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Towards Transformative Practice Frameworks: Planners, Professional Agency and Sustainable Urbanism

Editors

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Table of Contents

Identities as Enabling Conditions of Sustainability Practices in Urban Planning: A Critical Realist Exploration with Planners in England
Niamh Murtagh, Nezhapi-Dellé Odeleye and Chris Maidment 86–97

Community Resistance and Discretionary Strategies in Planning Sustainable Development: The Case of Colorado Cities
William L. Swann, Shelley McMullen, Dan Graeve and Serena Kim 98–110

Planners between the Chairs: How Planners (Do Not) Adapt to Transformative Practices
Frank Othengrafen and Meike Levin-Keitel 111–125

Playing for the Future: Using Codesign Games to Explore Alternative Sanitation Systems in London
Tse-Hui Teh 126–138

De-Colonising Planning Education? Exploring the Geographies of Urban Planning Education Networks
Julia Wesely and Adriana Allen 139–151

Urban Planning (ISSN: 2183–7635)
2019, Volume 4, Issue 4, Pages 86–97
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Article

Identities as Enabling Conditions of Sustainability Practices in Urban Planning: A Critical Realist Exploration with Planners in England

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Abstract
The case has been made in reports of the Intergovernmental Panel on Climate Change for the crucial role of the built environment in mitigating the worst excesses of a warming global climate. Urban planners are essential actors in delivering a sustainable built environment. Alongside macro influences such as policy, practices in urban planning are influenced by underlying mechanisms at the level of the individual. Adopting a Bhaskarian critical realist approach, in this study we examined enabling conditions of sustainability practices. Semi-structured interviews were conducted with 19 planners in England with at least seven years' experience. The analysis found evidence from the planners' experience of tensions between the three strands of sustainability, and of practices which could be understood from theoretical perspectives of collaboration/consensus, dissensus and pursuit of specific outcomes. A professional commitment towards a better environment appeared to be a generative mechanism for sustainability practices and underlying conditions included professional identity, identity as a public sector worker, organisational and team identities, and personal commitment. Constraining conditions were found to include stakeholder and political pressure and weak policy. The findings suggest points of leverage for the professional body, local authorities and planners themselves, in order to strengthen sustainability practices and potentially lead to transformation.

Keywords
built environment; climate change; critical realism; identities; professional identity; sustainability; urban planners

Issue
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1. Introduction

Climate breakdown, predicted by environmental scientists over the past 40 years, is increasingly permeating public consciousness. Friday strikes by schoolchildren around the world and a growing campaign of civil disobedience have been widely covered in the UK media. These campaigns are united in their objective of far greater policy intervention on greenhouse gas emissions and biodiversity.

Unlike other sectors with weak environmental regulation, such as aviation and shipping, the legislation called for by civil campaigns is—in part—already in place for the built environment. The built environment has major impacts on the natural world (IPCC, 2014). Greenhouse gas emissions are created in the manufacture and delivery

of construction materials, particularly cement and steel. In operation, buildings consume an estimated 40% of energy globally (IPCC, 2014). In addition to contributing to global warming, the built environment is a major factor in pushing conditions beyond another planetary boundary, that of biodiversity loss (Rockström et al., 2009).

In the face of these consequences, there is a clear argument that the pursuit of environmental sustainability is fundamental to the idea of urban planning as "fundamentally about making choices, with and for others, about what makes good places" (Campbell, 2002, p. 274). To this end, the National Planning Policy Framework (NPPF), introduced in England in 2012, describes itself as having a "golden thread" of sustainable development running through it. However, outside of specimen developments with strong sustainability credentials, there is little evidence that recent planning legislation has succeeded in achieving a widespread sustainable built environment. Despite the rhetoric of declaring its goal to be "the greenest government ever" (Cameron, 2010), the UK Coalition Government of 2010 subsequently removed the previous government's target for new homes to be zero-energy from 2016. Nevertheless, the NPPF remains the current policy framework for planning in England: It was revised in July 2018 with further amendments in February 2019.

Policies are enacted through an ecosystem of actors and institutions. Lipsky (2010) argued that policy regulation is created in the day-to-day practices of what he termed "street-level bureaucrats," that is, public service workers whose role it is to administer and conduct the processes through which policy is realised. Consequently, the current study sought to examine the role of the urban planner as one such 'bureaucrat' of substantial importance to a more sustainable built environment. The context in which the planner in England operates is now briefly described. We then move on to previous research on the central construct for the current study, that of identities, before describing our philosophical and epistemological position in the Method section.

1.1. The Professional Urban Planner in the English Planning System

In England, the regulatory and policy functions of urban planning remain primarily the responsibility of local government. Local authorities gather evidence to develop local policy and framework plans in compliance with national policy and legislation, and manage their implementation. Planners working for the local authority offer guidance on policy and provide judgement on applications for development. While they have delegated powers to decide on typically small developments, their work is set within a wider context of local planning committees comprised of elected officials and the Planning Inspectorate which oversees appeals against planning judgements. The Royal Town Planning Institute (RTPI) grants the professional qualification of Chartered Town Planner. To attain this status, planners are required to complete an accredited, planning-related postgraduate degree and to have achieved relevant experience. The RTPI considers sustainability as a key aspect of an accredited planning education, specifically identifying the relationship between climate change and the built environment as something that planners should be able to explain (RTPI, 2012). The RTPI also requires its chartered members to continue to update their knowledge through systematic and recorded continuing professional development.

1.2. The Role of Identities

Lipsky's notion of the "street-level bureaucrat" draws attention to the role of individuals within regulatory systems. From a sociological perspective, the urban planner administering the processes which enact policy and legislation exemplifies the individual agent operating within societal structures. As Archer (2003) argued, social agency mediates the causal power of social structures—the individual may reflect on his/her position and may choose different stances in relation to the prevailing societal forms. Consequently the motivation of the individual planner can affect their behaviour and, in turn, the outcomes of planning practices in which they are involved.

A particularly influential aspect of motivation is that of self-identity. Within the self, individuals manage a hierarchy of multiple social identities, such as employee, professional, parent or environmentalist (Stryker, 1987). In the working environment, the professional identity is likely to be most salient (Stryker, 1987). Individuals will tend to act in a manner that aligns with their professional identity, in order to lay claim to a potentially valued identity and to express who they are (Marra & Angouri, 2011) and to fit in and be accepted by society, that is, by the Lacanian 'Other' (Gunder & Hillier, 2004). Conceptually, the professional identity overlaps with the "planner's ego-ideal," described as developing during education and in the course of experience of work (Gunder, 2004). Scholars in social psychology have long examined the processes of the self (Mead, 1934) and an interest in identities in organisational studies has been mapped from the 1990s (Koot & Ybema, 2000). Where Koot and Ybema (2000) argued that, in post-traditional society, the old certainties were gone, leaving identities as continuously evolving personal projects, Stryker and Burke (2000) and others have viewed the internalisation of social roles, and their assimilation into the self-concept, as the foundations of identities. Whether seen as actively pursued personal projects or as subjectively assimilated roles, identities are viewed as guiding meaning, cognition and behaviour.

Writers on the subject of professions have listed attributes of a profession, including: a representative body which accredits qualifications and determines membership; an agreed code of conduct; a specialised body of knowledge; and complex or specialised work, typically

with exclusive jurisdiction. The role of urban planner to a large degree meets the definition of a profession by Evetts (2011) and others. However, much previous work on the concept of the profession, such as Abbott's (1988) "system of professions," has been sociological in approach, exploring how 'professions' have developed in societies over time. Less attention has been paid to the lived experience of the identities of the professional and few studies have considered built environment professionals. Addressing the gap, in part, Foxell (2019) focused on three professional groupings in the built environment (architect, engineer, surveyor), describing their institutional history and current challenges and, in one of the small number of studies on professionalism in planning, Campbell and Marshall (2002) usefully explored specific aspects of professional experience. However, there is little work to our knowledge which examines, in particular, identity-congruent behaviour relating to the sustainable built environment. Our research question was: How do planners' identities influence their work on sustainability? We began with a particular focus on the professional identity, given its salience in the work context.

1.3. Public Interest and Sustainability in Planning Theories

The notion of sustainability is linked in planning theory with that of public interest, both contested concepts. Foxell (2019) documented the long-standing assumption that professionals, including those in the built environment, should work in the public interest. Although urban planning continues to be defined as having the public interest at its core (Slade, Gunn, & Schoneboom, 2018), the concept has been shown to be problematic in its assumption of a single, homogenous public (Sandercock, 1998), a problematisation reflected in the wider evolution of planning theory.

The post-1960s move away from understanding planning as a technical-rational process, based on technical evidence, toward understanding planning as value-led, where decisions are inherently subjective in nature, has strongly disrupted the traditional idea of the professional as knowledge-wielding 'expert.' In the absence of a specialised body of knowledge, it has disrupted too the planner's claim to a profession. In this paradigm, the positioning of sustainability as fundamental to better places underpins the argument that the pursuit of sustainability should be a key value, forming a fundamental part of the planner's professional identity. However, Campbell's (2002) use of the words "with and for others" hint at a key tension in how contrasting approaches in planning theory envisage this being achieved in practice.

Several key strands of contemporary planning theory seek to understand the agency of the professional planner, strands that are commonly taught as part of a planning education. Arguably the crucial distinction between them is in how they position the professional judgement of the planner in relation to the roles of other stakeholders, including the wider public, with consequences for how they operationalise sustainability. On the one hand, collaborative planning (Healey, 2006) is representative of a communicative approach, where decisions are a matter of consensus reached by multiple stakeholders, rather than the 'expert' judgement of the planner. Similarly concerned with the role of dialogue is an agonistic approach, addressing concerns that a communicative focus on consensus may cause participants to hide their true interests (McClymont, 2011). In an agonistic approach, participants are adversaries with conflicting interests (Mouffe, 2005), leading instead to dissensus. However, the logic behind collaborative planning is that the decision is based on consensus, so that there is no space for a judgement to be made about whether the outcome of the decision is truly sustainable.

Conversely, other theories of planning maintain a focus on the idea that planning should pursue substantive outcomes. This is encompassed in Fainstein's (2010) approach, setting out key principles such as equity and diversity that underpin the "just city," which may be positioned as the substantive outcomes that sustainable planning should strive to achieve. Superficially, such an approach appears reminiscent of the traditional model of the expert. However, this is not intended to return to the fallacy that planning is a technical matter, but, instead, defines the role of the professional planner to make judgements, such that it becomes the role of the planner to use the mechanisms at their disposal to influence sustainability much more directly. Understanding planning as value-led means that no one theoretical approach can automatically be privileged over the other, and an analysis of how the professional identity of planners is practiced in relation to sustainability might expect to find elements of each.

Exploring how these theoretical tensions play out in relation to the public interest, Maidment (2016) draws on the typology proposed by Campbell and Marshall (2000), which positions the public interest as either substantive outcomes that constitute a common good, as exemplified in Fainstein's (2010) *The Just City*, or as arrived at through a dialogical approach, as exemplified by collaborative planning (Healey, 2006). Maidment's argument is for the importance of the common good based on a set of fundamental values shared by a notional public at scale, within which the interests of more localised publics can be accommodated. That is, some common values and interests may be attributed to a large and heterogeneous public, representing also the values of those who cannot articulate their own interests (such as future generations and non-human living organisms). The common good, therefore, describes, inter alia, reduction of greenhouse gas emissions to mitigate climate change and other forms of sustainable development (Maidment, 2016). This is the concept of common good which will be used in this article. While the literature has debated the difficulties of defining what is meant by sustainable development (Rittel & Webber, 1973), the NPPF (2012, p. 8)

references five principles, including living within planetary environmental limits and a fair and healthy society and, with minor changes of wording, these principles remain unchanged in the 2019 version.

In this section, we have outlined the global importance of sustainable development, the regulatory context in which planners in England work, and provided a brief overview of previous work on theoretical perspectives on identities, public interest and sustainability. A gap has been identified on the identity-driven motivations and behaviours of planning professionals. In the next section, we set out our research philosophy and method.

2. Method

2.1. Research Philosophy

Underlying pre-suppositions guide any approach to research, even if these remain unexamined. Such assumptions include questions of ontology, epistemology and methodology. Critical realism (CR) offers a meta-theory of scientific research which makes explicit its philosophical stance on what is real, what can be known and what can be observed. In seeking to examine factors influencing sustainable practice in the current study, and adopting a post-positivist approach (Allmendinger & Tewdwr-Jones, 2002), CR offered a rigorous and logical framework that is appropriate to the subject matter. Of the sometimes contending schools within CR, developed over the last 50 years, our approach was guided by that of its leading exponent, Roy Bhaskar, and by the later refinements of Margaret Archer. The essential features are now briefly outlined.

CR posits human society as an open system in which observable events are engendered by underlying and enduring structures. Due to the non-deterministic nature of open systems, prediction is not possible (Bhaskar, 1998). However, explanation of the generative mechanisms and associated conditions of events is not only valuable but in fact essential in order to achieve change (Bhaskar, 1998). Generative mechanisms and causal powers may be uncovered through research aimed at identifying factors without which events could not take place—the notion of natural necessity (Bhaskar, 2015)—and such mechanisms may become the new phenomena to be explained (Bhaskar, 1998). CR proposes a stratified reality (Porporo, 2015) comprising three conceptual domains: the domain of the real—existing independently of human society; the domain of the actual—where events occur of which people may (or may not) become aware; and the domain of the empirical—data on events which may be observed or gathered. Thus empirical research has access only to data which are distinguished from the events giving rise to them. The events are generated by mechanisms and conditions within the domain of the real which are the ultimate focus of useful research (Collier, 1994). CR research offers "a non-arbitrary procedure for arriving at (fallible and iteratively corrigible) real definitions of forms of social life" (Porporo, 2015, p. 162).

The non-deterministic nature of open systems is summarised by Bhaskar (1998, p. xii): "Generative mechanisms...may be possessed unexercised, exercised unactualized, and actualized undetected or unperceived." Whether generative mechanisms do indeed give rise to actual events depends on contextual conditions, termed "constraints" and "enablements" by Archer (2003). Conditions do not exist in isolation, rather they are potential causal powers arising from structural and cultural emergent properties (Archer (2003). They are wholly contingent upon their setting, that is, they may or may not exist as potential influences, and if they exist, they may or may not impact on generative mechanisms to cause events, in any particular context. To examine the conditions which could exist is to add to knowledge of the underlying processes through which events may occur. Further, knowledge of particular conditions may suggest routes through which conditions may be altered, bringing the potential for changing observed events. CR's fundamental embrace of uncertainty acknowledges that intervention on conditions cannot bring certainty in changing outcomes but the approach argues that change and indeed transformation in society cannot happen without understanding of the underlying causal powers (Porporo, 2015).

By rejecting perspectives which reduce the person to practice, habitus or discourse, CR positions people as conscious and feeling actors (Porporo, 2015), a perspective which accords with our argument above for the critical agentic role of planners in realisation of policy. Further, the theoretical pluralism of CR is compatible with exploring value-led approaches to planning that might be manifested through dialogical and/or substantive-outcome focussed modes of planning.

2.2. Procedure

We conducted semi-structured interviews with 19 practicing town planners in England, each of whom had at least seven years' experience. Ethical approval was gained before data collection. The participants were recruited through communications with alumni of accredited programmes in planning at the authors' institutions, and through the authors' professional networks. Participants' experience ranged from seven to 19 years. Eight were women and 18 worked in local authorities. Job titles included Senior Planning Officer or equivalent (4), Principal Planning Officer (5) and Planning Manager (5). All but one worked in local authorities. Four participants worked primarily in development management (control), seven worked in policy and six combined both (this categorisation was not applicable for two participants). Interviews, lasting on average one hour, were audio recorded with permission and transcribed verbatim. Nine interviews were conducted by the first author and ten by the third author based on the same

interview schedule. The interviews included questions on: career to date; perceptions of planning as a profession and of current planning policy; and the concept of sustainable planning. First, thematic analysis was conducted (Braun & Clarke, 2006) using Nvivo Pro 12, in which extracts referring to professionalism and to sustainability were coded. Where appropriate, causal powers or conditions were identified. Second, in order to examine salient conditions in greater detail, we chose two cases to explore in more depth, one with a planner who worked on policy and the other with a planner who worked in Development Management. Only two were chosen in order to balance depth, breadth, and traceability. Following the approach of Naess and Jensen (2002), we then took two sample 'events,' in CR terminology, and attempted to map the generative mechanisms and conditions which may impact them. All names below are pseudonyms to protect confidentiality.

3. Findings

3.1. Meanings of Sustainability

The participants in general understood sustainability to encompass environmental, social and economic aspects and described the challenges in seeking outcomes that satisfied all three dimensions. However there was recognition that a balanced outcome may be an ideal and in reality, there may be pressure to achieve housing or other targets. The following quotation alludes to not only mutually exclusive goals (here: economic versus environmental objectives) but also a "political" pressure:

> I suppose you've always got the political angle as well, [that] is that something might not be in the best location, say, environmentally. But if it brings a lot of jobs then….You know, it's a tricky one. (Anne)

In CR terms, this would suggest that political focus or pressure is a condition influencing the interpretation of policy. Given the context in which elected public representatives, most of whom are aligned with national political parties, form the planning committees which decide on large proposed developments, it is to be expected that party politics and local power struggles will influence outcomes. This is the setting which planners must navigate.

Examples were given of sustainability objectives in the realm of transport, local economy and biodiversity. However, many of the participants questioned the usefulness of the term that has come to be seen as "a form of tokenism…a buzzword" (Gail):

> It's so elastic that it can mean anything to anyone….I would never do this, but you could almost write a committee report…and find and replace 'sustainable' with 'good,' and it wouldn't actually make much difference, because that's how watered down the definition of sustainable has become. (Kevin)

This lack of detail and precision in the term was linked to the view of the core national policy document (the NPPF) as not useful, despite its stated objective of placing sustainable development as a core construct. The vagueness of critical concepts meant "it's a lawyer's dream, because there's just so much you can interpret and fight the meaning of" (Fliss). A further condition therefore may be the precision and defensibility of written legislation. This quotation also references the "fight" described in many of the interviews, with dissenting views on planners' judgements from developers, the general public, local elected members and even other parts of the local authority.

Despite their dependence on inadequate policy, many of the participants saw planners as jointly responsible for the achievement of sustainable development. Planners were not seen as solely responsible: When asked who they viewed as responsible for delivering a sustainable built environment, the interviewees referred not only to central government but also to local government, council partners and specialist advisers such as Highways England. A few argued that everyone involved in the built environment shared responsibility, from citizens submitting a request for planning, to developers and advisers.

The view that planners had an important role in achieving sustainability was echoed in the sense from many of the participants of a personal commitment to protecting the environment. For example, Neil said: "as a personal thing, I have massive ambition to deliver the next Hampstead Heath." Many others spoke of a personal drive to "leave everything in a better state than [they] found it" (Gail). This illustrates how personal motivation and commitment may drive professional decisions. Personal commitment, then, may operate as a condition enabling sustainable practice.

3.2. Meanings of Profession

Almost all participants were unequivocal in their view that planning is a profession, "definitely a profession—absolutely" (Heidi). Their view was based in part on the characteristics of professions cited in the literature (Evetts, 2011). All referred to the requirement for a relevant degree. Most mentioned membership of a professional body, although interestingly not all were members themselves. Many of the participants described their profession as rewarding and fulfilling, particularly in its breadth, variety and multidisciplinary nature. One point of departure from previous definitions of profession was on a specialised body of knowledge. Rather than a profession-specific set of knowledge, the participants emphasised their role as integrators of knowledge from multiple sources: "We have to have that broader awareness of a whole range of issues, from sustainable drainage through to residual land values for the development of land. So, it is a very broad area" (Rob). The planners' contribution was described as that of moving

between micro-level detail and macro-level strategy at a place-wide level and there was a general view that this ability was uniquely that of the planner. This may be seen as a claim for unique skills, perhaps substituting for a jurisdictional claim for a specialised body of knowledge.

One theme common to all participants was that of shared professional values and principles, in particular, transparency, openness and fairness. While a few participants noted that, in reality, objectivity and independence are not always achievable, most described independent judgement as an essential characteristic of the planning professional: "I do not think that planners think in a way that the NPPF wants us to think. I think we are too independently minded and too professional to be influenced in that way" (Harry).

3.3. Professional and Other Identities

This quotation also shows the shared identity of the planner: The legislation (in the form of the NPPF) is positioned as expecting a particular approach but "we," "planners" are not to be influenced due to a neutral stance inherent in their sense of professionalism. The common identity was referred to in many accounts: "There's a recognition amongst planners that we're all in the same boat together, particularly in the public sector'' (Jack).

Jack's quote demonstrated multiple salient identities—that of planner but also that of public sector worker, and these multiple identities were in evidence in other accounts: "I see myself as a public sector, a public servant first and a planner second" (Harry). This speaks to the theoretical understanding of identities as multiple and arranged in a rank order of salience (Stryker, 1987). Further, there was plentiful evidence of a sense of individualised professional identity. Participants used phrases such as "I, actually, as a planner" (Beth) and "my duty, as a professional planner" (Rob), providing evidence for the internalisation of the professional identity.

Aligned with and part of their professional identity as a planner, most participants described a sense of purpose related to contributing to society. They referred to their influence on the happiness and well-being that people can experience in their lives and work. Most participants phrased such concepts in terms of public good or community betterment: "There's a sense of your professional principles as well in terms of is what you're doing ultimately going to be for the public benefit" (Jack). This professional motivation often appeared closely associated with the sense of personal commitment discussed above, exemplifying the theoretical understanding of role identities as internalised through assimilation with the self-concept. Identities then—as professional planner and as public sector employee—may form enabling conditions for sustainable practice.

3.4. Critical Realist Analysis of Two Cases and Two Events

As described in Section 2.2, we attempted to map the generative mechanisms and influencing conditions for two cases (one policy planner and one development management planner) and two events:

- Inclusion of an environmental requirement in a local plan or policy;
- Determination of a planning application which imposes a requirement to take action to protect or enhance the environment.

Table 1 presents the events and an initial set of generative mechanisms and conditions, illustrating a number of the points made above and extending the list of conditions. For reasons of focus and space, only the conditions and supporting evidence for one mechanism in each case are presented in detail.

The first event is the inclusion of an environmental requirement in a local plan or policy:

- Generative mechanisms which may impact positively or negatively on this event include national legislation, other local policies, the requirement of the local authority to produce such a plan or policy and the actions of the planning team in its production. We propose that a further generative mechanism is a planner's professional commitment to improvement of the physical and natural environment, a "professionally correct belief" (Gunder & Hillier, 2004);
- Amongst the conditions which act as constraints and enablements are professional identity, personal commitment and other identities. Each may vary in strength and hinder or enhance the generative mechanism depending on context;
- The illustrative quotations for professional identity in Table 1 show an alignment between personal motivation and the choice of profession (a), a perceived professional norm of seeking a better world (b) and motivated action to improve the natural environment (c). Gail positions herself within the grouping of professional planners in extract (d) and explicitly notes her personal commitment (e). The participants in general agreed that planning is a team activity without individual 'stars' and many responses showed an identification with the work team, illustrated by (f). Beyond professional and team identities, participants showed stronger or weaker identification with their employer organisation. While Gail in extract (g) appears to identify as a local authority employee, she also sees the planning team as being outsiders (h);

Table 1. Critical realist analysis of conditions underlying professional commitment to improvement.

Generative Mechanism	Condition	Supporting Evidence
Event 1: Environmental requirement included in local plan/policy (all supporting quotations from Gail, working in planning policy).		
National legislation Local policy Requirement to produce plan/policy Planning team drafts plan/policy		
Professional commitment to "make the world a better place"	Profession identity	(a) I think socially, I knew I wanted to try and make things better, if you know what I mean? So, that was really what drew me to planning in the first place.
		(b) Most people I know who have been successful as planners all share certain characteristics..., and oh, it sounds really hippyish, but make the world a better place.
		(c) There are other things we look to do as well. I mean, air quality, that's a big one …But, I think with that, it's very, very airy-fairy….So, one of the ways we thought we'll deal with it was, "Well, we have to provide mitigation. We can make sure that we include trees as part of our mitigation."
	Personal commitment	(d) They go into planning because they want to make things better than they found them, whether that's environmentally or socially. I think I've got a bit of that in me.
		(e) I do obviously care about the environment.
	Team identity	(f) I'd say we're a small team.…I would say things like our involvement in trying to get funding for things….So, that's probably been where we've had most influence in terms of trying to get things done, whether it's simple things like cycle lanes, cycle schemes …working with other authorities to do joint working for mitigation.
	Organisational identity	(g) You have to be quite dogged, I think, to be a planner, because you are so often, especially in the local authority, you're so often on the end of abuse from one party or another, even your own local members, members of the public.
		(h) We still, as planners…we still get the same sort of opposition that we get from members of the public sometimes, from in the authority itself. So, whilst they're happy to put us through the education, they still sometimes see us as a barrier.
	Level of autonomy/authority	(i) I don't see that we're anything other than hierarchical. That said, things get delegated…I would say [applying own judgement] fits within the hierarchy.

