a greener commuting route or actively participating in the natural environment through taking exercise or gardening (Pretty et al., 2005). Roe et al. (2017) found that higher levels of green space at a neighbourhood level were associated with lower levels of stress, while a study in Auckland, New Zealand, found that better access to green space was associated with lower levels of anxiety or medical treatment for mood disorder (Nutsford et al., 2013). De Vries et al. (2003) observed that residents of lower socioeconomic groups were more sensitive to the beneficial effects of green spaces. Natural spaces have also been observed to provide healing and restorative effects for children 'under conditions of hardship and stress' (Chawla, 2014); and children exposed to 'high nature conditions' are less adversely affected by stressful life events (Wells and Evans, 2003).

Yet establishing causal links between types of green space and improved wellbeing is contentious and complex. Different green spaces contribute to experiences of wellbeing in different ways. The kind of spaces required to maximise restorative effects (Kaplan and Kaplan, 1989) are not necessarily those that provide young people with a sense of freedom and adventure (Chawla, 2014). The benefits of urban nature are also unevenly distributed (Ward Thompson and Aspinall, 2011). While Mitchell and Popham (2008) found that greater levels of green space mitigated health inequalities, deprived urban areas are also associated with reduced access to green spaces (Astell-Burt et al., 2014). The enjoyment of natural spaces may be dependent on physical fitness and ability to get out of the house; a sense of safety and security so that strangers are not perceived as threatening; and freedom from antisocial behaviour and intimidation. All of these are likely to be stronger factors in deprived areas. It may also vary significantly depending on an individual's childhood experience of natural environments (Ward Thompson, Aspinall, and Montarzino, 2008).

The quality of green space matters, too (Dempsey and Burton, 2012; Pope et al., 2018): places that are seen as neglected, blighted with litter or vandalised, can become places to be avoided rather than sites of sanctuary. In extreme circumstances, green spaces become sites of overt social conflict (Pemberton, 2017). Local and urban context is of fundamental importance. Returning to the Wood study (2017) cited earlier, the authors caution that 'clarity around the context, type and quantity of exposure' to green spaces is required (p. 68); they also acknowledge that factors such as neighbourhood crime rates may act as confounding variables.

The policy dilemma

We know, in a nutshell, that green spaces are good for us. But not all green spaces are good for us, and not all are good for all of us in the same ways. This presents a classic problem of public goods and market failure: the benefits of urban green spaces are 'externalities' in that they are not solely enjoyed by those who must pay for their provision (Choumert and Salanié, 2008). In the UK, the costs of providing and maintaining a network of natural urban spaces fall predominantly on local authorities. The benefits accrue to the population at large, but unevenly. The costs avoided through providing the service (for example, the costs of exacerbated mental or physical ill-health) are avoided by businesses that have a healthier workforce and by the National

Health Service, which would otherwise bear a greater burden in terms of healthcare demand and medical interventions. In crude policy terms, this gives rise to an argument that costs that currently fall on municipalities should be borne, at least in part, by the sectors that benefit from the provision of the service - healthcare and business. But because those benefits are realised in terms of costs avoided rather than through additional income they are difficult to quantify and predict accurately. Nobody actually knows whether worker X or patient Y would have a longer working life or require less medical intervention if amount Z is added to the local budget for parks and green spaces. In such calculations, proxies and approximations abound.

A more equitable policy framework would be one in which the costs of public goods are fairly distributed among the institutions most concerned with upkeep and that have most to gain from their provision at an appropriate geographical scale. Where there is a mismatch between institutional costs and institutional benefits, policymakers will be tempted to seek an adjustment so that the burden falls in what is perceived to be a fairer fashion. If green spaces provide demonstrable health benefits, then health agencies should foot a suitable proportion of the bill.

But to quantify what that proportion should be requires an assessment of the gains that will accrue on aggregate to a healthcare provider through the provision of well maintained natural spaces that are accessed by the population groups of most concern to health agencies: those with the highest degree of presenting physical and mental health problems. Hence the proliferation of attempts in recent years to 'value' nature through such processes as natural capital accounting (TEEB, 2010) and studies designed to capture social return on investment (Greenspace Scotland, 2013); by establishing what value is generated and who benefits from it, costs may be more accurately apportioned. But as Wild et al. (2017: 181) observe, 'surprisingly little work has been done on the relations between ... costs and benefits, and how the match or mismatch between those who bear the former and those who enjoy the latter affects the provision of green infrastructure'.