Table 1. (Cont.) Critical realist analysis of conditions underlying professional commitment to improvement.

Generative Mechanism	Condition	Supporting Evidence
Event 2: Determination of application which demands environmental action (all supporting quotations from Ella, working in development management).		
National legislation Local policy Requirement to determine applications Determination completed and signed off		
Professional commitment to "make the world a better place"	Professional identity	(j) The fact that you do need to be educated, and you need certain qualifications, makes it a profession to me. I'm a member of the RTPI as well, so that makes me feel a bit more like I'm part of some kind of profession. Not that I feel that I get that much out of that, but it makes me feel like I'm signed up to a profession rather than just a job….There's nothing that I can think of specifically that's made me think that [education or experience has contributed to the feeling of profession].
		(k) We don't want to not allow people to stay in their houses and extend to meet their needs, but we've got to protect the built environment. We've got to do our job.
		(l) Sometimes I think as a DM officer you have to accept that you may have a personal opinion on something, but you have to make the decision based on policy, upon experience, other decisions being made locally, and appeals as well.…Like with the barn conversions….Morally, in principle, I think it's wrong, but the point is I have to make decisions in accordance with policy.
	Personal commitment	(m) The decisions I make I think about the consequences, because I'm a local resident, and because I just care, and because I'm going to see the consequences.
	Public sector worker identity	(n) [*For you as a professional, what values are important in what you do?*] To me, bearing in mind I've always worked in the public sector, certain morals are trying to achieve what's best for the built environment and the community.
		(o) I suppose as a DM officer I'm very much struggling with that. How can we protect the green belt, how can we achieve sustainable development, when the NPPF allows so much in the green belt?
	Team identity	(p) So we've certainly had [NPPF] in mind, and tried to use it to prevent unsustainable development and protect rural land in recent years.
	Organisational identity	(q) In terms of the details of what's been built, then yes, I think I and we as an authority can influence and do influence a lot on what's built, but it's only a certain amount.
	Level of autonomy/authority	(r) Each week maybe 15 to 20 planning applications will come to me to then sign off and make that final decision on.

- A final condition which appears salient to the exercise of professional commitment is that of the level of authority or autonomy available to a planner, illustrated in extract (i).

The second event is the determination of a planning application which imposes a requirement to take action to protect or enhance the environment.

- Generative mechanisms which impact positively or negatively on this event include national legislation, local policies, the requirement of the local authority to determine a planning application and the actions of the planning team to make and sign off the decision. We propose that a further generative mechanism is a planner's professional commitment to improvement of the physical and natural environment;
- Many of the same conditions as for Event 1 apply. Ella demonstrated an understanding of profession in line with definitions in the literature (Foxell, 2019) although she appeared to have a somewhat ambivalent perception of the profession in extract (j). Here she appeared to contradict the expectation that education and early career shape professional identities (Gunder & Hillier, 2004). Nevertheless, she implied a robust relationship between the role of the planner and protecting the built environment in (k). In (l), she described an ongoing tension between personal morals and the requirement for a planner to decide based on policy, which speaks to the argument of McClymont (2011) that professional behaviour requires hiding personal interests;
- Her use of the term "DM officer" could reference a planner identity but could also relate to an identity as a public sector worker. This latter identity is clear in extracts (n) and (o), in which she specifically discusses objectives around protection of the built and natural environment. References to team and organisational identities are made in extracts (p) and (q), and in (r), her role in taking decisions on cases and signing off on the decisions of more junior planners is described.

4. Discussion

The findings presented the analysis of 19 interviews with planners in England, exploring the themes of sustainability and professional identity, and examining enabling conditions of sustainability practices.

The participants' accounts showed universal awareness of the ubiquitous definition of sustainability as requiring a balance between the 'triple bottom line' of environmental, social and economic sustainability. The participants also described their experience of the dynamic tensions inherent in the triad, as recognised by Campbell (1996). They further highlighted the shifting and contested meanings of sustainability, speaking to the Lacanian notion of sustainability as a 'master signifier,' a term requiring no further thought while serving as a 'professionally correct' belief with normative implications (Gunder & Hillier, 2004). Many of the participants positioned planners as sharing joint responsibility for delivery of a more sustainable built environment with other actors including developers, specialist advisers and the general public, but accepted accountability for part of the process, a finding which echoes that of Campbell and Marshall (2002). Thus the agents of change towards sustainability potentially include these actors, alongside social and cultural structures including government, local authorities, the planning system and the planning profession.

In their description of everyday work and sustainability, the planners' responses could be seen to illustrate several theoretical perspectives. Seeking consensus with numerous stakeholders speaks to a communicative/collaborative approach. References to battles with stakeholders speaks to dissensus (Gunder, 2003) and references to requirements for trees and cycle schemes speaks to pursuit of specific outcomes. The evidence points to the salience not of a binary, 'either-or' theoretical stance, but of the relevance of a 'both-and': planning practice as collaborative, incorporating consensus and dissensus, and also aimed at specific outcomes. CR's theoretical pluralism accommodates such diversity, arguing for appropriateness and specificity of theory and method to the research question.

The examination in detail through CR-informed analysis of professional commitment showed a complex set of factors which influence sustainable outcomes in planning, in many ways reflecting the ongoing tension between strands of planning theory. Our initial focus on professional identity led to a more nuanced and interrelated set of conditions. We found identities beyond the professional which had the potential to influence sustainable outcomes. We noted a personal commitment to improving physical, social and natural environments, in some cases acting as a motivation to become a planner. While we expected a strong identity as a planner, we found instead that a number of participants more readily described themselves as DM, local authority or planning 'officers,' and they grounded rationale for motivations for improvement on this identity. Relatively little work has explored the public sector worker identity, particularly in the UK after almost a decade of policy aimed at reducing the resourcing of local government. For some but not all participants, this additionally overlapped with an organisational identity—seeing themselves not just as planning officers but also as representing their employer. This stands in contrast to previous work on professional identity in the built environment which has documented tensions between professional and organisational identities (Foxell, 2019; Janda & Killip, 2013). Finally, there was a strong sense of a team identity in the accounts. The identities were overlapping and it was not always

possible to isolate professional identity, consistent with Stryker and Burke's (2000) identity theory. A CR explanation would suggest that sustainable outcomes are more likely to occur when a strong professional, local authority, team and organisational identity and personal commitment which share a commitment to improving the physical and natural environment co-occur. Conversely, where one or more of these identities are weak, or are not motivated to achieve better spaces, sustainable outcomes are less probable. The CR layered structure sets such understanding in the context of other generative mechanisms including national and local policies and processes of planning, each of which also have multiple constraining or enhancing conditions. Thus it can be argued that professional identity, identity as a public sector worker and other identities, are potentially influencing factors on sustainability in planning while not claiming that this list is comprehensive or deterministic in its effect.

While identities which align with sustainability goals may operate as Archer's "enablements," conditions may also act as constraints. The participants referred to policy pressures such as the current focus on housing, but also to political pressures. This was understood to refer to the institutional context of planning committees comprised of elected representatives, as well as the requirement to comply with government policy and direction. It is possible that the political pressures also encompass the multiple stakeholders involved in the planning system who will have varying access to resources and power. The participants referred to many of these stakeholders in their response to questioning on where responsibility lay for greater sustainability. A number of participants had talked about joint responsibility and this can be seen as reflecting the theoretical concerns of communicative/collaborative planning with involving other stakeholders. However, this is at odds with claims to a position as professional planner in its traditional sense of planner as expert, highlighting the practical implications of theoretical tensions. As knowledgeable and specialised integrators of knowledge, and providers of professional judgement, a clearer position of responsibility and even of leadership might have been expected. The diffusion of responsibility amongst multiple stakeholders may operate as a constraining condition or problem mechanism, impinging on the ability of enabling conditions to generate action. The proposition of diffusion of responsibility as a constraint condition leaves open the question of whether it is willingly accepted by planners, perhaps even as a defence against taking greater responsibility, or if it is a societal constraint within which planners have little agency. In either case, it serves to weaken the claim to professional status, given that professions may be expected to prioritise their duties to the wider world (Foxell, 2019).

Another construct in evidence which appeared to operate more as a constraining rather than enabling condition was that of (weak) policy. The participants noted the ineffectiveness of the NPPF. Where effective policy which is clear, directive and unambiguous is likely to function as a generative mechanism for change, inadequate legislation which does not withstand scrutiny in court operates as a problem mechanism, preventing positive change.

As noted at the outset, a critical realist approach posits "fallible and iteratively corrigible" (Porporo, 2015, p. 162) definitions. Thus further work should explore other generative mechanisms and the conditions which may influence them. For example, to what extent and how does each structural component (the employing organisation, the planning committee, the RTPI) potentially influence a planner's professional practice? Further, there is a need to extend the enquiry in the empirical realm. A stated motivation to pursue sustainability goals cannot be equated with their achievement and data on aspects of sustainable outcomes would be valuable.

Based on the findings, recommendations and cautions may be offered for practice and for policy. Professional identity as a generative mechanism of action towards sustainable development offers one 'lever' by which to increase efforts, but appears unlikely to be effective in a situation where planners are unclear on their responsibilities in a context of weak policy and the competing influence of multiple stakeholders. Development of the professional identity, increasing its salience, enhancing its value to individuals, and clarifying its remit within the wider context may extend the circumstances in which it operates to drive practice towards sustainability. In general, professional identity is developed through education and socialisation at work and so educators of planners and the organisations in which they work are essential facilitators of enhanced professional identity. The professional body too has an important role to play, in part due to its close association with perceptions of professional status and recognition, and also due to its capacity for continuing professional development. The unexpected finding from the study was that of identity as a public sector worker. As identities as a public sector worker, organisational employee and team member also may act as enabling conditions, the local authority as employer organisation has an important role to play here. Valuing their professional planners, supporting planners' professional development and recognising their professional judgement may strengthen beneficial effects on sustainability outcomes. Finally, planners themselves have much to gain in developing their profession, strengthening its jurisdiction and showing greater leadership, in order for the demonstrated commitment to the concept of sustainability to act more clearly as a generative mechanism for sustainability practices.

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Conflict of Interests

The authors declare no conflict of interests.

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Article

Community Resistance and Discretionary Strategies in Planning Sustainable Development: The Case of Colorado Cities

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Abstract
How bureaucrats exercise administrative discretion is an enduring question in urban planning and democratic governance. Conflicts between urban planners' professional recommendations and community stakeholders' demands play out especially in the sustainable development context, where planners confront value conflicts between environmental, economic, and social goals. This article investigates the sources of community resistance to sustainable development and the discretionary strategies planners employ to persuade communities towards a more sustainable future. Utilizing a descriptive case study design, we examine four Colorado cities experiencing growth and community resistance to sustainable development practices. We find that while planners face community resistance from a multitude of sources, including developer pressures, NIMBYism and density concerns, and distrust of the planning profession, planners also work within their discretionary space using interdepartmental coordination, communication and outreach, data and evidence, rule changes, and neutral stewardship to encourage sustainable development. Implications for planning practice and future research are discussed.

Keywords
administrative discretion; community resistance; discretionary strategies; local governance; NIMBY; sustainable development

Issue
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1. Introduction

While urban planning involves designing formal documents, regulations, and codes concerning land use and the built environment, it is much more about ethical judgment, consensus-making, communication, and participatory processes (Arnstein, 1969; Campbell, 2002; Forester, 1980, 1989; Innes & Booher, 1999). To better engage citizens and address complex societal problems, planners are advised to draw on their professional knowledge, or specialized expertise gained through university or scientific-based training, as well as their local knowledge, or understanding of community context, characteristics, and meaning through citizen interaction and lived experience (Corburn, 2003).

Coupling local knowledge with professional expertise is important because public planners in democratic societies serve citizens and report to elected or appointed executive leadership and planning committees. As such, planners often tread carefully when making professional recommendations that challenge the tacit expertise of public officials, community stakeholders, and citizens

(Hoch, 1994). Despite their subordinate status in governments, however, planners—like many bureaucrats (Lipsky, 1980)—operate within a discretionary space or "the area in which agents are at liberty to make practical judgments and choices about how to act" (Forsyth, 1999, p. 6). Within this discretionary space, how do planners apply their limited discretion to promote decisions with "special concern for the long-range consequences of present actions" (American Planning Association, 2016)?

Planning sustainable development which "meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987, p. 16) is not always consistent with the policy preferences in local communities and involves inherent value conflicts among economic, ecological, and social equity goals (Campbell, 1996; Godschalk, 2004). Similar to the tension between bureaucratic expertise and democratic governance (Fischer, 2000), misalignment between planners' recommendations and local demands can hinder the pursuit of sustainable development. The NIMBY (Not-In-My-Back-Yard) phenomenon, for example, has challenged planners aiming to tackle environmental, health, and social problems for decades, across the industrialized world (Lake, 1993). NIMBYism concerns essential land uses that are perceived by local residents to have a concentrated, detrimental effect on property values or quality of life, even if such use benefits the community at large (Wallis, 2008).

NIMBYism is a longstanding obstacle to sustainable development in the form of higher-density living, renewable energy deployment, public transit expansion, or affordable housing. But planning and policy decisions enhancing sustainability can threaten not only landowners but also businesses, elected leaders, and other community stakeholders who hold onto narrow or particularistic interests (Lubell, Feiock, & Ramirez, 2005). Sustainable development is difficult to attain in practice because of fragmented interests, imbalanced power structures, and lack of political will (Hawkins, 2014a; Wheeler, 2000). While compact, energy-efficient, accessible, and affordable development is needed to enhance sustainability, not all stakeholders will agree on the best approach, and the most powerful, organized, and incentivized opposition will work to prevent such activities (Deslatte & Swann, 2016; Logan & Molotch, 1987).

Transforming planning ideas into practice thus necessitates political power, communicative strategies, and persuasion (Forester, 1980, 1982, 1989; Hoch, 1994; Taylor, 1998; Wildavsky, 1973). Forester (1989) describes how planners utilize strategies aimed at enhancing diplomacy, building coalitions, or mediating between conflicting parties to support the community's—and their own—development goals. Hoch (1994) also demonstrates how planners push against and leverage political power with persuasion and storytelling to win over support for their recommendations. Achieving sustainable development goals may therefore call for planners to overcome community resistance by utilizing strategies of their own, developed and implemented within their discretionary space, aimed at persuading less-than-sympathetic community stakeholders. Yet we have little understanding of what these processes look like in the contemporary sustainable development context.

In this article we ask two questions: (1) What sources of community resistance to sustainable development do planners perceive? (2) What strategies do planners use within their discretionary space to overcome such resistance? Using a descriptive case study design, we draw data from in-depth interviews with planners in four Colorado municipal governments and find that when planners face community resistance to sustainable development, they engage in interdepartmental coordination, communication and outreach, data and evidence presentation, rule changes, and neutral stewardship to persuade decision makers and citizens to pursue a more sustainable direction for their community.

The following section describes our method. The sources of community resistance planners face and the discretionary strategies they use for persuading their community towards sustainable development are then identified. We then discuss the implications for practice and research. A conclusion follows.

2. Method

To investigate the perceived sources of community resistance and the discretionary strategies planners use to encourage sustainable development, this study uses a qualitative, descriptive case study design that aims to describe the theoretical concepts of interest in their real-world context (Yin, 2014). Cases were drawn from Colorado's Front Range Urban Corridor, containing the Fort Collins, Boulder, Denver, Colorado Springs and Pueblo metropolitan areas. Colorado's Front Range, which runs along the Eastern edge of the Rocky Mountains, has served as a useful laboratory for studying sustainable development in recent decades (Godschalk, 2004; Goetz, 2013; Mitchell, Attoh, & Staeheli, 2015). As a whole, Colorado grew by 13.2% from 2010–2018, making it the fourth-highest growth state in the U.S. during that time period (Tabachnik, 2018).

2.1. Case Selection

Case selection was guided by ensuring variation in city population size, political leaning, household income, educational attainment, racial composition, and form of municipal government, all of which have been empirically linked to sustainable planning and policy decisions at the local level (Lubell et al., 2005; Lubell, Feiock, & Handy, 2009). Different types of development settlements likely have different demands and experience different development pressures, so we selected cases from a range of central, suburban, and more peripheral, "urban-edge" cities. In total, while eight cities meeting these criteria were sent email invitations to partici-

pate in interviews, four cities opted to participate in the study. The four cities included one central city, one large suburb, one mid-sized suburb, and one urban-edge city, which varied along political, income, educational, racial, and institutional lines. Characteristics for each city, as well as Colorado and the U.S. for comparison, are reported in Table 1, using 2018 Census estimates (population and form of government were excluded to protect cities' anonymity).

City A, a mid-sized suburb within a major metropolitan area, has experienced steady expansion in its population, economy, and infrastructure, while its residents have been getting older and more diverse in recent years. The city, which leans right politically, has recently focused on developing its historic downtown and expanding higher-density development to serve its role as a commuter city but also offering residents a vibrant place to live. Having mostly single-family homes, the city has experienced resistance to increased density, multifamily housing, and mixed-use development in some neighborhoods, according to city officials interviewed.

City B is a large suburb in close proximity to a central city. Although historically conservative, the city now leans left politically, as its non-white population has grown to become one of the most diverse suburbs in Colorado. In recent decades the city has expanded into its undeveloped land, despite growth limitations due to lacking a central business district and prohibitive water service costs. According to city officials interviewed, there is less community resistance to increasing density relative to other cities in its metropolitan area. The city has also made sustainability an explicit goal in its comprehensive plan.

City C is a moderately large central city with historically conservative politics and pro-development values. The local economy is bolstered by three key industries, including higher education. Although there have been recent attempts to address infill development and downtown renewal, the city has long focused on developing its outer fringes with numerous annexations since the late 1800s, resulting in a highly sprawled urban area. Despite having some historic, wealthy neighborhoods, the large influx of new, younger residents has created affordable housing challenges, according to city officials interviewed. The city is also beginning to make improvements in stormwater management, sustainable utilities, and green infrastructure, as evidenced in its comprehensive plan.

City D is a small to mid-sized city on the edge of a major metropolitan area. Like many of Colorado's metropolitan cities, it has experienced robust growth in the last decade. The city is conservative politically and considerably wealthier than most cities statewide and nationally. The city predominantly consists of single-family residences and is automobile-centric with few apartment living options, largely due to opposition to higher-density development in the community. Of the four cities, city D has experienced the highest population growth from 2010–2018.

While we expect some similarities across cases due to the cities being subject to the same state laws and institutions, each case may face different sources of community resistance to sustainability and thus necessitate or constrain different discretionary strategies, due to variation in development, fiscal, and interest group indicators (Lubell, Feiock, & Handy, 2009), civic capacity (Portney & Berry, 2010), and geographical and natural resource limits (Owens, 1994).

2.2. Data Collection

Data were collected from field interviews with 26 local government employees (three in city A, five in city B, 14 in city C, and four in city D) during the spring of 2019. The number of interviewees is higher in city C due to its larger population and government organization size. A semi-structured questionnaire was prepared prior to the interviews, and the study was approved by an institutional review board prior to conducting interviews. The vast majority of interviewees worked in local planning offices, while a select few worked in related areas such as community engagement, buildings, urban renewal, and environment. Interviewees spanned vertically (directors, middle managers, and frontline staff) and functionally (long-range planning, housing, environment, building, zoning, and land use) within local planning offices. Interviewees were recruited through an initial point of contact (planning directors in most cases) who was asked to identify staff across departmental hierarchy and functions to achieve variation in work perspectives and expe-

Table 1. Characteristics of case cities.

Case	Development Settlement Type	% Democratic Vote in 2016 Presidential Election	Median Household Income	% Bachelor's Degree	% Non-White
City A	Mid-sized suburb	40%–50%	$70,000–$80,000	30%–40%	0%–10%
City B	Large suburb	50%–60%	$50,000–$60,000	20%–30%	30%–40%
City C	Central city	30%–40%	$50,000–$60,000	30%–40%	20%–30%
City D	Urban-edge city	30%–40%	> $100,000	50%–60%	10%–20%
Colorado	N/A	48.2%	$65,458	39.4%	12.9%
U.S.	N/A	48.2%	$57,652	30.9%	23.5%

Notes: City figures are reported in ranges to protect cities' anonymity. N/A = not applicable.

riences. All interviews were confidential and conducted on-site in private offices. Interviews were recorded with permission and transcribed. To improve the validity of our study (Yin, 2014), we triangulated the interview data by reviewing comprehensive or master plans available on public-facing city websites.

2.3. Data Analysis

Interviews were coded by the authors to identify main content themes. We followed Yin's (2016) recommended Level 1 and Level 2 coding procedure, which is similar to Corbin and Strauss's (2015) grounded theory approach that uses "open" and "axial" coding, respectively. In the "disassembling" stage, Level 1 codes were assigned by the authors, sticking closely to the data. This was followed by the authors' assignment of Level 2 codes, which are higher-level categories of initial codes. Patterns were identified by the authors in the "reassembling" stage, and tables were created to organize thematic codes. During the coding process, exemplary quotes from interviews were identified to provide context. City comprehensive and master plans were used to compare against what was said in the interviews, obtain background information, and verify facts.

2.4. Analytic Definitions

Following Pitt and Randolph's (2009, p. 841) definition of community, we define community resistance as opposition stemming from the "entirety of a given locality, including its residents, businesses, and institutions" that stand in the way of achieving local goals or policies. This definition is limited to democratic societies, and the goals we are referring to concern those promoting sustainable development in the form of higher-density living, natural resource conservation, cleaner environment, and affordable housing.

Following Forsyth (1999, p. 6), we define discretion as "appropriately distinguishing between actions and having the power to act on those judgments." According to Forsyth (1999), discretion can be positive (actors having formal power to decide) or negative (actors having no formal power, but an informal expectation that a decision will be made exists), as well as strong (actors face no constraints on decision making) or weak (greater constraints on decision making exist). Of the different types of discretion, planning decisions in the U.S. may entail more negative and weak discretion, as elected officials, executive leaders, and planning commissions tend to have more positive and strong discretion, although this depends on context (Forsyth, 1999).

Strategy is broadly defined as a plan of action to achieve an overall aim. Strategies are believed to range from purely deliberate (i.e., realized as intended) to purely emergent (i.e., realized despite intentions), with most strategies falling somewhere in between (Mintzberg & Waters, 1985).

We therefore define discretionary strategy as involving a deliberate or emergent plan of action to achieve an aim conceived and implemented within an actor's discretionary space. From the perspective of the planner, discretionary strategies are normative—that is, they aim to encourage outcomes that are consistent with professional norms, ideals, or values. Discretionary strategies in such settings are often persuasive in nature because while they cannot compel a democratic society in a certain direction, they can prompt change through reasoning, argumentation, evidence, and course of action.

3. Empirical Findings

To identify perceived sources of community resistance to sustainable development and discretionary strategies planners utilize to deal with such resistance, we interviewed city planners and asked them open-ended questions about a situation in the past when people stood in their way to make a particular decision regarding a development project, and what they did to deal with this situation. We find planners face multiple sources of community resistance but also utilize a wide range of discretionary strategies aimed at persuading communities to pursue a more sustainable path in development. We explain the findings below, which reflect what was said during the interviews, backed by reviews of official planning documents.

3.1. Sources of Community Resistance to Sustainable Development

Achieving sustainable development involves overcoming obstacles associated with institutions, political economies, and path dependencies (Filion, Lee, Leanage, & Hakull, 2015). Less explored are the sources of resistance to sustainability stemming from citizens, businesses, and elected officials. Table 2 lists the general sources of community resistance to sustainable development (development pressures, NIMBY-related resistance, and community distrust/lack of understanding planning), as well as more specific sources, experienced within the four cities examined. We explain each identified source in order in the following table.

3.1.1. Development Pressures

Development pressures have long been a key driver of urban growth and economic expansion. Harvey Molotch's seminal work on urban growth machines (Logan & Molotch, 1987; Molotch, 1976) contends that as land-based interests (landowners, real estate agents, lawyers, newspapers, etc.) cooperate and overrepresent in local government, these interests tend to promote the growth of cities, increased land rents, and competition between cities for development. Although the growth machine theory has lacked generalizability to other countries, especially in Western Europe (Cox, 2017), there is strong

Table 2. Sources of community resistance to sustainable development planning.

	City A	City B	City C	City D
Development pressures				
Pressure to approve development projects faster		X	X	
Pressure for regulation or zoning rule change		X	X	
Pro-growth/push for economic development		X	X	
Developers opposed to sustainability goals		X	X	X
NIMBY-related resistance				
Density concerns	X	X	X	X
Parking concerns	X	X	X	X
Opposition to multifamily housing	X		X	X
Landowner–resident conflicts	X	X	X	X
Ecological preservation				X
Community distrust/lack of understanding planning				
Distrust between elected officials and planning staff	X		X	
Lack of understanding zoning and approval processes	X	X	X	X
Archaic view of city planning		X		
Lack of attention to projects in early planning stages	X			

empirical support for developers and real estate interests promoting less-than-sustainable growth patterns in cities in the U.S. However, this depends on the institutional context that can help or hinder pro- or anti-growth interests (Hawkins, 2014b; Lubell, Feiock, & Ramirez de la Cruz, 2009; Schneider & Teske, 1993). This shift from Molotch's focus on landowners and land-related interests to developers and real estate firms as the primary actors in growth machines has been a fruitful approach for empirical research. As Cox (2017, p. 395) notes: "The enduring actors in the development politics of the city, the city as a growth machine, are the developers and the land development companies."