The returns on investment, moreover, are seldom cashable: they do not appear on anybody's balance sheet or provide funds that can be reinvested. For rational-choice economists, the benefits of not putting money into the kitty to pay for well cared-for green spaces are immediate and cashable, outweighing the risks of picking up the tab later because of a failure to invest. Policymakers and local decision-makers are left with a dilemma: to continue to invest in green and natural spaces in the belief that not doing so will lead to unspecified but keenly felt negatives in terms of everyday human functioning, or to reduce investment in order to focus on immediate threats to life and limb such as care of frail older people or children at risk of harm. In such circumstances investment becomes a matter of risk management, judging between different threats and the statutory sanctions and reputational threats that are attached to failure.

Policy dilemmas put the role of institutions in the spotlight (Bevir and Rhodes, 2005; Gibbs and Krueger, 2012). They expose the beliefs and traditions on which institutional actors rely, and the fissures between actors' expectations and experience. They shift the focus from the immediate problem - who pays for public goods - to the institutional and political context in which such decisions have to be made.

The institutional context: 'austerity urbanism'

The demand, explicit or implied, for a budgetary justification for investment in natural spaces raises the question of why something that is a public good - the natural and

green environment in towns and cities - must fight its corner in the public accounts arena against statutory municipal responsibilities such as child protection or refuse collection. This question highlights the role of what Peck (2012) describes as 'austerity urbanism'.

Austerity urbanism, in Peck's characterisation, is not simply the slimmed-down financial planning of municipalities in an era of fiscal restraint. His analysis highlights a political agenda, overt in the United States but dominant too in UK politics, of institutional buck-passing from the central to the local level. It involves the 'systematic dumping of risks, responsibilities, debts and deficits, to the local scale' (p. 650). Cuts must not only be made at local level, but managed locally: localities are required to take ownership of centrally imposed budgetary constraint. Hence the Hobson's choice of investing in either green spaces or child protection.

Peck observes (p. 650): 'Neoliberal austerity measures operate downwards in both social and scalar terms: they offload social and environmental externalities on cities and communities, while at the same time enforcing unflinching fiscal restraint by way of extralocal disciplines; they further incapacitate the state and the public sphere through the outsourcing, marketization and privatization of governmental services and social supports; and they concentrate both costs and burdens on those at the bottom of the social hierarchy, compounding economic marginalization with state abandonment.'

Those costs and burdens might be quantifiable in terms of providing the same, or reduced, services with fewer resources. But they are also unquantifiable in terms of the long-term effects of the incremental degradation of the local environment. A park that is poorly maintained reaches a stage where it becomes a liability to a community rather than an asset; the wellbeing effects noted by academic researchers become sources of additional stress. Spaces of sanctuary become places of fear. These changes go unnoticed because nobody bears an institutional responsibility for them: they only impact on the public domain at the point of an individual crisis (such as an acute episode of mental distress) or a collective crisis (such as an increase in violent crime).

A salient feature of austerity urbanism is the requirement to provide a compelling financial case for public investment - compelling in the sense that policymakers can be persuaded that further cash savings may be achieved. Peck describes this as a process of 'shrinking-pie resource allocation'. Such an approach favours a medicalised epistemology of nature in which natural spaces are reduced to instrumental factors in achieving health gains.

Shanahan et al (2015) typify an approach informed by health economics, arguing that work needs to be done to identify optimum 'doses' of nature in urban environments, factoring in individuals' intensity of exposure to nature, the frequency of exposure, and the duration of exposure. The authors argue that there are significant public health gains to be achieved if populations are given the right 'dose' of nature, because urban nature 'has the potential to provide an inexpensive intervention' to help address problems such as cardiovascular disease, high blood pressure and obesity. Similarly, Barton and Rogerson (2017: 81) argue that 'If greenspace were considered in the same way as a drug for mental health and well-being would be, more detailed understanding of its mechanisms would lead to optimal dosage, and knowledge of when and for whom it might work best.'

The idea of dosages, as Shanahan and colleagues indicate, appeals to those who wish to relieve the costs on healthcare institutions of conditions that are typically associated with deprived urban populations and where currently preferred treatments come at a high cost. This is not to suggest that natural environments do not have the salutogenic properties that researchers have observed, or that there is anything

inappropriate about 'green prescriptions'. Neither does it imply that the 'dose-response relationships' that have been observed in different studies for specific groups suffering from specific health conditions are immaterial. The argument here is that such approaches examine green space through the wrong end of the telescope.

By reducing urban nature to a health intervention alone, its value becomes subject to a narrow measure of cost-effectiveness for a particular population cohort when it should more properly be considered as a public good from which benefits accrue to the population at large, including those with specific health conditions who might then further benefit from appropriately targeted activities. The narrow view of medical cost-effectiveness supports a 'more for less' agenda of public service provision; the wider view of the benefits of greenspace supports a universalist perspective that asserts the value of natural spaces to the whole human population, as well as their value across the more-than-human world. Such considerations are sidelined within an austerity paradigm.

The IWUN project

Improving Wellbeing through Urban Nature is a multidisciplinary research project led by a team at the University of Sheffield, with colleagues at the University of Derby, Heriot-Watt University, Sheffield and Rotherham Wildlife Trust and the Centre for Sustainable Healthcare, funded by the Natural Environment Research Council as part of the £6.5m Valuing Nature programme. It seeks to enrich the evidence on relationships between health and wellbeing and the natural environment, and explore how urban green space can help to meet health and social care goals.

The project focuses on the city of Sheffield, the UK's fifth largest city, which has a rich heritage of green spaces but also high levels of urban deprivation. Natural environments form 70 percent of the city's land cover, including 80 public parks and 650 other green and open spaces managed by Sheffield City Council. A recent study (Vivid Economics, 2016) highlighted both the economic contribution of these parks and the dilemma of the distribution of costs and benefits. It found that benefits valued at nearly £1.3 billion accrue to public services in Sheffield (including £145 million in respect of mental health). However, the parks and green spaces cost Sheffield City Council £36 million while generating benefits to the city council of £35 million, a net loss of £1 million.

IWUN has four work packages:

- An epidemiological study to analyse the relationship between the quality, quantity and distribution of green space in Sheffield and population health and wellbeing.
- A phenomenological study to explore relationships between feeling good and the natural environment among population groups thought to be infrequent users of green space.
- A smartphone app to measure people's daily exposure to green space and its impact on their mental health.
- Detailed analysis of green space interventions likely to impact positively on mental health. These interventions were selected through a process of literature review, reflection on IWUN's research findings, and consultation with practitioner and stakeholder groups. They are the means through which research findings and recommendations might be operationalised, as informed by locally situated practice and experience.

This paper draws especially from the fourth strand of IWUN's work. From the stakeholder and practitioner consultation a range of preferred interventions emerged. Researchers began with a long list of 35 possible actions under the headings of 'making' (capital investment), 'keeping' (care and maintenance) and 'prescribing' (activities, including organised therapeutic activities, in green space). Five key priorities for practitioners and stakeholders emerged:

- Improved access to green and blue spaces, including 'green' walking and cycling connections between neighbourhoods and parks.
- New or upgraded toilets and cafes in existing parks or woodlands.
- Minimum standards for regular sustained maintenance of green spaces.
- Development workers and parks staff to encourage and facilitate a range of outdoor activities.
- Support for voluntary and community organisations that animate green spaces and provide wellbeing-enhancing activities.

The research team has explored how the links between interventions and outcomes work, and sought to identify the decision-making processes required to implement these interventions. This has been done through qualitative interviews, focus group discussions and stakeholder events over the course of 2017 and 2018.

Reflections on practitioners' priorities

The interventions chosen by practitioners and stakeholders shed light on the insights gained through years of reflective practice (Schön, 1984). What appears instinctive is informed by a practice-based understanding of 'what works' and deserves examination.

The chosen actions are notable in that they are generic in nature; they are more concerned with the animation of natural spaces rather than their provision and design; and they benefit the population at large rather than particular groups. All of these characteristics challenge the notion that nature should be applied as a 'dose' to remedy specific health conditions, although they do not rule out the inclusion of targeted health promotion within an overall context of greenspace care and improvement.