In our study, we considered development pressures to be an external force placed on planning departments to pursue development without meaningfully considering other sustainability goals. Interviewees in cities B, C, and D mentioned development pressures in the form of: (1) developers pushing development projects through approval processes faster; (2) developers changing regulations or zoning laws to facilitate development; (3) cities narrowly pursuing development goals to bolster economic competitiveness; and (4) developer opposition to sustainability goals.

Planners expressed concerns over being pressured to facilitate faster project approval. Pushing development projects through administrative processes faster runs the risk of overlooking environmental, equity, safety, and aesthetic concerns. One interviewee in city C mentioned how developers have threatened to pull out their projects if the city could not adjust its laws to facilitate faster approval processes:

> Developers say that they just can't do it. They say that they cannot make it work. And they say, 'I'll pull out everything and go to a different city'—That wouldn't have been a good situation for the city, either. They say, 'I'll fight you tooth and nail.'

Both cities B and C, which are significantly larger than cities A and D, experienced pro-growth pressures to narrowly pursue development and bolster economic competitiveness. Empirical research has long suggested that cities will focus on enhancing economic viability before addressing social or environmental concerns (Deslatte & Stokan, 2019; Peterson, 1981). While such emphasis can deliver economic benefits, it also impacts future decisions and uncertainty, as a planner in city B explained:

> Our city's planning and development has been very pro-development, and this encouraged all different kinds of development in the city. From an economic point of view, it was advantageous, but that has had an impact on [sustainability] decisions that have been made....I don't want to be pressured to say that it's good or bad until we can see something....In the end I probably agreed to things that I wouldn't have agreed to without that pressure [from developers]. What did we miss when we were being pressured?

Interviewees also discussed how developers have significant influence over the language in planning documents and zoning laws. In city C developers were able to remove language from a publicly-endorsed comprehensive plan that would have promoted social equity at the expense of developers' profits. As one planner explained:

> Our [city's] comprehensive plan draft had inclusionary zoning. We had a robust public engagement process and stakeholder process, and the public supported

> it. However, the development community did not. Our community is developer-friendly. So, although the plan was written mostly, when the second subset group with developers and one of the city council members came in, they took out inclusionary zoning from the comprehensive plan.

The malleability of planning documents to developer demands is disconcerting, especially as planners in cities B, C, and D mentioned local developers being opposed to sustainability goals. We were surprised that interviewees in cities A did not mention developer pressures as a source of community resistance. It is possible that city A being an older city with minimal undeveloped land and a heavier focus on infill may have helped reduce some pressure from developers.

3.1.2. NIMBY-Related Resistance

NIMBYism concerns locally unwanted land uses that are perceived to have a negative influence on property values, health, environment, and/or quality of life. Schively (2007) notes that there are two conflicting characterizations of NIMBYism. One is negative, as narrow-minded, self-interested actors oppose land uses that impose costs on their neighborhood even though such uses may benefit the community at large. The other is positive, as the phenomenon gives rise to grassroots citizen opposition, especially among marginalized groups facing unwanted or unjust land uses. Schively points out that the perceptions of impacts, participants, and siting processes can vary significantly among decision makers and actors affected by such decisions.

NIMBYism is generally viewed as a barrier to sustainability in the form of renewable energy deployment (Devine-Wright, 2014), higher-density living (Lewis & Baldassare, 2010), public transit expansion (Weitz, 2008), and affordable housing (Scally & Tighe, 2015), although this may be the opposite case in environmental justice where NIMBYism can stave off environmental hazard siting in vulnerable neighborhoods (Rabe, 1994). In our data, NIMBYism was the most prevalent source of community resistance mentioned. Interviewees in all four cities mentioned experiencing resistance to higher-density projects, such as multifamily housing, and increased scarcity of parking. As a planner in city A described:

> Community groups have opposed to different areas of development of the city. This opposition has been pretty consistent in the community because our residents truly believe that this community is a sleeper or suburban community. Single-family homes in the city are greater than 85% of all residential buildings, which is significantly high. And that's what the community is used to. So, any time townhomes or apartment buildings or anything like that comes in, the community has been very outspoken about that.

Interviewees identified community resistance to multifamily housing in three of the four cities studied. A planner in city D, which is the smallest city in our study, mentioned: "Multifamily projects that include some affordable housing units…are dirty work around here in the public's perspective. Residents really don't understand, [and they ask,] 'Why can't you make [developers] stop building multifamily?"'

Community opposition to higher-density development was also prevalent in all four cities. In city D, for example, higher-density living is generally cast in a negative light among citizens. As one planner explained:

> Residents don't really understand the word 'sustainability.' So, we took baby steps with all of our plans and policies where we can educate on what sustainability is. Sustainable development is maybe a little more urban-level development as far as the bad 'D-word,' density. That's a dirty word around here.

We also found NIBMY-related conflicts between landowners and residents across the four cities. A planner in city C mentioned how residents opposed a new commercial development because of negative externalities associated with the development:

> There was a large commercial development, and the residents did not want that development to occur. They came out to a community meeting and expressed reasons in terms of noise, light, and air quality impacts that would impact them, and claimed that [the development] was not compatible. It's probably the typical story of NIMBYism.

While less common in our data, NIMBYism also manifested in residents' ecological values that conflict with development projects. Planners in city D, a comparatively wealthier and more educated community, mentioned a story where concerned residents pushed a developer and the city to relocate wildlife inhabiting a plot proposed for development.

3.1.3. Community Distrust/Lack of Understanding Planning

Perhaps the most crucial component of planning in democratic society is trust in government. Laurian (2009, p. 371) defines trust as a "mode of interpersonal relations embedded in a complex network of social relations and norms," and argues that while building trust entails dealing with obstacles and paradoxes in democratic governance, trust can be facilitated through better communication strategies.

Resistance to sustainable development planning stemming from community distrust was a common theme emerging in the interviews. Such distrust appeared to be associated with elected officials and citizens lacking understanding of planning practice. A planner in

city A explained how distrust among elected officials may link to a lack of understanding planning practice in exercising independent professional judgment:

> Council has made it very clear that they think [the planning] staff has an agenda and are unwilling to see any evidence that we bring forth….[The planning department] did a couple of parking analyses, going around to different approved apartments in the city and also in the region to see utilization rates and found that [a very high percentage of them] were pretty severely underutilized….That [study] was just completely thrown out the window because [council] essentially said, 'We recognize that staff did this; we don't trust staff's counts.'

In addition, interviewees in all four cities mentioned the public lacking understanding of zoning and approval processes. For example, a planner in city D commented on how the public sometimes does not understand how zoning is approved:

> There is a confusion. People say on Facebook that 'Our city is building a strip club,' or 'Our town is building a new neighborhood.' But the city does not build anything. Property owners are building it, and they have come to us….We require them to meet a number of standards.

Interviewees in cities A also mentioned citizens paying little attention to development in early stages when projects are more malleable to public input, and interviewees in city B indicated the public having an "archaic" view of city planning. Although these sentiments may not extend to the communities at large, distrust and lack of understanding planning may serve as a key barrier to encouraging sustainable development and participatory governance. One way planners aim to close the perceived trust gap and improve public understanding of planning practice is through communication strategies described in the section below.

3.2. Discretionary Strategies Planners Use

In addressing our second research aim, we contribute to the literatures on administrative discretion and sustainable development planning by zeroing in on the strategies planners use within their discretionary space to persuade their community towards sustainable development. Our interviews yielded five general strategies that planners employ, as well as a number of sub-categories, reported in Table 3.

3.2.1. Coordination and Networking

One key strategy for building capacity for planning sustainable development is collaboration (Hawkins, Krause, Feiock, & Curley, 2016; Innes & Booher, 1999, 2003). We learned from our interviews that city planning offices informally engage in interdepartmental coordination and seek out internal leadership buy-in when attempting to build capacity and support for their recommendations.

Interviewees in all four cities mentioned using coordination between departments to combat organizational silos, share knowledge, and better address new problems. A planner in city B discussed how interdepart-

Table 3. Planners' discretionary strategies for encouraging sustainable development.

	City A	City B	City C	City D
Coordination and networking				
Interdepartmental coordination	X	X	X	X
Seeking out internal leadership buy-in	X		X	X
Expanding outreach, communication, and education				
Educating council members and citizens	X	X	X	X
Promoting participatory decision making	X	X	X	X
Publishing a monthly newsletter				X
Engaging in social media exchange	X		X	
Utilizing data and evidence				
Performing data analysis and visualization	X	X	X	
Providing ample documentation and evidence	X	X	X	X
Changing formal/informal rules				
Updating zoning codes	X	X	X	X
Utilizing administrative zoning	X		X	
Developers engaging the community to resolve conflicts	X			
Council resolving disagreements before directing staff				X
Being transparent, neutral stewards				
Being an honest, neutral broker	X		X	X
Promoting transparency	X	X	X	X

mental coordination prevents developers from strategically playing one department against another when seeking information:

> To make sure zoning codes and residential standards work for everyone, we had a weekly-basis meeting with staff, managers and directors of the planning department and additional staff from other departments for six months….Especially on these large projects, we're trying to minimize side effects, and every department sits at the table when something new is coming at us. This doesn't allow the developers to hit one department and fish for answers. And that coordination has really grown in the last year or two.

Planners also mentioned seeking internal leadership buy-in when making discretionary recommendations. They suggested that the support from city leadership is especially valuable when situations remain stymied by a lack of consensus. A planner from city C described how making an unpopular yet necessary decision to shut down a homeless shelter project due to large cost overruns was realized with support from city leadership:

> There was a shelter project [with] significant costs and architectural engineering, permit fees, plan development, reviews, etc. But it was clear to me that it was not a good project to move forward….I thought it was better to call it off, which I did. So, I went to the city leadership making that decision public, and I had the full support to go ahead. I would say, at least internally, the leadership is here.

Planning organizations may be able to achieve greater information sharing and collective action at higher levels of scale through intergovernmental collaboration (Hawkins et al., 2016), but our findings suggest that coordinating within city governments and seeking out internal leadership buy-in may be more common discretionary strategies to promote internal planning capacity for sustainable development.

3.2.2. Expanding Outreach, Communication, and Education

Communication is an essential tool for planners. Crafting logical arguments, persuading decision makers with captivating narratives, negotiating between conflicting interests, and listening to citizen stakeholders' concerns are all empirically supported actions that promote planning practice in democratic society (Forester, 1989; Hoch, 1994; Moore & Elliott, 2016).

Communicating with, reaching out to, and educating community stakeholders were identified as key discretionary strategies for persuading sustainable development. Interviewees in all four cities indicated they often educate city council members and the public, and engage the community in discussing planning issues. While planners in city D described how they engaged the community when incorporating density into their master plan, city B institutionalized community education and outreach by establishing a planning academy for residents wishing to be on the planning commission:

> We [the planning department] were trying to help [residents] understand the city and how important the environment is, and how important these decisions that [the planning commission is] negotiating right now….They didn't even know about boards and commissions. They wanted to engage with the city; they didn't know how. Maybe it was just to complain about their water bill, but they ended up doing something else.

While investing in a planning academy may be no trivial feat, small changes can also help educate stakeholders and promote information dissemination. City D, for example, started a monthly newsletter to inform citizens about sustainable development and mitigate political controversies. As one planner described:

> My mantra has always been, 'We need to educate better.' We created a section called 'Planning and Building a Sustainable City' in our monthly newsletter. So, we'll do monthly articles on this, whatever the controversy is….You just try to stay one step ahead of it.

Planners in cities A and C also mentioned how they rely on social media to better gauge local politics, values, and preferences around planning issues. According to a planner in city A:

> Facebook groups have been most useful because people are sharing a lot of great information there, and having open dialogue with each other. There are conflicts within the groups as far as people's opinions on different projects. And it's kind of neat to see that play out.

However, a planner in city D offered a caveat about the drawbacks associated with planners' use of social media, as citizen input via social media can reflect skewed or biased views on planning issues, and mentioned avoiding social media when possible.

While there may be numerous approaches to implementing outreach, communication, and education strategies focused on promoting citizen understanding of and participation in planning, all strategies should fit the needs and capabilities of the planning organization and the community (Burke, 1968).

3.2.3. Utilizing Data and Evidence

If planning is about storytelling (Hoch, 1994), then the use of data, technology, and scientific evidence can

make planners' stories more compelling and persuasive if used appropriately (Ramasubramanian & Albrecht, 2018). Interviewees in all four cities mentioned using data and evidence to overcome community resistance. Interviewees in three out of four cities said that data and visualization are crucial for developing better narratives for communicating to the public. A planner in city B described how visualization can help when planners know what their audience is looking for:

> We use a lot of visuals that were recognizable by the audience that we're speaking to. Trying to explain how the zoning code is changing from X to Y is difficult. So, what we tried to do was use visualization and simulation. We show visually how lots are going to be laid out or what changes needed to be made if we apply the new code. The audience will be more familiar with the project.

Another planner in city B added: "In a recent presentation, we pulled walk score, bike score, household income data and so on, and we showed developers how nice that street would be. When we put data together and show visual projection, people are persuaded."

Across all four cities planners also mentioned providing documentation and evidence to support their recommendations to the city council and planning commission. As one planner in city A mentioned: "We have been trying to find academic research that supports [sustainable development] points of view. We wanted to convince council members that this [study] isn't just presenting a viewpoint."

Data, visualization, and evidence, however, will likely only take planners so far in encouraging sustainable development. Campbell (2012) teaches us that presenting analysis is not meaningful in the planning context unless it is accompanied by synthesis or judging what action should be taken in a given situation; that is, to be impactful, planners need to link "knowledge to action."

3.2.4. Changing Formal/Informal Rules

Bureaucrats changing formal and informal rules to meet the demands of their job is a classic discretionary strategy (Lipsky, 1980). From our interviews we found all four cities regularly update zoning codes to steer development in a more sustainable direction. For example, after receiving several requests for waivers regarding changes to standard residential lot sizes, city B reviewed those standards to promote sustainable development. As one planner stated:

> We're now updating our whole code. And as part of that, we're updating standards for new residential homes, specifically smaller lots. And there's been a lot of pushback from the development community, specifically home builders on those standards….It's really a question of the quality of housing, design, and aesthetic of the neighborhood. So, if you've got the smaller lots, you can add development standards, architecture, that kind of stuff to increase the overall aesthetic of the neighborhood.

Interviewees in cities A and C also said that extensive use of a planned unit development (PUD) process have created challenges. PUD is a land regulatory process requiring planning commissions to hold public hearings. Although PUDs promote transparency and public oversight, they can cause significant delays in development projects. Interviewees in city A suggested that the PUD process has reduced trust among community stakeholders: "We've kind of gotten ourselves into a situation where we have enabled mistrust because we put all projects through a public hearing phase that allows people to scrutinize things." By putting more projects consistent with sustainability principles through administrative processes, planning departments can more easily avoid community resistance and lengthy development delays associated with PUDs.

While zoning changes and PUDs are formal rules, interviewees in cities A and D also identified the establishment of informal rules. To resolve conflicts between landowners and residents, city A encourages developers to reach out to the community before the review process: "We encourage our applicants to actively reach out to the community and communicate at the neighborhood meetings beyond the boundaries. Even if this isn't required, it's still a good idea….We're always pushing for more transparency."

Planners in city D, on the other hand, established an informal expectation for their city council to resolve conflicts before directing planning staff, which led to administrative efficiencies from the perspective of planners.

3.2.5. Being Transparent, Neutral Stewards

Openly admitting that planners are not the people whose intentions count may help planners circumvent community resistance and share blame when things go wrong (Wildavsky, 1973). Planners in all four cities made it clear that their job is to work for the community and incorporate local knowledge into planning decisions and processes. As a planner in city D pointed out:

> We educate the community, and we push for the right thing. But we can't force the community to be something that it's not. So, we can guide them to the right answers, and we can push them as far as we think it is appropriate. But in the end, we work for the community.

A planner in city C echoed this sentiment when stating: "Our job is to be an honest broker. This community is not environmental activist—That's just not the DNA of this community….We try to be transparent and as open as possible.''

The planners we interviewed appeared to share a normative value that, in democratic society, planners' technical knowledge as to what should or ought to be done is subordinate to what the community wants. While planners may have predispositions for directing communities towards sustainability due to their technical expertise, the application of such knowledge is kept in check by citizens' demands. Transparent, neutral stewardship—or being on "honest broker" who integrates diverse stakeholder perspectives and avoids advocating for a particular side (Pielke, 2007)—may be an effective strategy for guiding communities toward development goals, as honest brokerage has been found to enhance collaboration in sustainability management (Duff et al., 2009).

4. Discussion

Although technical skills are crucial for planning sustainable development in a rapidly urbanizing world, planners' political, social, and communication skills will be even more valuable as competition for scarce resources grows. Planners are not merely technicians charged with preparing esoteric plans, reports, and documents; they are political actors with varying degrees of administrative discretion in how they help shape the communities they serve (Forsyth, 1999). This article identified key sources of community resistance to sustainable development and discretionary strategies planners use to overcome such resistance. The findings build on decades of research suggesting that planners engage in discretionary activity and play an important role in shaping democratic society (Forester, 1982, 1989; Hoch, 1994; Taylor, 1998).

This study has some implications for planning practice. First, it would be unhelpful to think of the sources of community resistance and the discretionary strategies identified in this article in isolation. In reality, planners face community resistance from a multitude of sources, which are interwoven with other sources of resistance occurring simultaneously. This is why it is critical for planners to comprehensively assess, within their cognitive limits, the dynamic political and cultural landscape and tackle obstacles with a portfolio of strategies. Any discretionary strategy employed in isolation is likely too limited to have any substantial effect at overcoming longstanding barriers to sustainable development, especially in communities unsympathetic to sustainability.

Second, the sources of community resistance to sustainable development are complex and extend beyond NIMBYism. They also occur at the macro level (e.g., development pressures) and are inherent conflicts in democratic governance (e.g., distrust between planning experts and citizens). Employing strategies to facilitate communication, dialogue, and knowledge sharing among planners, elected leaders and citizens is essential. But communication is not the only structural impediment to sustainable development planning. Adjusting rules such as utilizing more administrative zoning in lieu of PUD processes, where appropriate, and urging developers to go above and beyond neighborhood engagement and assessment requirements could be promising ways to promote sustainability within planners' discretionary space.

Finally, the discretionary strategies planners appear to utilize could be enhanced with additional training in the social science and policy analysis and management disciplines. Intellectual and practical skills in social network analysis, evidence-based methodology, data visualization, public management, and public relations and rhetoric could go a long way in helping planners in persuade their communities in a more sustainable direction.

For future research, large-N assessments will offer a wider range of the types of community resistance and discretionary strategies in sustainable development planning. Studies over time and across institutional contexts are also needed to examine the effectiveness of these strategies in promoting more sustainable development patterns, and how these strategies work or do not work under different constraints. Especially, researchers can look more carefully at how different citizen demands and political preferences of communities shape the effectiveness and duration of discretionary strategies that planners use.

5. Conclusion

This article aimed to better understand the sources of community resistance to sustainable development and the discretionary strategies that planners use to overcome such resistance. Investigating four Colorado cities experiencing growth and development change, we identified diverse sources of community resistance to sustainable development planning, as well as a multitude of strategies that planners use within their discretionary space to overcome such resistance. Developer-induced pressures, NIMBY-related concerns over increased density, and distrust and misunderstanding of planning were common sources of community resistance observed across the case cities. However, at their discretion, planners utilize a host of strategies aimed overcoming such resistance, including interdepartmental coordination, educating council members and residents, providing data and evidence, changing formal and informal rules, and serving as honest, transparent brokers in planning processes.

This study is limited by its focus on four cities in a single region within one U.S. state, and thus we make no claims about the generalizability of the findings. Also, interviewing only local planning staff prevented us from gaining different perspectives from city council members, developers, and residents. We encourage researchers to build on these findings and further investigate the discretionary strategies planners employ, and the impacts of these actions on sustainable development over time and across contexts.

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Conflict of Interests

The authors declare no conflict of interests.

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Article

Planners between the Chairs: How Planners (Do Not) Adapt to Transformative Practices

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Abstract
Even though the turn to practice is widely accepted in the field of urban planning, the practices of planners are empirically largely unexplored. Looking at the daily routines and practices of urban planners thus allows a deeper insight into what planning is, and how planning practices are related to innovation and transformation. To do so, we start from the assumption that behaviour is a constellation of practices, including certain activities, a set of choices and actions, patterns of behaviour or forms of interaction that is organised in a certain space or context by common understandings and rules. By conducting an online survey among planners in medium-sized German cities, we first identified a wide range of planning practices and activities in general. In a second step, we conducted a statistical cluster analysis resulting in six types of planners: (1) the 'local-specific analysts,' (2) the 'experienced generalists,' (3) the 'reactive pragmatists,' (4) the 'project-oriented planners,' (5) the 'compensatory moderators,' and (6) the 'innovative designers.' Each cluster has specific practices and activities, linked to characteristic value-sets, role interpretations and self-perceptions that might help explain the differences with regard to innovation and transformation. From the identified six groups or clusters of planners, only two clusters more or less consequently aim at innovation, experimentation and new approaches. One cluster is dedicated to collaborative practices whereas traditional practices predominate in three clusters at least, mainly because of legal requirements. This is the result of an increasing 'formalisation' of land-use planning, making planners focus on technical and formal practices, and, at the same time, lead to the reduced 'attention' to and implementation of conceptual approaches or 'necessary' transformative practices, including proactive approaches and strategic coordination with regard to sustainable urban development, but also comprising experiments, real labs or social innovations.

Keywords
cluster analysis; planning practice; role of planners; transformative practices; urban planning

Issue
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1. Introduction

Planning is what planners do (Vickers, 1968). However, the practices of planners might differ from city to city or region to region as these practices, routines or patterns of behaviour are shaped in a certain social or spatial context. But how can we identify and describe the practices planners perform in their daily business? Do practices change over time? What moral and ethical values underlie the actions of planners? How do they reflect on their actions? How much autonomy and agency do urban planners actually have in their daily business? Against this background, it is the aim of the article to identify the different practices and attitudes of planners and to systematically reflect on the daily practices and routines of planners to draw conclusions with regard to the self-

perception of urban planning. Of particular interest is the extent to which practices in general influence the daily routines of planners and the roles of planning underlying these practices.

To do so, we start from the assumption that planning is a constellation of practices, including certain activities, a set of choices and actions, patterns of behaviour or forms of interaction that are organised in a certain space or context by common understandings and rules. Here, we mainly refer to practice theories as developed by Reckwitz (2002), Schatzki (2001, 2002), Shove, Pantzar, and Watson (2012) or Swidler (2001), where practices are defined as "sets of hierarchically organised doings/sayings, tasks and projects" (Schatzki, 2002, p. 73). By focusing on practices as the smallest unit of social analysis, practice theory thus offers a conceptual framework that comprises a certain way of seeing and analysing social phenomena. This approach opens up a new possibility to observe the everyday actions of actors and to adopt a more realistic perspective than other behavioural theories (Reckwitz, 2002).

Applied to urban planning, this means that practices "are thus assemblages of open-ended sets of actions performed by agents who mobilise skills and knowledge, ideas and materials in a more or less conscious way" (Savini, 2019, p. 60; see also Schatzki, 2002). These practices are not only spatially situated, but also have a space-forming effect (Beauregard, 2013). Planners repeat certain practices frequently and regularly and thus constitute specific 'spatial arrangements' that arise from the interaction of planners with other planners and stakeholders as well as with artefacts (e.g., plans, significant buildings and settlement structures). At the same time, specific spatial and institutional arrangements also influence and shape the practices being practised (e.g., Schatzki, 2016, p. 33).

In this context, it is our aim to analyse how planning practitioners actually work by questioning the foundation of their motivation, their underlying values, the diversity of their approaches and their attitudes towards different forms of practices. However, despite the pervasive interest in the practices of planners that encompasses "ways of talking, rituals, implicit protocols, routines, relational strategies, character traits and virtues" (Mandelbaum, 1996, p. 179; see also Watson, 2002, p. 179), those practices are largely unexplored. The turn to practice is widely accepted in the field of urban planning (Liggett, 1996; Watson, 2002), however, most contributions do not refer to the practice theories mentioned above, and rather see planning practice as a starting point for theory formation in planning research (Zimmermann, 2017). One exemption is the work of Healey (1992), who took a practice perspective in her essay entitled *A Planner's Day*, describing which activities and knowledge types determine the daily life of a senior planner in an English city. This practice-based approach clearly indicates that it is necessary for the analysis to reintegrate what planners are doing (e.g., technical expertise), why they are performing in a particular way (e.g., moral vision) and how their practices are framed in the organisational setting (e.g., adversarial politics; see, for example, Forester, 1999, 2013; Hoch, 1994; Vigar, 2012).

The complex interrelations and the often hidden and implicit notions between these different dimensions of practices already give an idea of the challenges to translate such an approach in empirical research design: What can be seen as technical expertise in planning—plan-making, place-based decision-taking? What strategies, skills and methods do planners use to fulfil their tasks? (see also Forester, 1993; Howe & Kaufman, 1979; Schön, 1982, 1983). How does one ask planners about their ethical orientation—values as underlying implicit assumptions? Which roles do planners assume when performing different planning practices (Lamker, 2016; Vigar, 2012)? What moral and ethical values underlie their actions? How do they reflect on their actions? How does one describe the interface of planning and politics by integrating questions of expertise and values—considering that both work for the common good? All these questions are partly addressed in more recent studies on planning practices (e.g., Beauregard, 2013; Clifford & Tewdwr-Jones, 2013; Ferm & Tomaney, 2018; Forester, 2013; Lauria & Long, 2017). But either these approaches address practices rather accidentally, and not as comprehensively as 'required' in the practical theories mentioned above, or they focus on few planners and their experiences and lack a broader empirical base. This has been our motivation to conduct a survey among urban planners working in medium-sized cities in Germany to be able to: (1) identify and analyse planning practices broadly, and (2) identify ideal types of planners based on the practices and attitudes of urban planners.

When analysing planning practices, it is also necessary to consider the different understandings or interpretations of urban planning, the ways planners make decisions, the ways planners' decisions are legitimised, or the roles of planners in planning processes. Ideally, we can distinguish between more traditional, cooperative and transformative planning understandings and practices. First, there are a number of tasks and 'duties' which urban planning must fulfil, and which lead to legally binding plans and programs, to institutionally-framed tasks within the city administration, to activities based on planners' specific expertise. These somewhat 'traditional' planning practices show a close instrumentalism on goal-specific tasks, means, and outcomes (Savini, Majoor, & Salet, 2015, p. 296; see also Lauria & Long, 2017, p. 204). These practices find their expression in activities such as protecting natural resources and certain areas, fulfilling basic and social needs (e.g., affordable housing or healthy living conditions), avoiding socio-spatial polarisation and implementing infrastructure projects. In this understanding, planning is a technical task which is carried out by experts, has a controlling function, and is regulative and intervening (e.g., Savini, 2019, p. 60).

Second, there are collaborative or communicative planning practices, which are characterised by communication and participation (e.g., Fischler, 2000; Harris, 2002; Healey, 1997, 2003; Innes, 1995; Sager, 2009). Here, planners often act as 'initiators' or 'mediators' to foster cooperation among actors involved in planning processes. The aim is to build consensus between all actors; therefore, power should be distributed amongst the stakeholders such that they are equals in the process. Openness and trust are also crucial for building consensus (Healey, 1997).

Third, more and more transformative practices can be observed. Planning through processes of 'co-creation,' referring to processes where planners, local communities, social associations, civil society actors, enterprises and business associations initiate joint learning processes to develop sustainable perspectives and strategies for the development of the city (e.g., Nevens, Frantzeskaki, Gorissen, & Loorbach, 2013; Schäpke, Singer-Brodowski, Stelzer, Bergmann, & Lang, 2015) has become a priority for practitioners and scientists (Savini et al., 2015, p. 296). These emerging practices can be defined as 'experiments,' 'niches,' 'living labs,' or 'social innovations' (Evans, Karvonen, & Raven, 2016; see also Savini, 2019, p. 59) to stress their transformative potential for a different, more sustainable future (Grin, Rotmans, & Schot, 2010; Loorbach, Frantzeskaki, & Avelino, 2017; Rotmans, Kemp, & van Asselt, 2001). In comparison with more collaborative practices, this approach focuses to a lesser extent on participation and public engagement to implement citizens' knowledge in urban development plans or concepts; the focus is rather on joint learning processes and the shared responsibility for the intended transformation processes. These so-called transformative practices consist of jointly developed images and visions and, at the same time, of strategies and instruments for the implementation, in which the spatial dimension plays a central role (Albrechts, 2016; Levin-Keitel, Mölders, Othengrafen, & Ibendorf, 2018).

In practice, the different ideal types of planning are to be found next to each other—a strict separation is not possible. However, we can conclude that planners have to work with structural tensions between organisation and spontaneity, control and self-organisation, experiments and routines, legal validity and openness, or intervention and non-intervention (Lauria & Long, 2017; Savini et al., 2015; Vigar, 2012). This influences how planners arrange their daily practices, how they make their decisions, and which roles they use in planning processes. We can summarise here that:

> The tales…from the everyday lives of practicing planners show how the conventional beliefs that separate moral vision, technical expertise and adversarial politics do not adequately explain what planners do….Some identified more closely with the conventions of competent inquiry, while others cared more about political strategy. (Hoch, 1994, p. 321)

This again shows the need to address planning practices from the perspective of the social science oriented practical theories to identify the different practices and attitudes of planners and to reflect systematically on the daily practices and routines of planners to draw conclusions with regard to the self-perception of urban planning.

To analyse how planners deal with these demands and expectations (e.g., organising collective spatial actions and policies or developing a legally binding land-use plan) simultaneously, the article first presents the empirical results of a survey on planners' practices conducted in medium-sized cities between 20,000 and 100,000 inhabitants in Germany (see Section 3). Here, we analyse various sets of practices (fields of action, activities, roles and professional agency) to deepen our understanding of planners' practices, values, norms and routines as well as their role perceptions and their strategic choice of roles. To avoid an overly strong simplification and to cope with the complexity of a practice-theory approach, we first present current practices of planners before interpreting and discussing to what extent planners are already involved in transformative practices. Section 4 then presents a cluster analysis of different types of planners based on the practices and attitudes of urban planners. The last section summarises the results and discusses the roles of planning and planners with regard to planning practices, in particular in the face of transformative planning practices.

2. Methodology: How to Analyse Planning Practices

In order to be able to map and analyse the daily practices of planners accordingly, we decided to focus on urban planners working in planning departments in medium-sized cities in Germany. Planners in this survey imply persons working in urban planning departments in medium-sized cities, including urban planning, urban development or regeneration as well as social housing. We assume that the practices and the tasks of planners in medium-sized cities are less specialised than those of planners working in larger cities, offering us the chance to map the entire spectrum of what planning practices encompass. Furthermore, medium-sized towns with a population between 20,000 and 100,000 inhabitants are typical for the German spatial structure and settlement system (Baumgart, 2011, p. 9; BBR, 2001, p. 4). About 42% of Germany's population lives in medium-sized cities, meaning that they play an important role in spatial development in general (Schmitt, 2010, p. 29).

We opted for a sequential quantitative-qualitative research design. By combining quantitative and qualitative research methods, we not only follow planners' stories and other 'micro-sociological' approaches (e.g., Forester, 1993; Healey, 1992; Hoch, 1994), but also consider and integrate institutional understandings in our analysis (see also Beauregard, 1999; Watson, 2002). In total, we conducted: (1) a quantitative online-survey,

(2) qualitative expert interviews, and (3) expert workshops or focus group discussions. The online survey took place between 22 May and 4 July 2017 by using an online survey tool. The link to participate in the online survey was sent by email to the planning departments in all medium-sized cities. In cases in which we had the individual email-addresses of planners working in the planning departments, we addressed the survey directly to them. In other cases, the link was sent to the given institutional (collective) email addresses of the planning departments with the request to forward the survey to the relevant colleagues within the respective urban planning departments.

The questionnaire was structured in four parts. The first part was dedicated to planners' fields of action and areas of activity, whereas the second part concentrated on the roles and role perceptions of planners. The third part addressed questions about how urban planners make decisions; the fourth part contained biographical and personal information as well as information on the planning department. In the survey, questions about the personal and institutional values of the planners played a central role. Therefore, we adapted the research design of Schwartz (2012) for our study. Schwartz (2012) works with indirect statements such as: "Thinking up new ideas and being creative is important to him. He likes to do things in his own original way" (Schwartz, 2012, p. 11); Schwartz asks for the interviewees' agreement or rejection of this statement to identify personal values. Our questions on the personal and institutional values of planners working in planning departments in medium-sized cities largely follow this pattern, for example, by starting with the question on one's own understanding of one's role perception to know more about the personal or individual values of planners. Similar to Schwartz (2012), we thus predominantly introduced the questions by using statements such as "It is important to me in my daily practice to…".

In total, 614 urban planners in German medium-sized cities took part in the survey. To analyse the results, we used various statistical-analytical methods (Atteslander, 2000; Diekmann, 2008; Döring & Bortz, 2016; Völkl & Korb, 2018). This includes analyses dealing with only one variable (e.g., the determination of frequencies for the fields of action and activities of planners) as well as bivariate analyses that allow the simultaneous analysis of two characteristics (e.g., the correlation between the age or professional experience of planners and their activities; some of the results can be seen in Section 3). Additionally, we conducted multivariate analysis allowing the simultaneous analysis of more than two characteristics (e.g., by carrying out a factor analysis). This also includes a hierarchical cluster analysis that we carried out to identify larger groups of planners that share certain values, which can be distinguished from values of other planners. Cluster analysis as a group-forming method (Bahrenberg, Giese, Mevenkamp, & Nipper, 2008, p. 259) is a statistical procedure that determines homogeneous groups from a large and heterogeneous amount of data. Due to methodological considerations, the Ward method was preferred as a hierarchical method as it led to conclusive data sets allowing us to identify six coherent clusters. The Ward method also has the advantage of creating similarly large clusters as a result of the data consolidation process (Backhaus, Erichson, Plinke, & Weiber, 2016, pp. 455, 510; Bortz & Schuster, 2010, p. 465), providing the most consistent results (see Section 4).

Based on the online survey, we further conducted 33 interviews with urban planners (inside view) or politicians (outside view) in eight medium-size cities varying in population size and development, economic development, and spatial location (peripheral or central). The expert interviews contributed to a more differentiated view on planning practices and contributed to explaining unexplained variances in the quantitative data. The interviews took place between 23 April and 1 October 2018. Additionally, we organised two focus group discussions with each of the 10–15 participants in February 2019 to validate and deepen our interpretations of the survey and the cluster analysis. One workshop was held with practising planners of selected medium-sized German cities to enrich our findings with their experiences and their reflections; the second workshop involved scientists from planning departments of German universities to reflect the results theoretically and from different perspectives.

3. Planners' Practices: An Overview

To understand the analysed planning practices in its local-specific framing conditions, a few characteristics about the German context have to be mentioned. In Germany, all cities and municipalities have the guaranteed right of local self-government (Art. 28 II of the Basic Law); that means the general competence to undertake all public affairs for their territory, including urban planning and development. Urban planning in Germany, unlike in some other European countries, is not confined to land-use planning, regulating exclusively the use of a certain piece of land. It is rather a function to coordinate all spatially relevant interests, functions, programs and projects. Urban planning in itself has no funds or implementing powers, its task is above all to direct and facilitate the activities of other actors (Blotevogel, Danielzyk, & Münter, 2014; Commission of the European Communities, 1999; Pahl-Weber & Henckel, 2008).

3.1. Various Fields of Action: Planners as Generalists in the Public Realm

Urban planning is an occupational field with various thematic fields of action, which is also reflected in the daily practices of planners in medium-sized cities. Based on 15 previously selected fields of action, the planners have indicated how frequently they work in the respective field

of action (see Figure 1). The vast majority of planners 'very often' or 'often' work in the field of 'urban land-use planning' (92%), followed by the areas of 'housing' (83%) and 'integrated urban development' (70%). This is also found in surveys of graduated planners of various planning faculties (e.g., Bornemann et al., 2017; Krüger, 2013; Leschinski-Stechow & Seitz, 2015). Interestingly, and in contrast to the frequently discussed topics in academia, planners only 'infrequently' or 'never' work in the fields of 'climate change,' 'monument conservation' or 'social urban development.' In addition, it becomes clear that the majority of respondents are active in all 15 action fields determined in the questionnaire. Less than 10% of the planners work in ten or fewer action fields (Othengrafen, Levin-Keitel, & Breier, 2019). This allows the assumption that planners, especially in medium-sized towns, are 'generalists' working in many different fields of action (Friedmann, 1996).

The naming of 'urban land-use planning,' 'housing' and 'integrated urban development' as central areas or action fields can, on the one side, be explained through the broad scope of the urban planning system in Germany. Additionally, this can also be understood as an expression of the discussions and challenges that planners currently have to cope with (e.g., affordable housing, the legal status of development plans, etc.). On the other hand, the normative orientation of urban planning also plays a major role. Here, urban planning as a predominantly municipal task should contribute to implement welfare state objectives (see also Evans, 1993; Low, 1991, p. 26; Vigar, 2012, p. 362). This understanding of planning as 'the guardian' of the common good is associated with the corresponding core tasks (i.e., provision of affordable housing, etc.), which are also largely defined and regulated in the German Building Code (Levin-Keitel, Othengrafen, & Behrend, 2019).

3.2. Planners' Activities: A Colourful Bouquet of Activities between Plan-Making and Moderating Exchange

In addition to the fields of action, it is also relevant to know what exactly planners do—in other words, which activities they pursue. Do they, for instance, draw up plans, negotiate with investors, represent environmental concerns, or do they try to find consensus between various actors with different or conflicting interests? Planning theories deliver all kinds of different activities

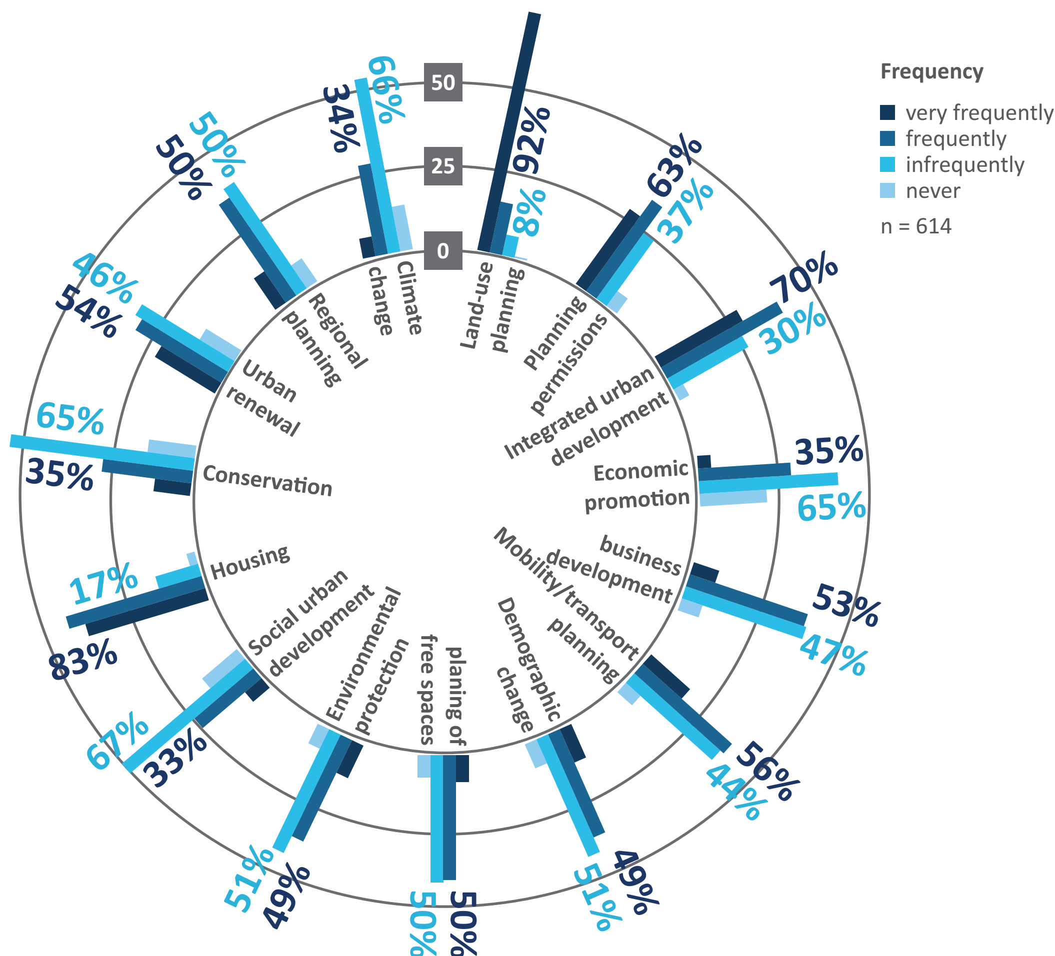


Figure 1. Fields of action. The answers 'very frequently' and 'frequently' as well as 'infrequently' and 'never' are summarised in the respective percentages.

depending on the theoretical perspectives they follow, and often theoretical approaches are anchored in such activities as the communicative turn in organising participation, the just city in representing arguments of unrepresented groups, the rational-technical paradigm in making technical plans. But to what extent is this reflected in planning practice? The participants of the survey received various statements relating to different activities and were asked to indicate how often they pursue these activities in their daily work (see Figure 2). For example, a high proportion of the planners (69.8%) agreed with the statement "I draw up legally binding plans," which is typical for urban land-use planning. In addition, coordinating and mediating tasks are a central area of planning, as the activity "I bring together different (conflicting) interests and contribute to the reconciliation of interests" (73.2%) shows. The activities "I create strategic planning concepts such as climate adaptation concepts or mobility master plans" (45.3%) and "I decide on building applications" (35.3%), on the other hand, are of lesser importance. The latter in particular shows again that urban planning in Germany is not only restricted to land-use planning but concentrates more on the strategic coordination of different interests, objectives and land uses.

When comparing the activities with the respective professional position, however, differences also become obvious (see Figure 3): In general, all respondents state that coordination is an important activity in their daily practice, but it is most of all planners at higher management levels exercising this activity (64.4%). On the other hand, the preparation of legally binding plans predominantly seems to be a task of planners at the project level (49.1%). The preparation of political decisions, in contrast, is again a task that planners at the management level perform more frequently (67.1%). In summary, respondents in management positions tend to take on more coordinating, advisory and intermediary activities. Project managers are more likely to be involved in technical and specific planning tasks (Othengrafen et al., 2019), a finding rarely discussed in theoretical reflections on planning practices so far.

3.3. Individual and Professional Role Perceptions

In their daily practices, planners take on very different roles to 'get things done.' Many of these role assignments are described in planning theories representing different planning approaches (Fox-Rogers & Murphy,

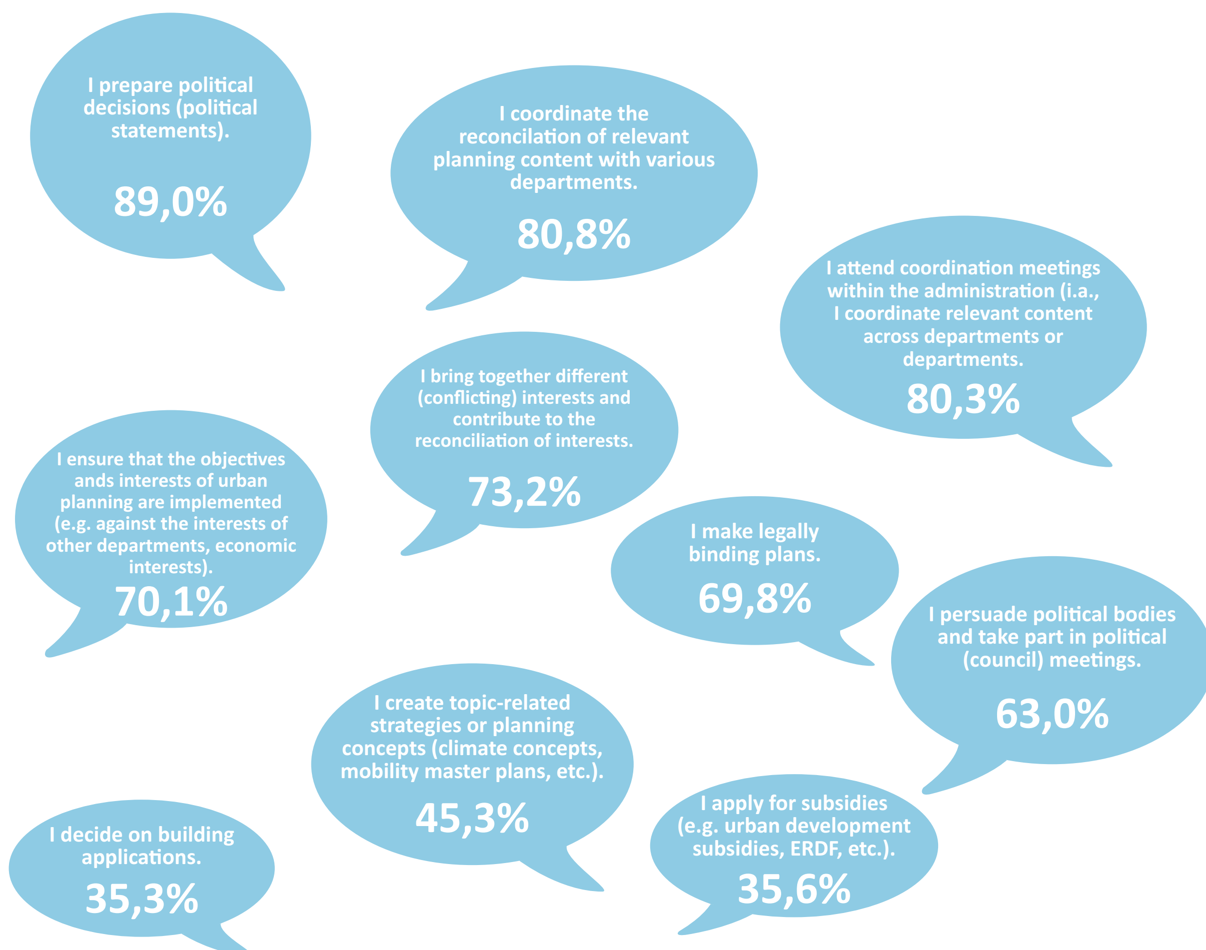
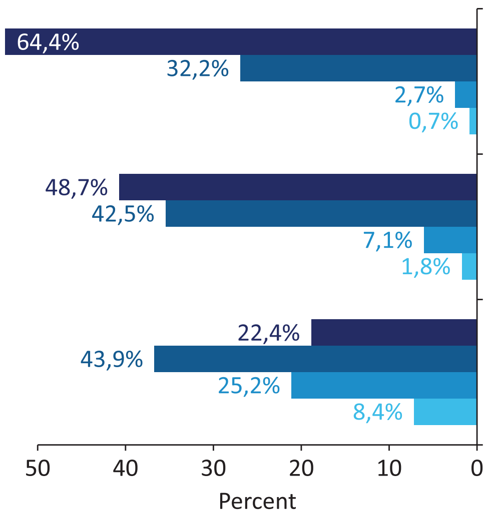


Figure 2. Planners' activities. The percentages in the figure indicate how often participants chose 'very frequently' and 'frequently.'



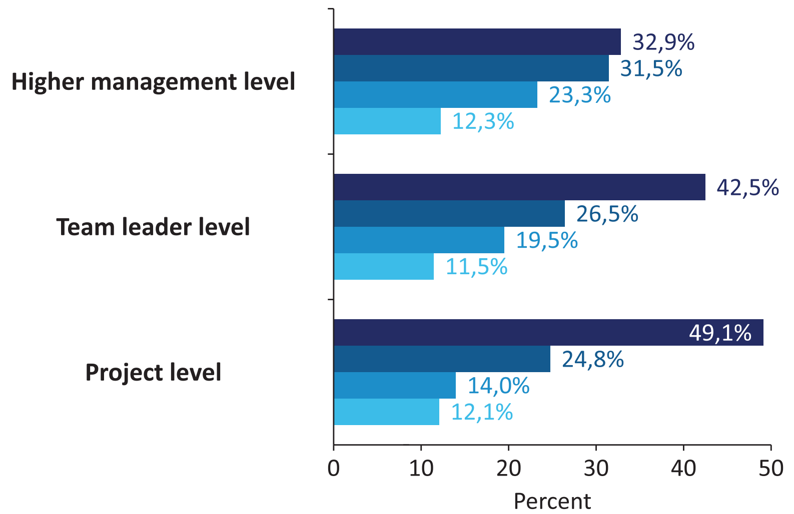


Figure 3. Planners' activities along the respective professional position. Note: N = 473.

2015, pp. 2–3; Knox & Masilola, 1990, p. 20; McGuirk, 1995). They serve as theoretical lenses for different approaches to planning, the underlying perceptions of problems (i.e., what is perceived and evaluated as a problem), the comparability of various planning activities and the interaction with other actors (Albrechts, 1991; Campbell & Marshall, 2002; Fox-Rogers & Murphy, 2015; Lamker, 2016, p. 100). Role models can generally refer to institutional as well as individual role perceptions. The institutional understanding describes a general perspective on the role of urban planning as an institution whereas the individual role understanding covers the personal role attributions and priorities of the planners themselves. Urban planning as a discipline is thus assigned by a multitude of roles by planners at both individual and institutional levels.