In each case, the chosen actions mediate the interaction between humans and the natural environment. Green walking and cycling connections make spaces accessible that might otherwise be off-putting because of their proximity to busy roads or distance from residential neighbourhoods. Toilets and cafes encourage longer stays in parks and woodlands, and open up access to people (for example, elderly people or young children) who might find the absence of such facilities a deterrent. Regular and thoughtful maintenance reduces the blight of litter, fly tipping and dog fouling and helps to create more aesthetically attractive environments, encouraging footfall and dwell time. Development workers and parks staff do not only deter antisocial behaviour; they also provide a supportive environment for social activities including sports and games. Similarly, specific support for local voluntary and community organisations helps to maintain the civic infrastructure that facilitates local involvement in greenspace, whether through participation in organised activities (anything from health walks to art classes) or through direct involvement in volunteering in the natural environment.

The practice-based focus on accessibility, animation and inclusion complements the insights of academic research which, while often precisely focused on particular users

and their experiences, demonstrates the wide range of benefits and beneficiaries of urban natural spaces (for an overview, see Douglas et al., 2017). This underlines that it is not the space itself or the planting alone that provides the wellbeing benefits that have been identified, but the long-term care, use, activation and negotiation of those spaces to benefit a wide range of users.

The concept of a wide but indeterminate range of benefits and beneficiaries is captured in the notion of 'affordance', the idea that natural spaces offer users the opportunity for a variety of wellbeing-enhancing activities. Affordance stresses the reciprocal relationship between the perceiver and the environment (Gibson, 1979; Heft, 1988) - a particular space will carry different meanings and support different activities for a particular individual on different occasions. All those activities and meanings are potentially beneficial, but to design a space to support only one set of activities (such as youth sports through the provision of a multi-use games area) severely limits the affordances it can offer. It is the generic that matters in health promotion, as Ward Thompson and Aspinall observe (2011: 231): 'The concept of affordance links environment and human behaviour, or opportunities for action, and is therefore of particular interest in understanding how the environment might encourage or support people to be more active - a primary goal of public health policy.'

To think in terms of affordances suggests that the multifunctionality and flexibility of natural spaces matters more in supporting policy goals such as promotion of physical and mental wellbeing than their suitability for specific interventions such as a health walk or organised sports. Such an understanding militates against a drive to apply 'doses' of the natural environment in response to specific health conditions, because it stresses the variety of subjective perceptions that contribute to physical and mental wellbeing.

Comments from participants in a focus group discussion held with voluntary sector members of the People Keeping Well partnership in Sheffield highlight the discrepancy between a broad understanding of the affordances offered by urban nature and the specific, instrumental approach that would dovetail with accounting logics and practices driven by cost-benefit calculations and concepts of return on investment.

One participant described how the data generated through a particular health-enhancing activity were rejected by potential funders because of the failure to demonstrate cash savings:

...from day one of doing that work they've got really consistent data about the impact it has on individual people's wellbeing, on how much it makes them feel good, but the reality is that's not getting them any money to carry on doing the work, it's not encouraging people to invest. We know it makes people feel good, anybody would be able to say that, and what they're being consistently asked for is data around cost savings.

Another participant highlighted the incompatible logics of people-centred service provision and cost-driven decision-making:

It goes against the way we do everything to be talking in numbers, because as a sector that's not how we work and that's not how we see the work we do, but the reality is increasingly that is what we're having to do. So for example if we were talking about green spaces and trying to talk somebody into investing in doing activities in green spaces, I think generally the angle would need to be that in the long run, this will reduce the pressure on mental health services. It's not necessarily that it improves people's wellbeing, it's that directly it will save money to mental health services.

To generate such data would require extensive clinical trials of green prescriptions that are currently not taking place. But such trials would not capture the contextual investment required in order for the green spaces to be suitable for therapeutic activities: the planting, maintenance, accessibility improvements and ancillary provision of facilities that make the difference between a natural space that supports human wellbeing and one that falls short of its potential.

From contest to context

This paper has highlighted the precedence of the generic above the specific both in creating successful green spaces and in supporting human wellbeing. It has problematised the notion that there are direct causal links between investment in therapeutic activities and savings to healthcare providers. But it has argued that the absence of evidence demonstrating such direct causal chains is no reason to forgo investment: quite the opposite.