The roles of urban planning as an institution (see Figure 4) include the control of spatial development (95.3%), the decision preparation of political processes (90%), the process-coordinating task (85%) as well as planning as a content-related task (80%). Less frequently mentioned is the representation of the interests of disadvantaged groups (45%). It is obvious that urban planning cannot be reduced to one or another role perception, and therefore the approaches in planning theory reducing these complex interplays in urban planning need to be assigned to its limitations. The respective roles must, therefore, be assessed depending on the situation and, in a first step, merely show the spectrum and variety of roles.

Individual understandings of roles show a similar picture (see Figure 5), where planners wear different hats, feeling responsible, among others, for a compensatory moderation (95.3%), for steering (92.2%) and for the implementation (88.5%) of spatial development, and for political consultancy (79.6%). There is less support for interpreting the role as an innovator (74.8%) or as an initiator (74.8%) and much less support to act as an advocate for the interests of disadvantaged groups (47.6%) or for preservation issues (11.9%). In comparison, many institutional role understandings can be found on an individual level, ranging from a more technical role on the one side to a more political role on the other (see also Lauria & Long, 2017). It becomes clear that planners in their daily practice have to deal with a multitude of roles that are mutually exclusive in individual cases (e.g., a moderating activity excludes a simultaneous technical role). However, it can be summarised that coordination, moderation, political consultancy and the control of urban development seem to be the most prominent roles that planners perceive. This has been confirmed by the practitioners in the focus group discussions where the planners explained that urban planning as a department is regarded by both planners (internal view) and politicians (external view) as one of the central departments within medium-sized cities that is given great importance for the future development of the city. This might help to explain the more strategic and, at the same time, communicative roles that planners perceive in German medium-sized cities (see also Blotevogel et al., 2014, p. 105).

4. Planners and Planning Practices: Six Ideal Types of Planners

The previous section has presented the range of planning practices and activities in general. However, it is still un-

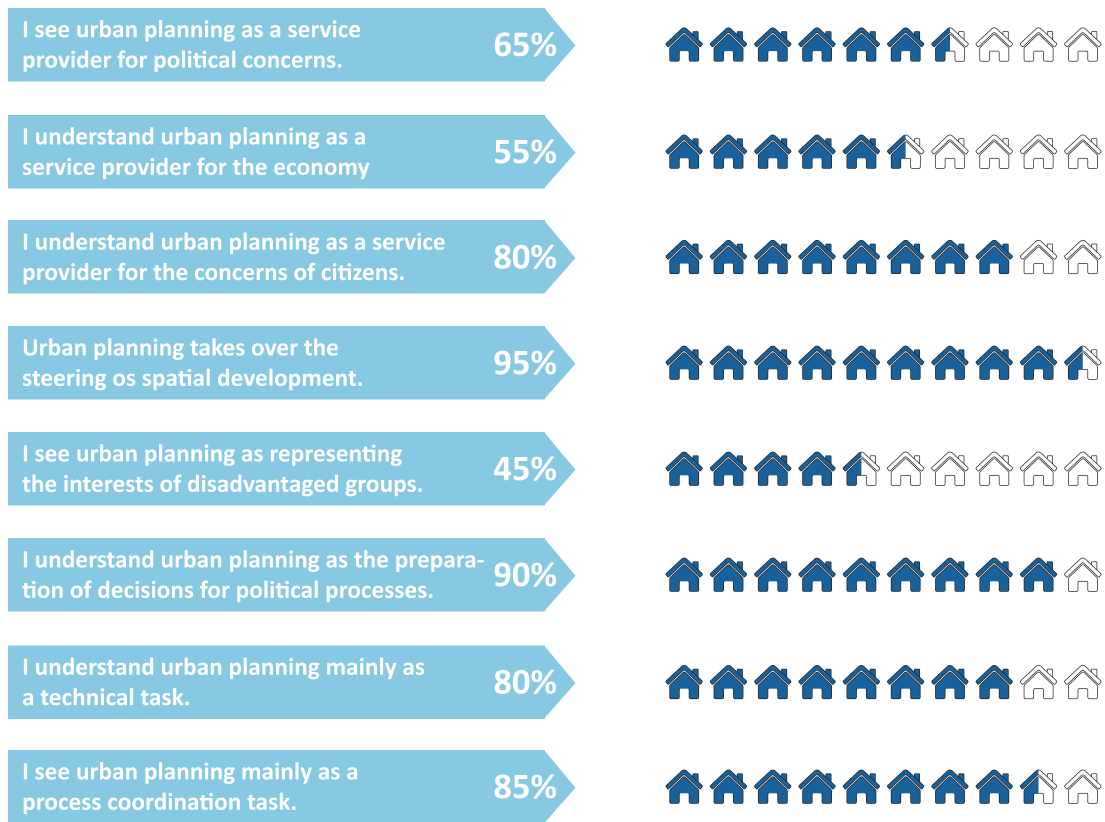


Figure 4. Professional role understandings.

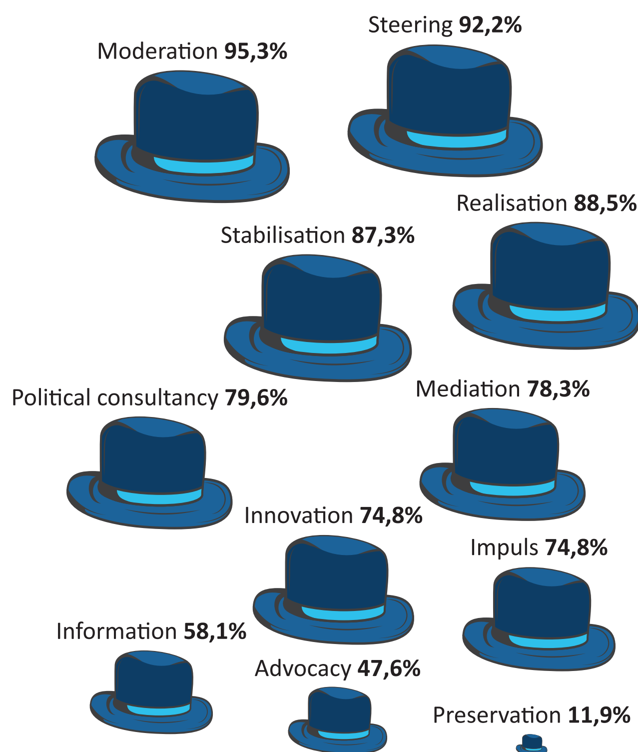


Figure 5. Individual role perceptions. Note: N = 511.

clear to what extent individual practices, activities and values differ from one another. Are there empirically verifiable profiles of planners that differ from each other? Are these values, perceptions and attitudes only related to the individual level or is it also possible to identify larger groups of planners that commonly share certain values and that can be distinguished from each other? Moreover, to what extent do traditional, collaborative or transformative practices become visible in the completion of tasks or in the underlying perception of planning in these larger groups? For this purpose, a hierarchical cluster analysis was carried out (see Section 2), identifying six coherent clusters.

Looking at the six clusters, it is noticeable that cluster 2 (the 'experienced generalists') and cluster 6 (the 'innovative designers') share many characteristics. This refers to the dominant age groups (from 46 to 55 and over 56 years), the longstanding professional experience, and the high proportion of planners working in management positions (e.g., as head of the urban planning department; see Table 1). However, with regard to planning practices and values, the two clusters differ significantly: The experienced generalists most frequently (1) ensure that the aims of urban planning are implemented and (2) negotiate regularly with investors as part of their daily work. Highly relevant for the respondents are also the analysis and evaluation of data as well as the political consultancy, i.e., to provide comprehensive advice to politicians. The planners in this cluster favour strategic and spatial control through concepts and plans (see Figure 4), which can be interpreted as an expression of the German planning system (see Section 3). The implementation of individual projects is, compared to other clusters, less important to them. The innovative designers, on the contrary, develop strategies (e.g., for climate adaptation) and apply for funding. In comparison to the experienced generalist and the other clusters, planners are most often concerned with realising concrete projects (95% consent) and valuing the importance of target group-specific communication. Moreover, all respondents agree that they understand their role as initiators (100% consent); another 90% think that it is important to develop and implement new approaches and instruments. The members of this cluster seem to be very open to transformative practices and the experiments, innovations and formats associated with them.

Compared to these two clusters, it is evident in cluster 4 (the 'project-oriented planner') and cluster 5 (the 'compensatory moderators') that the majority of planners here is under 35 years of age or between 36 and 45 years old. Additionally, cluster 5 is the only cluster with a female majority (see Table 1). With regard to the activities and role perceptions, the project-based planners—similarly to the other clusters—draw up legally binding plans but they are also frequently involved in preparing information for the public. Exceptional for the planners in this cluster is their focus on the implementation of projects and plans, which all members of this cluster agree with (100% consent). They do not see themselves completely as innovators or initiators, but with their general openness to new and innovative approaches or methods they clearly tend towards transformative planning practices. The compensatory moderators, compared to the other clusters, most frequently prepare information for the public. Additionally, they very often bring different interests together and try to balance and reconcile different and sometimes conflicting interests. The vast majority of the planners in cluster 5 find it important to provide comprehensive policy advice and to communicate in a target-group-specific manner. The focus here is clearly on communication, coordination and the balance of different interests (see Figure 2 for the importance of coordination)—all respondents agree that planning should be understood as a process-coordinating task (100% consent). New, experimental participation approaches are applied if these formats seem to be purposeful. These are clearly collaborating practices (see Section 1); however, it is striking that coordination and consideration are largely related to the legally defined objectives of urban planning.

The planners in cluster 1 (the 'local-specific analysts') are involved in a wide variety of activities, although they do not stand out particularly in any of the relevant areas. Above all, they draw up legally binding plans and take part in internal coordination meetings with other municipal departments (see Figure 4). This again shows the importance of urban planning departments within the city administration. The perception of planning roles, however, clearly shows that the collection and evaluation of data are particularly important to them (see Figure 5). Here, planning seems to be understood as a technical task that is carried out by experts, which seems to be the classic self-image of planning in Germany (see Section 3). Innovative approaches and new impulses are much less frequently represented than in other clusters. This seems to be similar in cluster 3 (the 'reactive pragmatists'). Here, planners are also involved in processes of drawing-up legally binding plans; additionally, they contribute to the implementation of planning tasks, bring (conflicting) interests together and prepare information for the public. In comparison to the local-specific analysts and other planners, they tend to have little or no involvement in committee work or external representation, e.g., negotiating with investors. This is not surprising as the majority of the planners in this cluster work at the project level (see Figure 3 and Table 1). The planners see their own role mainly in realising local land-use plans or related activities and advising politicians. Compared to other clusters, the development and use of new instruments and practices are much less favoured. On the contrary, this cluster has by far the largest number of planners (almost 40%) who wish to maintain the status quo. It becomes clear that traditional planning practices—i.e., the use of existing instruments—are in the foreground to preserve the status quo and to deal with planning tasks within the framework of the given political-administrative structures.

Table 1. The six clusters in a nutshell.

	Cluster 1: Local-specific analysts (17%)	**Cluster 2: Experienced generalists (17%)**	**Cluster 3: Reactive pragmatists (22%)**	**Cluster 4: Project-based planners (13%)**	**Cluster 5: Compensatory moderators (19%)**	**Cluster 6: Innovative designers (12%)**
Gender	64% male	58% male	60% male	64% male	51% female	54% male*
Age	< 35: 17% 36–45: 29% 46–55: 20% **> 56: 34%**	< 35: 12% 36–45: 23% **46–55: 45%** > 56: 21	< 35: 21% 36–45: 20% 46–55: 33% > 56: 27%**	**< 35: 46%** 36–45: 12% 46–55: 21% > 56: 21%	**< 35: 31%** 36–45: 20% 46–55: 28% > 56: 21%	< 35: 22% 36–45: 15% **46–55: 35%** **> 56: 28%**
Position	30%: Head of department 25%: Team management 45%: Project level	**48%: Head of department** 28%: Team management 24%: Project level	20%: Head of department 20%: Team management **60%: Project level**	28%: Head of department 22%: Team management **50%: Project level**	25%: Head of department 22%: Team management **53%: Project level**	**43%: Head of department** 35%: Team management 22%: Project level
Education	53%: Planning 2%: Geogr. 12%: Civ. Eng. 20%: Architect. 13%: Others	56%: Planning 4%: Geogr. 4%: Civ. Eng. 28%: Architect. 8%: Others	51%: Planning 3%: Geogr. 6%: Civ. Eng. 26%: Architect. 14%: Others	50%: Planning 12%: Geogr. 0%: Civ. Eng. 23%: Architect. 15%: Others	54%: Planning 8%: Geogr. 3%: Civ. Eng. 26%: Architect. 9%: Others	51%: Planning 4%: Geogr. 2%: Civ. Eng. 26%: Architect. 17%: Others
Planning is about...	Data collection and analysis Making legally binding plans	Strategic and spatial control through plans and concepts Data analysis policy advice	Making legally binding plans Balancing conflicting interests Maintaining the status quo	Implementation (100% consent) Making legally binding plans	Process-coordination (100% consent) Balancing conflicting interests Target-group specific communication Policy advice	Implementation (95% consent) Initiating new ideas and concepts (100% consent) Innovation (90% consent) Target-group specific communication

Notes: * Corresponds approximately to the distribution of the total survey (56% male respondents); ** This corresponds almost to the distribution of the overall survey.

We can conclude that the clusters show many similarities in terms of action fields, activities and the underlying perceptions of planning. However, there are also recognisable differences, particularly with regard to the perception of traditional, collaborative or transformative practices (see Figure 6). In general, in most clusters, traditional planning practices are predominant, mainly due to legal requirements. In particular, planners in clusters 1, 2, and 3, and to a lesser extent in cluster 4, are more concerned about traditional practices, referring to technocratic planning models focusing on goal-specific tasks, means, and outcomes.

Obviously, there is not much interest or scope for the application and further development of transformative practices in the daily practice of planners working in planning departments in German medium-sized cities. However, why is that? In the interviews and in the focus group discussion with the practitioners, urban planners explained that they are supposed to ensure that the formal planning processes procedurally continue in a legally correct manner and that the planning outcomes are legally correct. However, this 'formalisation' of urban land-use planning, in contrast, consequently leads to reduced 'attention' as well as the implementation of conceptual approaches or transformative practices, including proactive approaches and strategic coordination with regard to sustainable urban development, but also comprising experiments, real labs or social innovations. This is also reflected in the practices of cluster 5. Although the practices have a clear focus on collaboration and communication, they nevertheless are closely related to legal procedures. However, planners belonging to clusters 4 and 6 are very open for innovation and thus more willing to allow experiments and new solutions in their daily practices. However, it is important to notice that the clusters do not compete with each other. On the contrary, the focus group discussions with practitioners have shown that all types of planners are needed to fulfil all the relevant tasks urban planning has to deal with (e.g., the planner who initiates experiments and innovations and the planner who develops legally binding plans).

5. Conclusion

As we have shown, the differentiated and empirically-based consideration of planning practices and activities has so far been rather vague in planning sciences or has focused on specific individual cases of planners. A more consistent consideration of practices seems necessary in order to better understand planning as a profession. By focusing on practices as the smallest unit of social analysis, practice theory offers us a conceptual framework to analyse the practices and routines of urban planners, their expertise and activities, their values and moral considerations and the institutional context in which planning is embedded. This was impressively confirmed when conducting the survey, the cluster analysis and the expert interviews which, taken together, have enabled us to identify and analyse planning practices broadly and to identify ideal types of planners based on the observed practices and attitudes.

The identified practices, fields of action and activities may not be completely new and do not come completely unexpected, but they allow a more differentiated picture of urban planning as a profession, and until now have not been considered or represented in planning theory. This also refers to the six identified types of planners, which can also be found in a similar manner in international studies on planners, planners' roles or values. However, the cluster analysis has empirically shown that each of the six clusters has its own specific practices and activities, linked to characteristic value-sets, routines and self-perceptions. It also indicates that some activities and routines are perceived by various clusters at the same time, but might be interpreted or valued differently. Additionally, the cluster analysis shows that planners, i.e., planners, geographers, architects or others working in the urban planning department of medium-sized cities in Germany are socialised by practices and only to a lesser extent by their profession.

Our research has also revealed that traditional planning practices are still prevalent or have recently been used to a greater extent again. Traditional practices pre-

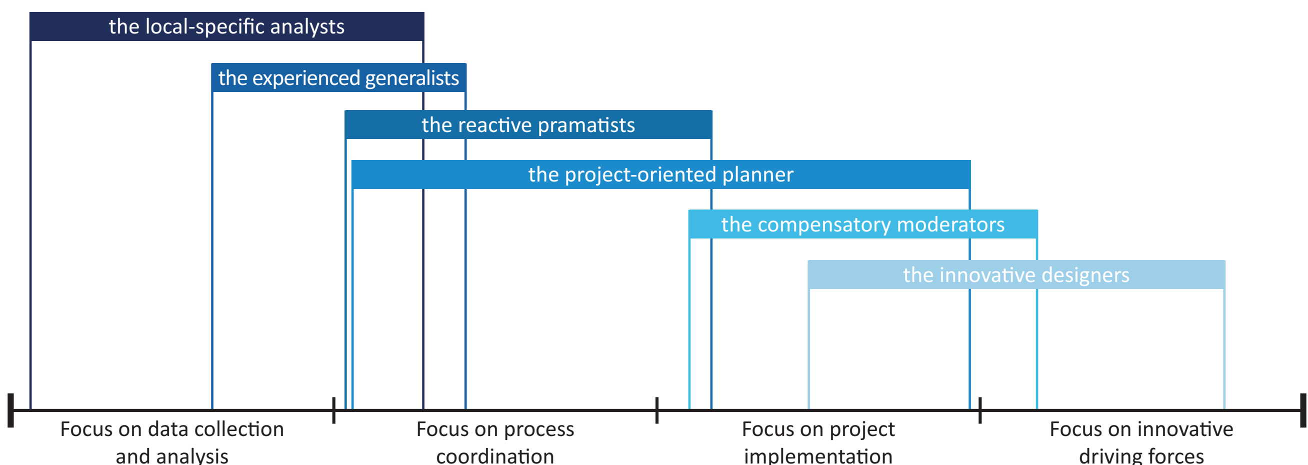


Figure 6. Analysing planning practices: Planners between data analysis and innovation.

dominate in three clusters at least; one cluster is dedicated to collaborative practices and only two clusters more or less consequently aim at innovation, experimentation and new approaches. One possible interpretation would be that both institutional and individual practices, routines and habits change very slowly. With regard to institutional practices, this might have its roots in the fact that urban planning as a public task is embedded in the political-administrative system, where both substantial and procedural legal requirements have already been laid down, determining the scope of the planning practices at the local level. Additionally, we can at least in Germany observe an increasing 'formalisation' of land-use planning in the last years, making planners focus on technical and formal practices to ensure that plans are adopted in a legally secure manner so that claims by other actors (e.g., with regard to building permits or the construction of wind turbines) can be rejected on the basis of the plans. Subsequently, the original task of a "visionary and holistic spatial design" (Zlonicky, 2009) and the 'innovation function' of planning is only fulfilled to a limited extent in the daily practices of planners. Planners thus seem to sit between the chairs when trying to implement innovative or transformative practices, including new solutions, experiments, or urban labs. Obviously, planners need new 'guiding principles' or 'ethical landmarks' to promote their practices and actions in the on-going social, economic, technological, but also spatial transformation processes (Krau, 2014, p. 320) to be able to guarantee proactive and strategic coordination in terms of sustainable urban development.

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Conflict of Interests

The authors declare no conflict of interests.

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Article

Playing for the Future: Using Codesign Games to Explore Alternative Sanitation Systems in London

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Abstract
Public participation is viewed as a best practice in planning, and yet most people who participate in it (planners included) often feel that it is a cynical box-ticking exercise. Citizen participation rates are usually low, implying that they may feel this way too. There are two good reasons for this feeling: On the one hand, public consultation often only occurs when it is a mandatory exercise required by government for development approval; on the other, when public consultation occurs it is after much time and effort has been invested by professionals to develop a scheme therefore change is made reluctantly or not at all. These factors create a reactionary and adversarial atmosphere during consultation. These structural limitations mean that there is no time to find alignment of interests between project developers and the public, or to develop trust and collaborations. This article explores how codesign games as a form of public participation can be done at an early stage of project development to contribute to finding alignment of interests and collaborations between project developers and different public interests. The empirical case study is focussed on the possibilities for the retrofit of sustainable sanitation systems in London. Three future sanitation systems were developed by 14 workshop participants. They demonstrate new alignments of interests, from methods of collection and treatment, to new economies of reuse and production. It also established reasons why the current water-based sanitation systems are obdurate, and the work involved in keeping the status quo.

Keywords
actor-network theory; codesign games; coevolution; London; public participation; sanitation

Issue
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1. Introduction

It is universally acknowledged that public participation is best planning practice. However, it is also universally acknowledged that most public participation events are cynical exercises in public relations and persuasion (Beebeejaun, 2016; Lowndes, Pratchett, & Stoker, 2001). The idea of public participation in planning arose from the rejection in the 1960s of post-war planning and architectural projects from the 1940s and 1950s, (Brownill & Inch, 2019). The projects of the 1940s and 1950s were inspired by a desire to improve housing stock by increasing access to sunlight, ventilation, open space and hygienic sanitation and bathing facilities (Le Corbusier, 1947; Smithson, 1967). They were future-looking and took on the spare aesthetics of the modernists. By the 1970s, this sparseness no longer represented a future of glowing rationality in which everyone benefited from new scientific knowledge, instead it represented the inhumaneness of scientific rationality in which cars could take precedence over people, exemplified by the clash between Jane Jacobs and Robert Moses about Greenwich Village (Ballon & Jackson, 2007; Caro, 2015; Jacobs, 1961). Jane Jacobs amongst other activists mobilised her neighbourhood to stand up and fight against the demolition of housing to make way for a highway. She noted the rich social interactions that occurred, supported by the three to five-storey mix of residential and retail uses comprising

the urban fabric of Greenwich Village. Her public activism inspired planners to think about the necessity of consulting the public, before making sweeping changes to places that affect their lives. It was believed that seeking public opinion would enable more humane projects to be built. Sherry Arnstein (1969) gives the clearest framework to this belief, by grading different forms of public participation as rungs on a ladder. The lowest rung, manipulation, being the poorest form of public participation; and the highest, citizen control, being the best form of public participation.

In 2019, 50 years after Arnstein's categorisation, and over 50 years after ideas of public participation gained popularity, government policy embeds public consultation for large urban and infrastructural projects in many countries and is recommended by the United Nations (Brlík & Pelčíková, 2018; Department of Economic and Social Affairs of the United Nations Secretariat, 2007; Drazkiewicz, Challies, & Newig, 2015; European Council of Spatial Planners, 2016; Flores, 2005; Ministry of Housing Communities and Local Government, 2019; NSW Government, 2018). Plenty of creative ideas and innovations have been trialled (Brandt, Messeter, & Binder, 2008; Lauwaert, 2009; Rumore, Schenk, & Susskind, 2016; Sedlitzky & Franz, 2019), yet we remain with a process that the public, planners and other built environment professionals regard as a box-ticking exercise for a foregone conclusion driven by technology-led solutions and returns on investment. This belief is not unfounded. Most proposals are submitted to the government for consideration after technical and financial feasibility studies have shown that profits will be reaped from the investment. Public consultation is used to demonstrate that projects raise little or no public outcry or objections. This defensive approach leaves no space for the exploration or discovery of collaboration and alignment of interests. It has built environment professionals guessing what an unknown public wants—and a public who feels powerless in the face of built environment professionals, who have a specialist skill set, knowledge, and time to gather salient evidence and think through convincing arguments as to why large urban infrastructural or building proposals could benefit the public.

These limitations are built into the structure of the development process that exist in most capitalist democracies (Drazkiewicz et al., 2015; Flores, 2005). Most proposers of change desire the shortest amount of time to have plans approved in order to keep costs and unknown future risks to a minimum. Governing authorities have a statutory amount of time to consider and determine the acceptability and planning policy compliance of a proposal. Consultants are time constrained by their agreed fee and profit margin. The public have little time to spare from already full lives to spend on planning processes they have little understanding of—or influence over. These processes typically force a reduction of public participation to a box-ticking exercise.

In these times of climate crisis (Intergovernmental Panel on Climate Change, 2018) valuable resources can only be expended to build new places of human habitation that attempt to address the wider needs of society and ecology. It is therefore necessary to pursue efforts to improve participatory methods to help build places that increase the welfare of people and ecologies. Codesign games are a participatory method that can engage all types of people and things in dynamic dialogues (Binder, Ehn, Michelis, Jacucci, & Linde, 2011; Halse, 2010). It can involve people in forms of imaginative play, giving them a different context and thus freedom to find new ways to relate to the world and new forms of living.

This article first outlines seven problems with the use of Arnstein's ladder to frame public participation. It then explains how Collective Coevolution of Actant Trajectories (CCAT) structures the development of the participatory workshop format, content, and codesign games. After this there is an explanation of the workshop and codesign games that were used to explore alternative sanitation systems in London. The results of the final synthesis codesign game show how this format of participation opens up imaginative thinking and dialogue between people and things, demonstrating the benefits codesign games can bring to a participatory process.

2. Problems of Arnstein's Participatory Ladder

One of the most well-used models to frame public participation is Arnstein's ladder (Arnstein, 1969). Critiques of the ladder continue to inspire a plethora of ideas and research including collaborative planning, communicative planning, deliberative planning, coproduction of planning, public engagement, and participatory dialogues (Slotterback & Lauria, 2019). The ladder expresses a hierarchical gradation of eight types of interaction between the public and institutions. At the base of the ladder is manipulation, and at the top is citizen control, passing through therapy, informing, consultation, placation, partnership, and delegated power on the way. It is generally viewed that the top of the ladder represents the best type of public participation because the citizenry controls the decision making process, whereas the bottom of the ladder is the poorest participation as it consists of manipulating public perceptions of projects. Arnstein's ladder, in advocating citizen control as the best form of public participation, divides society into technocrats and elites against all other people and assumes a lack of trust between these groups. The ladder does not acknowledge that public participation can be passive. Nonparticipation may be because citizens trust decision makers to have public interests at heart and feel no need to have input in the decision making process. While Arnstein's ladder continues to be a reference point for public participation today, it pitches the knowledge generated by different types of people in society against each other. This does not give rise to processes bringing different viewpoints together to make informed choices

about the future, nor does it offer a way to incorporate nonhumans into the participatory frame.

The notion that citizen control is the best and most valid form of public participation is impractical in many life situations. The people most likely to participate are those who are most concerned about the issue at hand, who have time available to participate in the debate, have trust that the process will allow their view to have an effect and be taken into account, and have the skills to understand the often technical documentation and language used to communicate ideas. The members of the public able to fulfil all four criteria are necessarily few. People's lives are already full of concerns, busy with activities for work and personal pusuits (Schütz, Heidingsfelder, & Schraudner, 2019). Trust may have been eroded by other interactions with the same institution, say by making suggestions for a different proposal which was never responded to (Schütz et al., 2019). And it takes approximately three to six years of undergraduate study, one to two years of postgraduate education, and two years of professional work experience before someone is a qualified built environment professional conversant in the technical language and communication tools (Royal Institute of British Architects, 2019; Royal Town Planning Institute, 2019).

A second problem with citizen control at the top of the ladder is that it presumes that the majority view has the best interests at heart for all members of the public. All types of people and majorities can all hold views that if upheld, damage environments and other groups of people (Hendrix, 2007). Regardless of socio-economic position, the majority may want to maintain the status quo because the effort, expense, and uncertainty of change are too great in comparison to anticipated benefit (Subašić, Reynolds, & Turner, 2008). A simple transference of power from technocrats and elites to other citizens does not mitigate this circumstance. Exacerbating this is that sometimes change can have no tangible direct benefit to people whose effort is required, or whose life is disrupted by the essential change. For example, providing habitat for an endangered bat is unlikely to give direct benefit to a local café owner, even though they may be obliged to change how they light their premises in the evening.

A third problem of citizen control as the best form of public participation is it requires people to have broadly similar levels of health and education (Burden, Fletcher, Herd, Jones, & Moynihan, 2017). Inequity of health and education are often a symptom of wider structures of oppression (Farmer, 2004). Ill health demotivates people from thinking in a long time scale as a shorter lifespan prioritises short-term actions (Carstensen, Isaacowitz, & Charles, 1999). Different relative education levels can cause people to believe in others who they feel are more educated and knowledgeable, thereby giving away their power and devaluing their own thought processes and knowledges leading to coercion (Armingeon & Schädel, 2015). Conversely, inequitable education can also engender a distrust of people who are more educated because of disbelief in their knowledge, leading to aggression and revolt (Cho & McLeod, 2007).

A fourth problem of presuming that citizen control is the best form of participation is that it does not acknowledge that all these forms of communication and participation can have validity for different circumstances. For example, if infrastructural works have begun, it is unlikely citizens can overturn the decision, therefore informing people of the process and logic by which this decision came about is possibly the best form of participation. Citizens would then understand why and how decisions were made, what rights they have to change things at present, and how they could proceed if faced with similar circumstances in the future.

A fifth participation problem is that each form of communication and participation on the ladder requires citizens to comply with the efforts to change them. Manipulation requires someone to conform. Therapy involves a person to decide and work to alter their thoughts and behaviour. Informing entails the citizen to comprehend new information and incorporate it into their worldview. Consultation involves people to develop and offer their opinions. Placation necessitates citizens to be conciliatory. Partnership obliges people to work with technocrats and elites. Delegated power and control compels citizens to make decisions and take responsibility. For the desired outcome, technocrats, elites and citizens must follow their circumscribed roles, a happenstance that requires particular contexts to occur.

Sixth, if delegated power and citizen control do occur, it is likely that power would shift to particular members of the public to make decisions and take responsibilities, thus replacing one type of technocrat or elite with another, replicating the same power structure that citizen participation aims to mitigate.

A seventh problem with citizen control at the top of the participation hierarchy is it does not acknowledge that people representing institutions, or with particular technical skills, or in command of particular resources, are also citizens and part of the public. By making citizen control the top of the participation hierarchy it implies particular types of people are apart from the public or citizenry. This leads to the question of what and who should be included when considering the public and participation (Andersen, Danholt, Halskov, Hansen, & Lauritsen, 2015).

Contemporary notions of the public from an actor-network theory (ANT), socio-technical, or assemblage perspective show how nonhuman actants are part of the public. Without human and nonhuman relationships social relations are not made, knowledge cannot be created, and the idea of the public or participation cannot be enacted (Chilvers & Kearnes, 2016; Storni, Binder, Linde, & Stuedahl, 2015). Arnstein's ladder of participation concentrated on the relationship between what she saw as different types of people in society, have-nots pitched against elites and technocrats, therefore

it does not consciously attempt to give voice to nonhuman actants which are also involved in creating publics. Nonhumans include all things except those who identify or are identified as human. These nonhumans form part of the public because they enable, prevent, and circumscribe particular types of interactions between people.

These seven problems need addressing in order to create forms of public participation that enable different types of actants to come together on equal terms to develop ideas of how people may want to live in the world in the future. Five conditions can improve these seven participation problems:

1. Interest and concern;
2. Time commitment;
3. Trust and responsiveness;
4. Knowledge and language differences;
5. Integrating plural perspectives and understandings of benefits and harm for humans and nonhumans.

All five aspects influence each other. For example, if someone is interested or concerned about an issue, then they will be more willing to allocate time to participating in events about it. They are also more likely to spend time learning about the issue thereby increasing their knowledge and vocabulary on the subject. By spending more time and becoming more familiar with the process, trust and expectation of the timing of responses can be built. As trust develops, explorations of knowledge and language differences can occur either through deliberate questioning or by unexpected discovery in conversation. This may then raise new interests and concerns, which gives rise to the integration of plural perspectives, which increases trust and responsiveness, the likelihood of allocating time to the concern, and trust that other participants will be able to represent and take into account viewpoints when individuals are unable to attend all participatory events. Through the process of participation all five aspects need to occur or develop, but to begin an active participatory process the first condition of interest and concern is mandatory. Whilst the five conditions cannot directly address ill health and lack of education, they can respond by creating conditions where people who have ill health or feel lacking in education can participate.

To generate interest and concern amongst citizens is in opposition to most development pursuits. A concerned public adds complexity to the process of bringing projects to fruition by producing a multitude of conflicting concerns and priorities. One way to resolve this initial quandary is to begin the participation process before submission of a project application to a governing body. This solution is concurrent with problem seeking or architectural programming (Duerk, 1993; Faatz, 2009; Peña & Caudill, 1977). At this point, built environment professionals have not invested much time or money in the project, therefore they are open to incorporating citizen concerns. Citizens do not feel powerless in the face of technical drawings and language, as the project is nascent and undeveloped. This adds a sixth aspect that improves conditions for participation:

6. Begin public participation before any party has invested in a particular outcome.

The idea of games and play in the form of a codesign workshop supports a process of public participation that addresses these six conditions through an intriguing and fun process that allows different views of the future to be explored, expressed, recorded, and included in project proposals.

3. Codesign Games and CCAT

Codesign is a term used to cover a spectrum of processes where collective viewpoints achieve a design outcome. The role of the designer is either subsumed as an orchestrator of the process, or dispersed within the collective viewpoint (Binder, Brandt, Ehn, & Halse, 2015; Storni, 2015). This differs to the most conventional idea of a designer, where they are the arbiter deciding on the spatial and material qualities of things in the world. The rationale for making decisions can stem from the personal—yellow is my favourite colour—to the conceptual—when people see this, I want them to experience the warm glow of a tropical sunrise—to the practical—yellow is a colour that is best seen by the human eye in the dark. In each of these instances, the designer imagines the person or people that will interact with their design. Codesign aims to share the task of imagining users and outcomes.

There are different ways to share these imaginings. Product and human-computer-interaction designers have a process of user centred design, where end users are integrated into all stages of the design process from the brief formulation, to testing various iterations of the product, giving feedback to be responded to (Gulliksen et al., 2003). In this process a designer has already decided on the type of thing which they believe they will solve a problem. This process works well for problems that are already tightly bounded ("How do we make a better hairdryer?"). However, it does not work for problems with little or no boundary ("How do we create a sustainable sanitation future?").

Problems that are less circumscribed require a wider set of constituent interactions amongst both humans and nonhumans to both determine problem boundaries and imagine solutions. Codesign games are one process being developed to enable constituents to coalesce, collaborate and create ideas for their future forms of living (Binder et al., 2011; Halse, 2010).

The codesign games developed for the case study used a CCAT framework. This framework takes elements from ANT and socio-technical coevolution. I have previously referred to this framework as coevolutionary ANT (Teh, 2015a), or ANT coevolution (Teh, 2015b).

CCAT highlights and advances aspects of ANT and socio-technical coevolution. Humans and nonhumans that create the matter of concern are actants. Coevolution refers to the altering of actants relative to one another, whereby the causation of change is mutual rather than one on another. Collective trajectories enables the projection and hypothesis of likely coevolution amongst a given group of actants. Collectives occur when many actants are defined by or are willing to be defined by the same relations. Trajectories are the progression of actant transformations that comes from existing relationships, which limit the type of new relations that can form between actants.

The CCAT framework guided the development of the codesign games and workshop structure. The workshop gathered human participants who were able to articulate relationships between a range of humans and nonhumans. That is, people with different interests in the matter of concern. Enrolment included professionals, technicians, academics, and engaged citizens of different ages and backgrounds. Workshop events enabled people to understand existing human and nonhuman relationships, including visits to places currently affected by the matter of concern, presentation opportunities describing the latter, and an exhibition of the matter of concern. The games played facilitated ways for people to imagine and communicate new human and nonhuman relationships.

The order of workshop events was as important as the events in the workshop. Empirical case studies from socio-technical coevolution reveal that new relations between actants arise from pre-existing relations that alter incrementally over long periods of time, often in response to solving problems that arise from current relations. This means that the events of the workshop needed to progress from understanding existing relations between actants that define the matter of concern before collectively creating new types of network relations between actants. This resulted in the visits, presentations, and exhibitions about the existing situation occurring before games were played.

CCAT also affected the order of the games, which begins with individual thinking before moving to collective imaginings. By starting with individual thinking, participants contribute their concerns to the forum without needing to find consensus. It gave people a chance to ask questions to understand other positions and gave time for trust to develop between participants. By offering each participant a platform to express their concerns, the process began with a sense of respect for all actants involved and brought participants to a common platform of understanding that enabled engagement with the difficult conversations needed in order to find consensus in the later games.

Games in this case refers to structured imaginative play, similar to the games children aged about 1 to 6 freely make up (Fein, 1981; Sutton-Smith, 2001). The games have their own internal logic. All the parts make sense within the game, even if they do not fit in with the current world. They are rehearsals of future scenarios of being an adult. Examples are playing families, schools, hospitals, and battles. Observed and lived experiences as well as imagination are the basis of these scenarios. These types of games allow the players to deepen their understanding of existing and possible future scenarios by playing them out. It is both a learning and creative process.

4. Codesign Game Workshop for Alternative Sanitation Systems in London

The two-day workshop was titled "New Loos for London?'' It brought together fourteen participants with one facilitator to the University College London Bloomsbury campus to play codesign games that explored sanitation futures for London.

The fourteen participants represented various concerns about sanitation: three developers of alternative sanitation systems that were on the market; one distributor of alternative sanitation systems in London; one owner of a company that produces alternative sanitation systems; three interested citizens; an environmental policy consultant; a solid waste policy maker; a wastewater and sludge industry based researcher; a socio-environmental engineering academic; a history of design academic; and a sustainable urban design academic. Workshop participants were not asked about their level of education, gender, or ethnicity. The observable characteristics were that most people appeared to have at least university-level education, though one or two participants may not. Four participants were women, nine participants were men, and the facilitator was a woman. English was not the first language of one participant, and one participant was non-Caucasian. The mix of participants is an outcome of their various concerns about sanitation and their ability to volunteer their time rather than a representative mix of ethnicities, education levels, and genders in society.

The workshop organiser identified and personally invited participants professionally involved with aspects of sanitation and waste, with additional invitations extended when invitees made suggestions. Citizens were invited through an online forum *Project Dirt* (now *Semble*) that allows members to invite others to sustainability events they are organising. Membership is free and wide varieties of people are members. Attendees who lived out of London were reimbursed for one night of accommodation and rail fares. The timing of the workshop coincided with a business trip for an overseas participant to attend.

All participants were requested to commit to the whole two-day workshop, however three people had to leave early. One person participated for the first day; another left after the first game and another after the first hour of the third game on the second day.

The first day of the workshop was for humans and nonhumans to begin knowing other's existing network

relations, concerns, and to develop trust amongst participants. The second day was for humans to explore new types of network relations between nonhuman and human actants.

Day one of the workshop began at 9:00 AM with an introductory exercise to create a photo wall displaying photographs brought by each participant of their home toilet by way of introducing themselves (Figure 1). This established the ubiquity of the flush toilet connected to a sewer system amongst participants. Only one participant had an alternative form of sanitation—a vacuum flush compost toilet. Tea, coffee and breakfast pastries were available during the introductions. A photo printer was also available, so all participants had the ability to have digital photos printed.

Following the introduction, all participants boarded a minibus to go to the North London Ecopark, a solid waste processing centre based in Tottenham. The Ecopark treats solid organic waste for compost, sorts and packages recyclables, sends some waste to landfill, and incinerates remaining waste for electricity and heat. It is a collaborative project by seven boroughs in London, which handles about 583,000 tonnes of waste per year (North London Waste Authority, 2018). Following the tour, lunch was provided, and the group continued to Deephams Wastewater Treatment Works, which was conveniently located next door. Thames Water runs Deephams which treats 209,000m^3 of wastewater on an average day, which is approximately 885,000 people's daily wastewater (Robbins, 2015; Water Technology, ca. 2015). All participants were impressed by both the solid waste and waste water treatment plants for their size, sophistication, organisation, and the care they took to protect the environment from pollutants.

After viewing the large plants handling waste, the tour continued to visit a typical residential area of London whose solid and liquid waste is treated at the Ecopark and Deephams. On return to the UCL campus, a small exhibition was held with physical examples of three types of alternative sanitation systems that were developed or sold by participants (Figure 2). Systems included a packaging system, a tiger worm treatment system, and a desiccating compost system. The four developers and distributors of alternative sanitation systems also gave presentations, and answered questions about their systems, which concluded the first day of the workshop at about 7:30 PM. Drinks and snacks were available during the exhibition and presentations.

The second day began with creating another photo wall and review about what people found most interesting from the previous day's site visits. Participants then played three codesign games, developed specifically for the workshop (Table 1). The first game begins with individual thinking, the second concentrates on system interaction and the third collaborative decision making. After the first two games, participants had a one and a half hour lunch break at a nearby restaurant. The last game took three hours. A short film screening of the results from the last game, followed by discussion and feedback concluded the workshop. A few days after the workshop, participants were emailed a thank you note and feedback questions.

Figure 1. Participants playing Macromoves. Introductory photo wall in the background. Photograph by Danielle Willkens.

Figure 2. Alternative sanitation exhibition. Photograph by Danielle Willkens.

Table 1. Synopsis of games in sequence of play.

Name of Game	Aim	Types of actions	Outcome
Macromoves	Discovering what individuals and the group think would prevent or promote change	Individual thinking, followed by large group analysis, then small group play	Story based scenarios
I-Count	Exploring influences in relations between actants in a system	Individual decisions, within large group play	Alternative sanitation systems
Landed	Create a system, with its own context	Small group play	Video describing a scenario and the alternative sanitation system it supports

The first game, Macromoves, began with individual points of view about what types of concerns would help or hinder the implementation of an alternative sanitation system in London. Each concern was written on one index card, after each participant had written as many ideas as they had, the group then came together to read aloud their ideas and collate them thematically. The thematic analysis allowed people to see what ideas had the most strength by the number of people who had similar ideas. The index cards were then turned over and shuffled. Each person took six cards and formed groups of 3 to 4 people to re-examine the cards that they had collectively gathered. Based on these cards, each group created contexts for future sanitation systems. The shuffling and reallocation of the cards is to imitate life, where the future is made of some ideas which can be anticipated today, but which ideas emerge as influential can also be unexpected. These groups developed four scenarios: “Brown Economy,” “Wonderloo,” “Yes to Dry,” and “Cost.” These scenarios of the larger context in which alternative sanitation may or may not occur formed part of the background for the final game Landed.

The second game, I-Count, was played as one large group of 12 people. Each person received a random card representing a part of a sanitation system. For example, the toilet, the receiving environment, the treatment system, the conveyance for waste, the person using the toilet, pollution, cost, and so on. A dice was then rolled until a participant rolled a 1. When they did so, they then made a decision about how their role in the system would play out. How it could play out was dependent on all preceding decisions from other players. In other words, the first person to roll 1 was able to exert the most influence, because all subsequent decisions had to accommodate all preceding decisions. Each participant provided a written and drawn description of their decision and placed it in the consecutive order of decisions made. Some participants spontaneously let the group know what part of the system they represented and asked for advice from the group before making their

decision. Other participants stated their decision without input from the group. These contrasting ways of playing reflected people's personal preferences and styles of interaction. Each had its own advantages in the way it opened up discussions about relations between actants. Participants were respectful that each person had their turn to make a decision for their part of the system. This was because each participant wanted the chance to make their own decision without pressure from others, most participants did not have any preceding social ties with other participants, and everyone wanted to find out the consequences of the decisions made to the sanitation system it created.

To show how different parts of the system inhibited or gave opportunities for particular types of relationships the game was played twice. The two systems were different but made sense within themselves. The contrast gave evidence and experience of how actants related to each other to the participants. Participants could have played the game more than twice to increase depth of system knowledge, but there was insufficient time to do so within this workshop.

On completion of the two systems, participants analysed the parts that they liked, and those that they did not. Those that they liked were noted on green sticky notes; and those that were disliked on red sticky notes. Areas that were most liked and disliked were noted as things to include or avoid for the third game Landed. Relationships for participants to include were: reduction of pollution; efficient resource recovery; and self-sustainability. Relationships to avoid were: high energy costs; noisy function; easy vandalism; high initial implementation cost; and manual carting of waste.

Landed was the final synthesis game. Participants were given three hours in which to create a short 4-minute video about future sanitation systems in London. Participants worked in self-selected groups of 3 to 4 people. They were given various materials to make the video, such as cardboard, paper, sticky tape, glue, blu-tak, photographs, modelling clay, and Lego figures as characters in the scenario. Participants were also free to add whatever objects and materials they thought necessary to create their scenario. Each future sanitation system was in response to the site visits completed on day one, a scenario from Macromoves selected by a dice roll, and the I-Count elements to include and avoid.

5. Codesigned Alternative Sanitation Possibilities in London

Landed resulted in three scenarios: "Silvia Does a Poo," "McWorm," and "Status Quo." "Silvia Does a Poo" had the scenario "Yes to Dry." The people creating the video were one developer and one owner of a company that produces alternative sanitation systems, one socio-environmental engineering academic, and a history of design academic. The video describes what happens when Silvia does a poo, and when she does a pee in a public toilet (Figure 3). When Silvia does a poo, it is conveyed via a retrofitted vacuum flush system in the existing sewers of London. These pipes lead to a local biodigestor that also treats local food waste. The biogas from this process generates electricity to run the vacuum system, heat for a communal heating network, with any additional energy used for street lighting. The compost from the system is distributed to farmers as a fertilizer.

Figure 3. "Silvia Does a Poo" scenario. Photograph by Danielle Willkens.

When Silvia does a pee at the local pub, it is collected as a fertilizer for farmers. During the weekend, local farmers from Essex sell produce at the neighbourhood farmers' market to Silvia and her neighbours. Before the farmers leave, they collect the urine and compost to fertilize the crops they will sell in the market. Neighbourhood gardens benefit from any extra compost produced. In the contemporary city of London, "Silvia Does a Poo" imagines how the nutrient cycle is closed.

"McWorm" also had the "Yes to Dry" scenario. The participants creating this video were two interested citizens, an environmental policy consultant, and a wastewater and sludge industry based researcher. "McWorm" is a tale where a neighbourhood band together to increase their resilience to sewer problems and food by collaborating with a developer to retrofit a vacuum toilet system in the neighbourhood (Figure 4). The funds for this collaboration come from selling the rights to a McWorm burger which is made from worm protein from the sanitation system. New vacuum toilets are retrofit in the neighbourhood, the vacuum system runs inside the existing sewer system, which connect to an anaerobic digester, then to a composting area that feeds worms and creates clean compost. Neighbourhood gardeners receive compost, and worms are turned into burgers. People can eat their own produce and the worm burgers to metabolise into more worm food. "McWorm" also closes the nutrient cycle but is more futuristic than "Silvia Does a Poo" because it imagines the use of a protein source not widely used in contemporary London.

"Status Quo" had the scenario "Cost." The makers of the video were an interested citizen, a solid waste policy maker, and a sustainable urban design academic. This group also had the contributions of a distributor of alternative sanitation systems at start of the game, but this participant left before the filming of the final video. "Status Quo" described a public meeting held about the possibility of implementing a new sanitation system which involved storing waste in containers in the basement of buildings, which were then collected by electric vehicle, and transported to an anaerobic digestor for treatment and resource harvesting including electricity to power the collection vehicle (Figure 5). The anaerobic digestor was located in a local playground. Two people then report their impressions about the discussion. One enthusiastic community member talks to their partner over the kitchen sink. The partner raises many objections including traffic congestion, contamination from transporting waste through the streets, malodour, gas explosions, no necessity to make this change because water is cheap, and the lack of improvement to the current system that already generates electricity and fertilizer. They were also unsupportive because it would mean changing the recently renovated bathroom. The other reporter was an observer from the local water and sewage provider to their boss, who stated that their business was safe because the community had raised too many objections about the implementation of a new sanitation system.

The three videos demonstrate diverse ways in which collectives of actants coevolve relations in trajectories from relationships that exist today. The two groups who envisaged the implementation of a resource harvesting sanitation system by retrofitting the existing sewer system with vacuum flush pipes both had the scenario "Yes to Dry." However, the resources harvested, the organi-

Figure 4. "McWorm" scenario. Photograph by Danielle Willkens.

Figure 5. "Status Quo" scenario. Photograph by Danielle Willkens.

sation of the harvesting, and the financing of the implementation and operation were not alike. "McWorm" develops on existing cultures of fast food consumption and their transformation of food supply chains. Research for alternative protein sources have been sought for many years in the face of population growth, land and animal rights pressures. Worms form part of traditional diets the world over so it is conceivable as a future protein source (Martin, 2014). It also envisages benefits for local gardens through the distribution of compost that is another product from the sanitation system. "Silvia Does a Poo" contrasts this with fertilizer resources distributed to local farmers and gardeners, district heating, and electricity to power the vacuum system and street lighting. It builds on an existing culture of local farmers markets in London, supplying them with a source of fertilizer that is novel today, but commonly used in the past. "Status Quo" received "Cost" as the scenario within which to develop their sanitation system video. For this group, public safety, personal change, and the need to maintain the profitability of the privatised wastewater provider in London prohibited an alternative sanitation system.

Each imagined future plays with the collective entanglements between human and nonhuman actants. Their trajectories reside in today's relations but coevolve for a tomorrow where new collaborations abound. These coevolved relationships between humans and nonhumans were not described in a reductive or singular way. Instead, they articulated the multiple benefits and detriments that each sanitation systems' alliances created, allowing people to make decisions about the types of compromises they were willing to make for the corresponding advantages.

6. Improving the Process of Participation with the Codesign Game Workshop

The formulation of the "New Loos for London?'' codesign game workshop addressed the six conditions identified to improve participation. Most importantly, the public participation workshop was held well in advance of any party investing in a particular outcome. The topic was of interest and concern to the organisers of the workshop, the wider human population in London and globally, and water dependent ecological systems. The organisers had no stake in a solution. The facilitator did not help play the codesign games or encourage specific discussion points, confirming the organisers' lack of advocacy for a specific outcome from the workshop. The only intention was to allow participants to generate possibilities that would identify ways in which humans and nonhumans could coevolve for alternative sanitation systems to occur in London's future.