At the heart of this argument lies a challenge to the instrumental rationality that determines decisions about much public investment. For financial decision makers it would be more appropriate to think of natural spaces as infrastructure - not simply the green infrastructure required for biodiversity and healthy ecosystems, but also the civic infrastructure that makes the difference between a good place to live and one that exacerbates the problems and stresses of urban life. An infrastructure approach aligns with the understanding that natural spaces afford their users a varying but extensive range of potential benefits, each of which can be enhanced through thoughtful investment and continuing care. In this context, the interventions singled out by participants in our research should not be considered in isolation; rather they are 'gateway' actions that in themselves facilitate a wide range of secondary interventions (a café, for example, might also be a meeting point after a health walk or a venue for a nature-focused art class).

These interventions do not achieve specific policy goals. Rather, they promote a more favourable context in which policy goals may be achievable. Pawson and Tilley (1997) stress that in complex policy environments, the links between actions and outcomes is indirect: interventions are mechanisms that change the context, but outcomes may be influenced by a host of other variables that cannot be removed from the equation in real-world situations.

Pawson and Tilley's obvious, but regularly ignored, insight is that any intervention in the social world is highly contingent. Something may 'work' for one group in one set of circumstances and not for an identical group in different circumstances, or a different group in identical circumstances. This gives rise to two axioms of research (pages 75 and 77):

1. Research has to answer the questions: what are the mechanisms for change triggered by a program and how do they counteract the existing social processes?
2. Research has to answer the questions: what are the social and cultural conditions necessary for change mechanisms to operate and how are they distributed within and between program contexts?

This approach, which the authors describe as 'realistic evaluation', opposes the idea that effective policy interventions must be seen to pay their way in a contest against alternative policies and programmes. Instead, research must search for a cumulative understanding of how and in what circumstances change occurs. In the case of the urban natural environment, which natural spaces in urban locations work in

what ways for whom, in what circumstances, and over what period of time? Practitioners' support in our own research for interventions that are generic, access-enhancing, inclusive and facilitative highlights their insight that change is not linear but fluid and wellbeing is supported better through an improved context than through targeted and time-limited programmes.

A further factor needs to be stressed more explicitly. A programme or intervention is not the only context-changing mechanism at work at any given time. At the current juncture, and as a backdrop to the IWUN research, the denuding of public services through a sustained programme of fiscal austerity imposed by central government acts as a powerful and overarching context-changing mechanism, shaping not only the provision and character of public services and facilities but also the rationalities of the officials and citizens involved in their provision.

These rationalities are shaped by logics of appropriateness (March and Olsen, 1989; Thornton, Ocasio, and Lounsbury, 2012) within which institutionally-situated actors undertake their daily tasks and make sense of the world. Such organisational sensemaking (Weick, 1995) overrides the evidence of specific projects and programmes. It also leads to an epistemological pecking order, as one focus group participant explained:

...there's a huge hierarchy within health, social care, CVS [Community and voluntary sector]. Health's right at the top, social workers are a bit lower and we're at the bottom, aren't we?

In short, austerity urbanism itself is a context-changing mechanism that directly undermines action to improve wellbeing for the populace as a whole through investment in the natural infrastructure of urban areas. To proceed in a quest to demonstrate the value of specific greenspace actions without acknowledging the countervailing effects of austerity as a context-changing factor is to pursue a chimera.

It is the everyday infrastructure of well-maintained parks, public transportation, footpaths and cycle routes, public toilets and places to sit and relax in green and natural spaces that turns a city from a segregated space to a shared space. Yet it is precisely this infrastructure that is at risk when austerity policies shrink public services to a clutch of 'life and limb' statutory obligations.

Wellbeing - with its complex causal pathways, high dependence on subjective experience and perception, and interrelationships with a host of environmental and contextual factors - is at the back of the queue when it comes to investment (as opposed to reactive spending). While austerity urbanism demands resilient, capable communities to soak up the pressures it multiplies, it also consistently erodes the foundations for such resilience (Platts-Fowler and Robinson, 2013). A cared-for, activated and animated natural environment is simultaneously the most visible and least noticed of these foundations.

The IWUN project is supported by the Natural Environment Research Council, ESRC, BBSRC, AHRC and Defra [NERC grant NE/N013565/1]. The author is grateful to Nicola Dempsey for comments on an earlier draft of this paper.

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