The two-day time commitment for this workshop was both an advantage and an impediment for participation. The restriction created a group of participants who were engaged in the workshop process because they had committed and sometimes justified to their employers the two days from their working week for the workshop. Three of the fourteen workshop attendees did need to leave early, but all stayed longer than planned, showing how the workshop process engenders more interest and concern resulting in people committing more time to the process.

Participating in the workshop did not require specialist skills or knowledge. The things used to communicate ideas were familiar. The workshop introduced new con-

cepts and experiences to each participant, so everyone felt that they were learning as well as contributing ideas.

The most significant advantage to the two-day workshop was enabling points three and four: trust and responsiveness; and knowledge and language differences. Despite all participants being engaged, there were many instances where people spent time clarifying vocabulary, ideas, viewpoints, and ways of knowing in order to assimilate and critique new knowledges or alter existing ones. There were no circumscribed roles of technocrats and elites versus citizens because people firstly met as people with a common concern, and then as people with different types of knowledge which had bearing on the concern.

The relationships between nonhuman and human actants were central throughout this process. The icebreaker included pictures of homes and toilets, demonstrating similarities or differences in daily life, norms, and expectations formed by relationships with particular nonhumans. The tour viewed and discussed the functions, spaces, organisation, technologies and limitations of solid and liquid waste treatment works. The exhibition showed new nonhumans which are not a part of current systems but may have roles to play in future systems. Nonhumans sometimes demonstrated their requirements by being present, but frequently a human explained their less apparent qualities. For instance, the type of environment microbes treating liquid waste require to clean water of pathogenic contents; and in the second game, I-Count where people role played the nonhuman parts of the sanitation system. The final game, Landed, demonstrated possible future relations between humans and nonhumans derived from these shifting perspectives of actants and demonstrated an integration of plural perspectives.

7. Conclusion

The practicalities of undertaking public participation events which sincerely include and balance concerns from citizens and built environment professionals challenges the widely held belief in public participation as best practice. The often-used Arnstein's ladder of participation sets a frame of public participation of elites and technocrats against other citizens; and excludes nonhumans that form part of the concerned public. From this critique, six aspects emerged that would enable a public participation process which is more inclusive of and responsive to the differing needs of publics: The process should start before a group of people have invested so much in its development that they are unwilling to alter their project; participants need to have an interest and concern about the project; they need to have time to participate; the process needs to develop trust and responsiveness to differing viewpoints; allow for knowledge and language differences to be explored; and be able to integrate plural perspectives and understandings of benefits and harm for humans and nonhumans. The six aspects are interrelated, reinforcing or undermining each other, should an aspect occur or not.

The two-day workshop developed using a CCAT framework created and conducted a public participation event demonstrating a process integrating the six conditions. The workshop occurred before any participants had a stake in a particular outcome. It brought together people who were interested and concerned about the sanitation system and built on this through the workshop. All participants gave as much time as they were able. Knowledge and language differences were given time to resolve into common understandings through the full day of visiting examples, and within the codesign games on the second day. Plural perspectives of benefits and harm for humans and nonhumans were expressed throughout the playing of all three codesign games because of their structure but were most clearly articulated in the last game Landed.

The final synthetic game Landed showed that public participation need not be a hierarchical, adversarial, box-ticking exercise, dividing technocrats and elites from all other citizens. The codesign process revealed the relationships between actants, and gave multiple perspectives validity, contingency, and fluidity. This understanding allowed the exploration of new relationships for mutually beneficial scenarios and compromises. Arnstein's ladder was redundant because participants did not divide themselves into technocrats, elites and have-nots. Instead, they were people with a common concern, with unique viewpoints and knowledge to contribute to the discussion. These are valuable experiences and knowledge for participants to carry forward. In this case, the outcomes demonstrated two possibilities for future sustainable sanitation systems in London, and a prospect of stymying alternative systems. These imaginings contribute to transforming London's unsustainable reliance on the flushing toilet to a sustainable system. Future research could test the ability and limits of codesign games to continue engaging and encouraging publics to deliberate and act for collective benefits.

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Conflict of Interests

The author declares no conflict of interests.

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Article

De-Colonising Planning Education? Exploring the Geographies of Urban Planning Education Networks

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Abstract
Urban planning as a networked field of governance can be an essential contributor for de-colonising planning education and shaping pathways to urban equality. Educating planners with the capabilities to address complex socio-economic, environmental and political processes that drive inequality requires critical engagement with multiple knowledges and urban praxes in their learning processes. However, previous research on cities of the global South has identified severe quantitative deficits, outdated pedagogies, and qualitative shortfalls in current planning education. Moreover, the political economy and pedagogic practices adopted in higher education programmes often reproduce Western-centric political imaginations of planning, which in turn reproduce urban inequality. Many educational institutions across the global South, for example, continue teaching colonial agendas and fail to recognise everyday planning practices in the way cities are built and managed. This article contributes to a better understanding of the relation between planning education and urban inequalities by critically exploring the distribution of regional and global higher education networks and their role in de-colonising planning. The analysis is based on a literature review, quantitative and qualitative data from planning and planning education networks, as well as interviews with key players within them. The article scrutinises the geography of these networks to bring to the fore issues of language, colonial legacies and the dominance of capital cities, which, among others, currently work against more plural epistemologies and praxes. Based on a better understanding of the networked field of urban planning in higher education and ongoing efforts to open up new political imaginations and methodologies, the article suggests emerging room for manoeuvre to foster planner's capabilities to shape urban equality at scale.

Keywords
de-colonising planning; global South; higher education; urban equality; urban planning education

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1. Introduction

Realising the Sustainable Development Goal (SDG) 11—'Making cities and human settlements inclusive, safe, resilient and sustainable' (United Nations [UN], 2015)—demands urban planners with the capabilities to address complex socio-economic, environmental and political processes. Addressing inequalities is a central task of planning, which is confronted by the "simultaneous challenges of deconstructing the diagnoses from which it departs, and identifying strategies to transform urban injustices" (Allen, Lambert, & Yap, 2018, p. 365). In working towards more just and equal cities, planners need to be equipped with the skills, capacities and values to put the world's growing urban population at the centre of their actions. This, in turn, requires an education based

on critical pedagogy, which in its content considers issues of gender, intersectionality and justice, and in its methods stimulates critical thinking and reflective practice (Tasan-Kok, 2016).

This article aims to contribute to efforts advocating a radical re-framing, transforming and de-colonising of current planning education in two closely related regards: One is the expansion of conceptualising and practicing urban planning as a networked field of governance rather than a single profession or discipline. Particularly in the context of cities of the global South, professional planners are only one part of a wide network of urban practitioners, who are collectively and individually, formally and informally, building and shaping cities. Regarding the second, to accommodate this understanding of a wide range of urban practitioners, we need to stimulate urban planning education (UPE) within and beyond the higher education sector. This aligns closely with SDG 4—'Ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all' (UN, 2015)—which advocates broadening up the understanding of a wide range of education forms. Therefore, this article understands UPE as inclusive of, but not limited to, higher education and sees the building of capacities, skills and values of a range of urban practitioners as fundamental drivers of urban equality.

Despite momentum for change being created by the SDGs as well as the New Urban Agenda, research on inequalities has widely shown that UPE paradoxically remains itself as one of the drivers producing and reproducing urban inequality (MacDonald et al., 2014). This manifests in inequalities in UPE itself, as well as through the teaching of inadequate planning approaches (Allen, Revi et al., 2018). In other words, de-colonising planning involves both addressing inequalities within the political economy of higher education institutions in UPE, and the blind spots reinforced through outdated colonial curricula that renders 'formal' planning as the main process responsible for building cities across the global South, while ignoring the role and struggles of 'informal' city-makers.

Previous investigations on cities of the global South have identified several shortfalls in current planning education, which call for re-inventing and transforming it. Distributive inequalities and large quantitative deficits in the availability of, and access to, planning education have been frequently highlighted. For example, a report by the Asian Development Bank stated that by 2015 India had only an estimated 5,000 registered planners, which suggests a severe shortage of professional capacity considering that the census 2011 identified 377 million people living in about 8000 urban centers (Revi et al., 2012). Acknowledging current shortfalls and estimated rates of urbanisation in India, the Committee of Experts in Town Planning and Architecture for Policy on Education estimated a demand for educating 8,000 planners a year over the next 20 years (South Asia Urban Knowledge Hub, 2015). To this quantitative challenge come praxeological shortfalls and epistemological inequalities, which manifest in the teaching of planning as development control with a largely technical and modernistic focus that fails to consider the wider political economy and ecology of contemporary urban change (Tasan-Kok, 2016). In many parts of the world, planning curricula continue teaching colonial approaches, while failing to recognise everyday planning practices in the way cities are built and managed (Kunzmann, 2015; Mehta, 2015; Odendaal, 2012). Bhan (2019), for example, critiques that many planning and urbanism curricula do not reflect the actual conditions under which Indian cities are built and lived. Instead, universities focus on transmitting knowledge about simplistic tools and solutions for urban challenges, rather than building the capacity of urban practitioners to work with the messy modes of repair or auto-construction, which are essential to Southern urban practices.

In this article, we seek to deepen the understanding of the relations between UPE and urban inequality, following a three-dimensional conceptualisation of urban justice and equality which has been developed by Fraser (1998, 2005) and adopted for higher education by Walker and Unterhalter (2007). The first dimension concerns distributive equality, which has been the most dominant, resourcist approach to measuring, for example, access to education, number of graduates or student-teacher ratios across different social categories. Taken alone, this approach proclaims that learners can appropriate equally distributed resources in the same way. Hence, emphasis on distributive equality often overlooks the contextual factors that shape the learning outcomes of different individuals and groups. Therefore, it is paramount to complement calls for re-distribution together with those for reciprocal recognition, thus, scrutinising the ways in which planning education either challenges or reinforces politics of difference. The third dimension, parity of participation, is essential for opening up the political space for learners to activate their agency and utilise their capacities. This requires working towards an equality of capabilities, whereby addressing power relations is fundamental to entitle learners to access education and implement their learning into reflective action with a justice-oriented intent (Walker, 2006).

The following sections will take the higher education sector and distributional inequality as entry points to better understand levers and barriers for re-framing current planning education. Aligned with the notion of planning as a networked field of governance, which demands radical change at scale, we focus on the role of planning education networks, which are umbrella associations that link different schools in the field. The analysis is based on a literature review and online repositories of national, regional and global planning education and professional planner's associations.

Secondary data from these networks, which includes the names and location of members, membership requirements and categories, were used to develop a se-

ries of maps, which, in turn, served as an input for interrogating issues of urban inequalities in 19 semi-structured interviews. These were held between November 2018 and March 2019 with planning educators from Latin America (2), Asia (7) and Africa (4) as well as UK and US-based ones (6) with several decades of experience working in the global South. All interviewees have or had positions in higher education institutions; several hold positions in the boards of planning education associations and have affiliations with international NGOs and civil society organisations.

A critical reading of maps involves examining not just the geographical distribution of UPE but also the broader context of what and who is being recognised and made visible and in what ways (Lambert & Allen, 2017). In other words, the reasons and implications of absences and presences in planning education networks are highly contextual and are therefore best interpreted through consideration of the historical, political, socio-economic, and cultural conditions that shape UPE in specific geographies.

2. Networks in Higher Education and Urban Planning

Previous research has found several motivations for the emergence of planning education networks, which include forging connections between and across previously disparate schools, establishing a professional profile, and signalling key historical junctures in the development of planning as a networked field of governance (Freestone, Goodman, & Burton, 2018; Kunzmann, 1999). The decision for forming the Association of African Planning Schools (AAPS), for example, was strongly influenced by the idea of re-connecting planning schools across the region in a post-apartheid and post-colonial context (Watson & Odendaal, 2013). Moreover, the initiative recognised the shared institutional, legal, and pedagogic challenges faced by many African cities and the urgent need to collaboratively develop curricula and pedagogies to equip learners with the capacities to address such challenges (Odendaal, 2012). In Europe and North America, connecting planning schools in a regional network has been seen as a required step also for shaping and sharpening the profile of a distinct and recognised profession that stands vis-à-vis the professions it emerged from, particularly architecture and engineering (Frank et al., 2014). An example for establishing networks as markers for turning points in planning practice is the case of the Indonesian Planning School Association (ASPI). Indonesia started the national network in 2001 in an era of democratisation and decentralisation. Strongly influenced by German development assistance GTZ, ASPI's foundation has also been justified as a replication of a model that has been seen perceived as successful in several Western countries (Setiawan, 2018).

The benefits of connecting with other members and regional and global networks are manifold, as they have the potential to increase resources, recognition, visibility and build alliances. Resources include funding for projects and activities and publications, databases and other sources of information. For example, in 2009, the AAPS implemented a project called 'Revitalizing Planning Education in Africa' with funding from the Rockefeller Foundation. The project produced, amongst other outputs, a post-graduate curriculum frame, which was co-developed at an AAPS meeting in Dar es Salaam in 2010 (Odendaal & Watson, 2018). With support from the AAPS, this framework has been contextually appropriated and formally established as an MSc in Spatial Planning at the University of Zambia in Lusaka. Considering that only one other available planning degree exists in Zambia, which is moreover based on an outdated curriculum, this MSc has been an essential step towards equipping urban practitioners with skills and capacities to address the country's identified urban challenges, through innovative pedagogies that bridge practice and theory (Interview 2, 31 January 2019).

Moreover, the AAPS network was essential to make the experience from Lusaka visible and amplify the knowledge about this case, which provided opportunities for learning in other cities and universities (Interview 1, 9 January 2019). Associations are critical in facilitating translocal knowledge exchange, either across cases and schools facing similar urban planning issues and/or through the exposure to new and unfamiliar situations. These can take the form of visiting scholarships, collaborative workshops, and professional training courses. Further, regular conferences provide critical moments for networking among members and for sharing and discussing knowledge with a wide audience (Galland & Elinbaum, 2018). Regional and global conferences such as the World Planning School Congresses, along with related publications, including the book series *Dialogues in Urban and Regional Planning* and the *Journal of Planning Education and Research* and special issues like the *diSP Planning Review 2018*, have been essential mechanisms to gain visibility and recognition within the network and the wider (academic) field of planning.

In the following section, we read the absence and presence of planning education associations and their members as a proxy indicator for the potential benefits outlined in this section, which have multiple implications for the de-colonisation agenda and for building the capabilities of urban practitioners to address urban equality. However, the focus on potential benefits does not mean that we see networks of urban learning and practice uncritically. We assume that these networks are fundamental to achieve change at scale based on experiences from urban poor federations like Shack/Slum Dwellers International (SDI), or grassroots activist networks like the Habitat International Coalition, which have a rich history and tradition of learning the city. For example, SDI's horizontal learning exchanges represent an important methodology for members to learn about each other's programmes and processes. Moreover, sharing knowledge across the network also allowed for strength-

ening political advocacy activities and changing relations between the state and civil society organisations through making visible alternative, counterhegemonic models for issues such as housing and service provision (Bradlow, 2015). However, previous research has already identified that these tactics of collaborating with dominant urban actors might potentially put these networks at risk of replicating, rather than radically contesting, existing rationalities of governmentality (Roy, 2009). Complementary to those tensions and opportunities in grassroots networks, we see a need for interrogating more conventional networks of UPE to scope their potential benefits for planners to learn within these networks as well as across them.

3. Reading the Geography of UPE Associations

Several reports commissioned by, for example, the Commonwealth Association of Planners (CAP), UN-Habitat and different regional planning education associations, have so far aimed at benchmarking the distribution of UPE at the regional and global scale and in relation to network memberships. A global study by UN-Habitat (2009) argues that the major challenge for UPE does not lie in absolute numbers of planning students, graduates and schools, but in the maldistribution of planning schools across and within different regions. Of the 550 identified planning schools worldwide in 2009, 320 were located in 10 countries. The report further identified that 53% of these planning schools were located in the global North; an imbalance which becomes significant when considering that these countries only host 20% of the world's population (UN-Habitat, 2009). In terms of networks in many countries of the global South, some authors critique low regional network membership coupled with the substantial number of schools that do not operate under an accreditation system, arguing that academic staff therefore work in relative isolation, with limited ability to share curricula and pedagogic practices (Stiftel, 2009; UN-Habitat, 2009).

We have updated these reports' baseline information on planning schools in the higher education sector and their geographical distribution based on associations websites. We used openly accessible data about memberships in the Global Planning Education Association Network (GPEAN) as a departing point to investigate implications for urban equality. GPEAN emerged after the first World Planning Schools Congress 2001 in Shanghai, China. It was formed by several regional planning school associations, which recognised the need for a global umbrella organisation that brings together national as well as (cross-)regional planning schools. GPEAN comprises the following associations:

- Association of African Planning Schools (AAPS; 57 member schools, 18 countries). AAPS was founded in 1999 as a voluntary peer-to-peer network of tertiary education institutions across Africa.
- Association of Collegiate Schools of Planning (ACSP; 132 members, 5 countries). ACSP was established in 1969 with a clear mandate to shape pedagogic theory and practice for planning professionals.
- Association of European Schools of Planning (AESOP; 160 member schools, 39 countries). AESOP emerged 1987, motivated to create a forum of exchange similar to the previously established ACSP.
- Australian and New Zealand Association of Planning Schools (ANZAPS; 25 member schools, 2 countries). ANZAPS represents planning schools and educators; its main activities are annual conferences, which have been organised since 1994.
- International Association for the Promotion of Learning and Research of Urban Planning (APERAU; 35 member schools, 6 countries). APERAU was founded in 1984 with an explicit multidisciplinary discourse on planning.
- Asian Planning Schools Association (APSA; 52 member schools, 14 countries). APSA focuses on the particularly Asian planning education challenges and organises major regional congresses since 1991.
- Association of Latin American Schools of Urbanism and Planning (ALEUP; 15 members, 4 countries). ALEUP was founded in 1999 as regional platform which supports the legitimisation of undergraduate degrees in urbanism and planning.
- Association of Canadian University Planning Program (ACUPP; 18 members, 1 country). ACUPP started in 1977, focusing on the relations between planning education, research and practice.
- National Association of Postgraduate Studies and Research in Urban and Regional Planning (ANPUR; 78 members, 1 country). ANPUR has rapidly expanded in Brazil since its foundation in 1983 and brings together schools in regional and urban planning.
- Association of Schools of Planning in Indonesia (ASPI; 59 members, 1 country). ASPI was established in 2000 with a particularly explicit agenda to align planning education with the goal of welfare production in the Indonesian society.
- Association of Planning Schools of Turkey (TUPOB; 19 members, 1 country). As a national organisation, TUPOB was founded in 2004 by Heads of Planning Schools and the Chamber of City Planners, in response to demands for quality assurance in education as well as professional qualifications.

As of October 2018, we identified 650 higher education institutions, who are members of the GPEAN in 80 countries. 389 are organisations based in the global North (Australia, Canada, Europe, New Zealand and US), while 261 are located in Africa, Asia, the Middle East and Latin

America. These schools are part of different higher education institutions (including polytechnics), and include fields such as urban planning, regional planning, urbanism and development. Their distribution is mapped in Figure 1.

An interrogation of the global distribution of GPEAN members reveals five main issues, which host explanatory power for the distribution of member schools and implications for distributive, recognitional and participatory equality. They are: geographic density and gaps; capital cities; language; post-colonial networks; and alternative networks including other (higher) education networks and professional planner's organisations.

3.1. Geographic Density and Gaps

Figure 1 indicates that national and regional planning education associations have relatively and absolutely more members in the global North and BRICS countries (excluding Russia). However, there are some countries in the global South, which seem exceptionally well-represented. This applies to Indonesia (59 members), as well as Nigeria (9 members of the AAPS) and small states covered by the Commonwealth (St. Lucia, Trinidad and Tobago, Belize, and Brunei). On the other hand, the map also highlights large gaps in associations in Russia, the Middle East, North-West and Central Africa as well as Eastern Europe. The latter gap has been acknowledged by the European association AESOP, which specifically targeted to recruit schools from countries such as Ukraine, Latvia, and Russia. However, these efforts had only limited success, identifying costs and language as major barriers to membership acquisition and to obtaining the expected benefits (Frank et al., 2014). Other requirements for becoming a member—such as having national accreditation as a planning education school—can also become hindrances for certain schools, disciplines or degree levels.

There are several cautions to reading the geographic distribution of this map in isolation. These include that membership is voluntary, hence, does not reflect the entirety of schools in any region. Further, as will be explored below, alternative networks might exist which provide similar benefits to planning schools. Finally, it is important to emphasise that the distribution of members does not indicate the scale and scope of activities of the network. Even if structures are in place, networking and collaborative research activities are strongly shaped by funding resources to support, for example, travel exchanges and communication infrastructure. An interviewee from the Brazilian association ANPUR, for example, highlighted how the current national government abolished the Ministry of Cities and cut funding for universities. This implies that this might in turn re-focus network

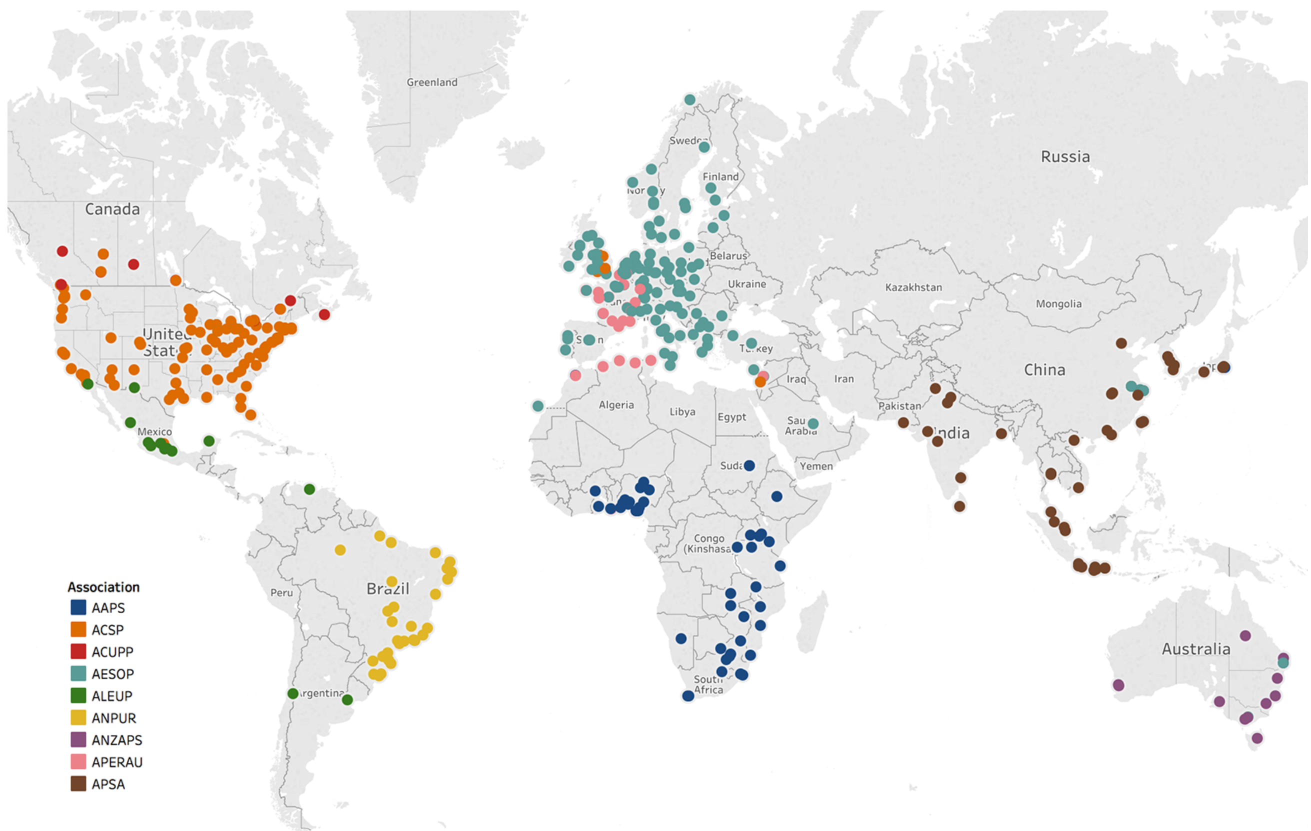

Figure 1. Location of the members of the GPEAN. Note that TUPOB and ASPI are not included in this map for reasons of legibility. Source: Authors.

members to align activities stronger with social movements rather than government authorities (Interview 4, 11 February 2019).

3.2. Capital Cities

Most member organisations are located in urban centres, although many schools are also responsible for regional and rural planning. The map shows higher concentrations of associations in coastal cities, which coincide with large urban areas and ports. This is particularly obvious in Brazil, but also in cities such as Lagos (Nigeria), Dar es Salaam (Tanzania), Cape Town (South Africa), Karachi (Pakistan), Accra (Ghana) and Sydney (Australia).

Out of the 650 GPEAN members, about one-sixth (102) are located in capital cities, while 23 countries do not have any member planning schools outside of their capitals. This can either be attributed to highly centralised planning systems, or explained by the fact that many countries face an overall high quantitative deficit of planning schools with only one member-school in the country (e.g., Uganda, Ethiopia). There are only few exceptions, such as Bangladesh and Malawi, where member organisations are respectively based in Khulna and Blantyre rather than in their capital cities. However, highlighted by an interviewee from Mexico, particularly in decentralised countries of Latin America, planning schools may have started from the capital city but are now more distributed across the country (Interview 8, 28 January 2019). In Mexico, this is reflected in their approach to 'territorial' (rather than urban) and human settlements planning.

3.3. Language

Strong examples of the importance of language as a barrier or boundary to networking across a region are manifest in Latin America through the division between ALEUP (Spanish-speaking) and ANPUR (Portuguese-speaking). Similarly, only five of the 57 member-schools of the AAPS are located in countries that are not *de jure* anglophone. These are two universities in Mozambique, one in Togo, one in Morocco and one in Ethiopia (albeit the latter can be considered *de facto* anglophone).

APERAU is the only network explicitly positioning itself as francophone network of urban planning, urbanism and urban development. It links members across Europe and North Africa and Canada and forms part and receives funding from the wider network of francophone universities (L'Agence Universitaire de la Francophonie).

At the global level, however, English remains the dominant language, which is manifested, among others, in network conferences as well as academic publications. In the context of Latin America, Galland and Elinbaum (2018, p. 51) note that some academics carry "a (well-founded) prejudice against the top-indexed Anglo-Saxon journals that arguably attempt to impose their problems and methods on southern countries." The authors see Spanish journals such as *Colombia's Bitácora*, *Cuadernos de Geografia* and *Cuadernos de Vivienda y Urbanismo* and Chile's *EURE* and *Revista INVI* as fundamental to develop alternative knowledge dissemination structures (Galland & Elinbaum, 2018). Further, many members deliver planning education in English while planning practice takes place in local languages. In India, local planning practice and academic research have to be transmitted between English and the country's 21 other official languages (Kunzmann, 2015).

3.4. Post-Colonial Networks

Evidently, questions of language cannot be seen detached from strong colonial influences on UPE, which take on different shapes in a post-colonial context. For example, of the 109 members in regional Asian and African Associations (AAPS and APSA), more than half (62) belong to nations of the Commonwealth; of a total 135 members of APSA, AAPS and AESOP (outside Europe and the UK), 84 are former British colonies or protectorates.

In the case of Commonwealth nations, this has several implications for linking planning education and planning professionals. The CAP, which represents about 40,000 planners in 27 countries, commissioned a report to review capacity building and planning education across the different regions of the Commonwealth (Levy, Mattingly, & Wakely, 2011). In regard to distributive equality, this study found an overall quantitative deficit and severe mismatches between the locations of schools and locations experiencing rapid urban demographic growth and urbanisation of poverty. Further, the report welcomes the increasing formation of regional and international networks; however, it sees scope for improvement particularly in regard to strengthening the capacities of cross-continental, global networks. This strengthening of cross-regional networks and the simultaneous critical interrogation of colonial legacies becomes particularly crucial considering the continued dominance of Western curricula.

3.5. Alternative Networks

Levy et al. (2011) also highlight the importance of considering the different ways in which 'urban planning' is conceptualised in each region. These can, for example, reflect colonial planning concepts, such as the dominance of 'territorial development' and 'urbanism' in the Latin American and French traditions. One interviewee, who has been mostly working in Africa and Asia, reflected comparatively on the manifestation of colonial legacies in Latin America:

> For me, what was always interesting about the Latin American context is that it was free of the British colonial history that was the huge imprint on the planning that I worked with in Africa and Asia. And at the same time, planning was very late in the Latin American con-

text where you had any kind of legal framing of planning as an activity…whereas in African and Asian cities this statutory basis for planning was part of a colonial heritage. So it created a completely different dynamic and also therefore a different planning education that emerged. And I suppose the first time I really came to know about a notion called urbanism was through the Latin American experience, because they had to create a term that could reflect their world that wasn't a planning world. (Interview P1, 21 November 2018)

When looking at the distribution of planning networks it is therefore important to ask which institutions are identified in a particular regional context as planning schools, and consequently, which might see benefits in affiliating themselves with certain networks. In Latin America, the Brazilian network ANPUR has strong representation across the country, bringing together about 70 post-graduate programmes in disciplines such as geography and economics, urban and regional planning (Interview 4, 11 February 2019). Comparatively smaller seems the regional network ALEUP, which only represents 15 members in four countries. However, there is an alternative regional network, which is not part of GPEAN: the Network of Postgraduate Studies from the Latin American Council of Social Sciences (CLACSO). This network offers 101 Master and Doctoral degrees across 60 institutions in 17 Latin American countries (plus Spain and Portugal) in disciplines related to urbanism and territorial development (see Figure 2). It fulfils similar functions to the GPEAN members, such as organising regional conferences and providing space for knowledge exchange about urban planning pedagogies.

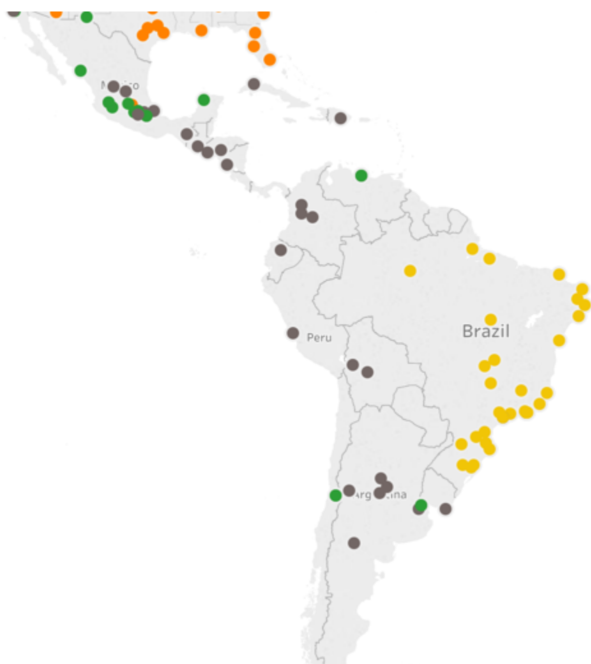

Figure 2. Members of the Latin American networks ANPUR (yellow), ALEUP (green) and CLACSO (grey). Source: Authors.

While these functions do not necessarily explain CLACSO's absence in GPEAN, an analysis of alternative networks shows that gaps in the map of regional GPEAN associations can have several reasons and implications.

Similar to CLACSO, alternative networks have a prominent role in larger nations such as China. China has only eight members in APSA, which hardly represents the hundreds of planning programmes in different cities that are implemented in engineering, architecture and geography departments. In the Chinese context, planning education has become increasingly demanded and well-regarded particularly since the early 2000s due to the boom of the urban economy and increased search for urban competitiveness (Hou, 2018). Rather than becoming part of global networks, Chinese planning education organisations seem to focus their networking on two other levels. On the one hand, strong bilateral relationships between Chinese and anglophone universities in the global North are emerging, which are manifested, for example, in the joint venture of the Xi'an Jiatong–Liverpool University. On the other hand, national-level networks are particularly strong between planning education and professional practice, which is evident in the close collaboration between academic curricula, the government's visions of urban planning, and its role for the market and industry (Hou, 2018).

Finally, it is also important to consider digital networks as alternatives, which allow for interactions and collaborations of urban practitioners and pedagogues. The web-based SDG academy, for example, provides access to a wide range of Massive Open Online Courses (MOOCs), which are taught by academic faculty as well as NGOs, CSOs and government officials. Moreover, the potential of MOOCs and digital tools to target populations, which do not form part of localised networks, has been increasingly explored. For example, recent work by Kennedy and Laurillard (2019) shows the challenges and opportunities for co-designing digital technologies to provide teacher professional education in the context of mass displacement. The large scale and wide reach of these technologies as well as their ability to accommodate localized context as well as generic principles, have implications for re-dressing especially the unequal distribution of access to education.

4. Networking (Higher) Education Institutions

Investigating the members of GPEAN shows that UPE is delivered across a range of academic disciplines. While planning has institutionally established itself in some contexts in the form of departments or faculties, many members are hosted in geography, engineering, architecture, environmental studies, urban studies, law, development studies, public policy, political science, economics, sociology, anthropology, and other social sciences. In Brazil, for example, urban planning is to a large extent taught in postgraduate degrees, as undergraduate students demand to study a 'recognised profession' in

order to find employment, especially in the public sector. Hence, students often prefer the above-mentioned disciplines for their first degrees, and opt for urban planning as a postgraduate specialisation (Interview 4, 11 March 2019). The multitude of pathways to urban practice has challenged many planning schools in their aims to form and strengthen a succinct profession at a national, regional and global scale (Kunzmann, 1999). Nevertheless, many academics welcome the diversity and flexibility of planning education approaches reflecting the contextually specific challenges and institutional structures they emerge from (Bertolini et al., 2012; Davoudi & Pendlebury, 2010). Essentially, this aligns with long-standing calls for planning to identify its core in a more dynamic way which does not wait for planning to be redefined every decade (Sandercock, 1999).

4.1. Professional Accreditation

The difficulties in grasping the professional identity of planners and planning education due to its variety of disciplines and formats, are frequently discussed in reference to the accreditation of planning schools and professional planners. The implications for equality are ambiguous: On the one hand, international accreditation systems have been critiqued for operating as gate keepers that are not sufficiently contextualised and tend to replicate Western ideas of planning, which, moreover, risk duplicating or side-lining existing national accreditation processes. On the other hand, contextualised accreditation has been lauded for providing quality assurance and accountability, for facilitating access to government funding and resources and for enabling knowledge exchange and collaborations within networks of professional planners and schools (March, Hurlimann, & Robins, 2013; UN-Habitat, 2009). However, there is a delicate balance to achieve, as national accreditation bodies are also feared to control and limit explorations and creativity in planning education, while lack of international accreditation might leave schools unable to demonstrate their quality and transferability of degrees (Levy et al., 2011).

The Institute of Town Planners, India, is an example for nationally contextualised accreditation. It recognises formal degrees as well as work-study programmes, which reflect the reality of on-the-job education and professional training as an important mode of learning in the country. The work-study programmes imply that people working in certified planning offices need to follow a programme of self-study and proof a certain amount of years of work experience in order to become professionally certified. Levy et al. (2011) also mentioned the UK Royal Town Planning Institute (RTPI) as example for the increasing internationalisation of accreditations. RTPI is currently internationally accrediting degrees at the Chinese University of Hong Kong, the University of Cape Town and the University of Botswana. While the RTPI points out that it does not prescribe and impose curricula on these institutions (personal communication, 1 April 2019), it is nevertheless critical to ask what benefits and caveats international accreditation brings to such diverse contexts.

To tease out issues of accreditation and their assumed relations with the recognition, resources and visibility of planning schools, we contrasted the GPEAN map with those of planning education organisations identified by the International Society of City and Regional Planners (ISOCARP). The following map includes 564 planning education organisations based on the ISOCARP database which was compiled by the University of Oregon (see Figure 3). The registered organisations came to the attention of the database managers and provided them with simple, basic information such as websites, key contact details and affiliation with professional and educational bodies, which includes GPEAN regional associations. Hence, institutions registered under ISOCARP do not go through any formal accreditation processes, therefore including a wider range of universities as well as a small number of educational institutions outside higher education.

The comprehensiveness and validity of the ISOCARP data has to be viewed with caution; however, it is notable that 212 of the 564 educational institutions, which have been part of the database by October 2018 did not register any affiliation with one or more of the regional planning education associations of the previous GPEAN map. What this suggests is, firstly, that reframing planning education for urban equality at scale requires an engagement with educational institutions beyond those formally accredited or recognised by regional and global networks. Secondly, that the ISOCARP network might indicate the motivation of institutions to affiliate themselves with cross-regional, global networks (and their potential benefits mentioned before) while they are somehow hindered by membership to GPEAN networks. Third, compared to the GPEAN map, it is noteworthy that the ISOCARP map seems geographically wider distributed, as it fills some of the gaps in Eastern Europe, Latin America and South Asia that became apparent in Figure 1. However, although accreditation and gaining recognition might play a role in the ability to network, geographical gaps in parts of Asia, the Middle East, and North-West Africa in Figure 3 indicate that neither does ISOCARP capture the full body of organisations actively engaged in UPE across the world.

4.2. Bridging Professional and Educational Associations

What remains obscured in Figures 1 and 3 is the (lack of) articulation of networks between higher education and other forms of education, as well as between higher education, professional and insurgent planning practices.

For example, the two aforementioned maps do not acknowledge strong ongoing engagements between universities and networks of grassroots organisations, such as collaborations between the AAPS, SDI

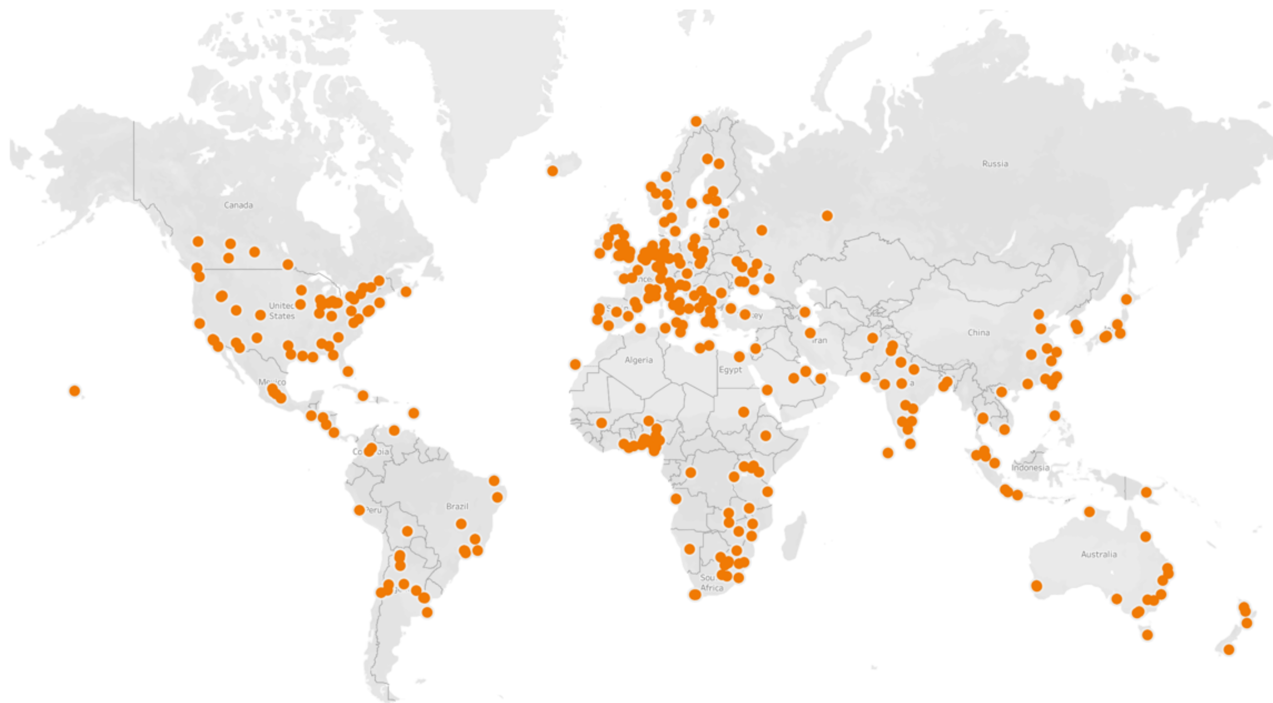

Figure 3. Distribution of 564 self-registered educational planning institutions. Source: Authors, based on the ISOCARP database.

and Women in Informal Development—Globalizing and Organizing through case and field-study based pedagogies (Odendaal & Watson, 2018). The specific rules and mechanisms of these engagements vary widely, with some collaborations facilitating frequent studio-based workshops over the period of a term while others conduct intense, week-long, sometimes international fieldwork and knowledge exchanges.

Overall, these kinds of collaborations reflect an increase in co-learning approaches of academics, students, civil society and grassroots-based organisations, which have been lauded for their potential learning outcomes to provide planning students with more grounded capacities and sensibilities to address urban inequalities (Allen, Lambert, & Yap, 2018). As such, co-learning falls within a long-ongoing shift from traditional education that unidirectionally sees to 'fill' students with professional skills and competences, towards a form of learning—which Sandercock (1999) called already 20 years ago—as technical, analytical, inter-cultural, ecological and design literacies. Pedagogies for building these literacies often engage with practices of insurgent planning and claim invented spaces of participation (Miraftab, 2016; Porter et al., 2017). They thereby contribute to disrupting the normalised order of planning and destabilising implicit hierarchies of knowledge between the wide range of urban practitioners and planning professionals. However, it can be argued that these pedagogic efforts are still not applied at the scale required to challenge urban inequalities. One interviewee, who set up a module with community leaders doing a lot of core teaching, highlighted the importance of support from her (senior) colleagues and the department. However, she also stated that this may still be exceptional and that a take-up of similar courses may be limited as many academics still fall short in imagining alternative learning cultures and gaining support to pursue such pedagogic visions (Interview 6, 18 February 2019).

Beyond these collaborations, many civil-society and grassroots networks are themselves critical actors and learning networks outside of higher education. However, their pedagogic approaches and potential for re-framing UPE remain largely unrecognised in the global planning education field.

Furthermore, there is a need for further investigating the links and interactions between professional and educational associations. For example, one interviewee, who is a practitioner in the US with vast experience in international planning education, remarked that throughout his career, he often found limited room to discuss what being a reflective practitioner means in mainstream planning conferences. While the interviewee acknowledged an increasing 'flow' from theory to practice, i.e., more practitioners receiving theory-informed higher education qualifications, he critiques that this flow remains largely uni-directional, with little practice-based theorising finding its way into education and planning curricula (Interview 5, 14 February 2019).

To start investigating the disjuncture between educational and practitioner networks, we mapped the geographical distribution of the ISOCARP database, which is covering professional and educational organisations, as

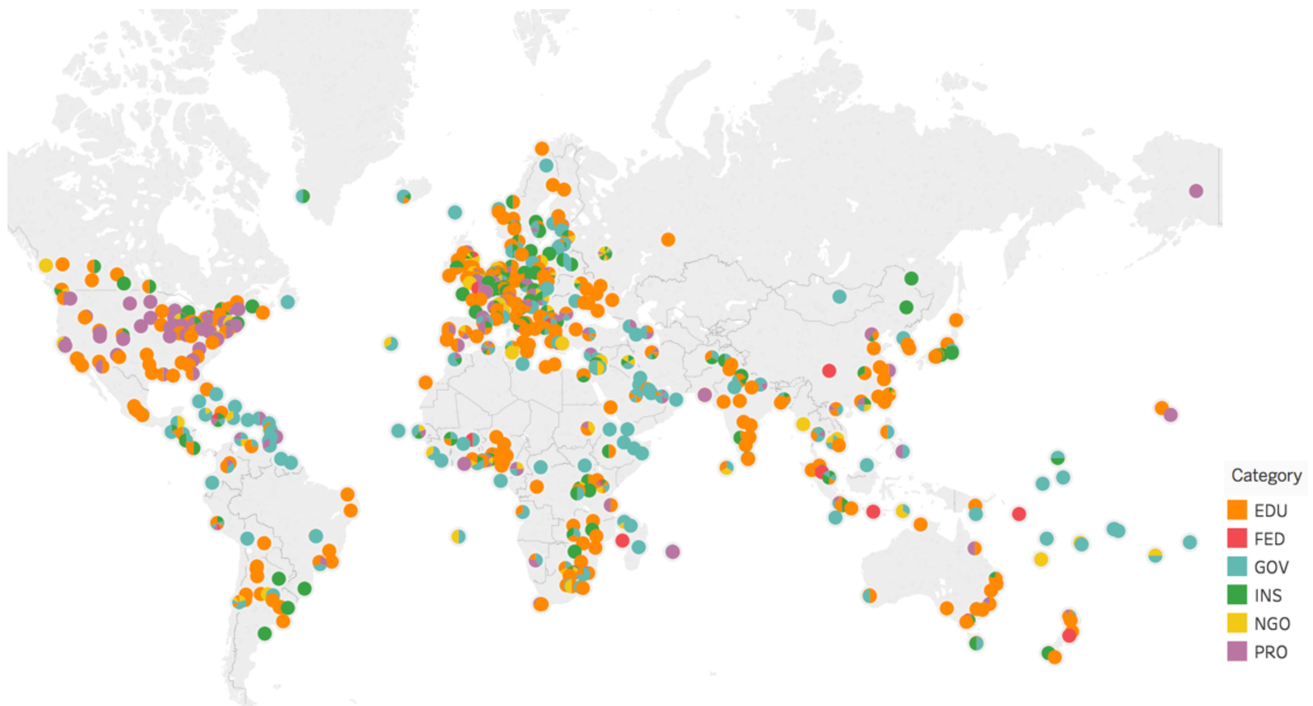

Figure 4. Distribution of EDUcational institutions, FEDerations, GOVernment agencies, INStitutes, NGOs and PROfessional organisations. Source: Authors based on ISOCARP.

it includes in total more than 1800 planning agencies, associations, institutes, government ministries, NGOs and universities. Figure 4 is particularly interesting as it shows planning organisations in many countries which are not covered by previous maps, such as Mongolia, Yemen, Senegal, and many Pacific and Caribbean islands. Further, one-coloured circles highlight that in many countries only one type of planning organisation exists, implying locations where educational and practice institutions do not overlap. It requires further research to reveal potential reasons and implications for urban equality in these countries, such as exploring links to the increasing mobility and the translocal flows of learning across cities and institutions, i.e., where planners learn in contexts that are different to the ones they practice in.

5. Conclusion

The article aimed to contribute to decolonising and reframing UPE through an examination of the multiple geographies in which this wide field of thinking, learning and practice operates. We provided an analysis of the geographies of planning education networks through mapping and interviews, thereby raising multiple interrelated issues like geographical density and gaps, language, colonial legacies, gaps between academia and planning practice, and the role of professional accreditation in either hindering or advancing planning approaches that talk to context-specific urban equality challenges.

What are the implications of the various geographies of the analysed global networks through which UPE manifests itself? What do the biases and omissions, absences and presences in the distribution of these maps tell us about UPE and its required re-invention to become an effective driver of justice? Returning to the tri-dimensional conceptualisation of urban equality advocated at the beginning of this article, the conclusion highlights two challenges that might help steering further analyses and practice.

The first relates to the reciprocal recognition of the different actors in, and modes of, planning education. Higher education networks, for their benefits to members as well as their rapidly growing scale and reach, reveal potential to re-invent UPE at scale. However, analysing their geographical gaps shows that they can also reinforce rather than contest inequalities, especially in relation to membership barriers like accreditation standards and language differences between and within networks. These, among other factors, tend to reproduce certain centres of gravity and hegemonic relations within existing networks and constrain the recognition of the many modes and sites of learning within and beyond higher education. We identified several alternative networks as well as links between higher education and other (networked) urban practitioner organisations that are increasingly reshaping the landscape of UPE in collaborations with civil society organisations (as in the case of SDI and the AAPS). What seems to be missing is a better recognition of the practices of alternative educational networks and their implications for urban equality. This includes exploring their articulation with formal higher education associations, and their actual and potential im-

pact in de-colonising urban planning through a more inclusive mobilisation of ideas and practices that challenge the notion of planning as a single discipline.

Second, working towards equality of capabilities and using the notion of planning as a networked field of governance demands careful consideration of the power relations between member schools, affiliated and collaborating organisations, funders and other actors shaping UPE within the examined regional and global networks. These relations have so far been captured in research around increasing mobility and internationalisation of planning and higher education. An examination of issues like international accreditation and coloniality showed that there is an additional challenge in transforming UPE through UPE networks to work towards an equal recognition of capabilities. This implies avoiding the subordination of 'situated' learning processes and practices in specific localities to the often-presumed scalar authority and legitimacy of an increasingly global planning industry.

To sum up, more than ever in the past, we currently witness the emergence of UPE as a polycentric and networked field, with significant concerted efforts to transform the current shortcomings of planning to work towards SDG 11. But while distributive deficits have by far received more attention, it is worth noticing that what is required is not just an expanded geography for professional planning to be taught and accredited. More fundamentally, achieving transformations call for variegated re-inventions of planning to flourish across the global South and to be recognised with equal voice in forging critical epistemologies, pedagogies and practices. Planning education networks can play a key role in this endeavour but their scope for transformative change depends of whether they privilege the rescuing of a discipline producing professionals with certain competences, or to nurture the development of de-colonising knowledges and praxes to equip urban practitioners with the capabilities and sensibilities required to address urban inequality, both in its situated manifestations and structural drivers.

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Conflict of Interests

The authors declare no conflict of interests.

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