Summary for dissemination of the thesis

Recognitional equity in access to and planning of urban green spaces: How socio-economic deprivation shapes community values and participation in place-based governance.

A thesis submitted for the MPhil in Environmental Change & Management at the School of Geography and the Environment, University of Oxford.

MPhil project supervised by Dr. Mark Hirons and Martha Crockatt (PhD).

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Mattia Troiano | October 2024

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For more information about this summary, the thesis and research project behind it, and the drawing-based outputs, please get in touch with the primary researcher at mattia.troiano@stx.ox.ac.uk

Abstract

Equity of access to, and planning of, Urban Green Spaces (UGS) is an area of growing interest in a period in which urban greening is intertwined with equity issues in socially diverse urban centres. While efforts to widen communities' spatial access to UGS and procedural representation in their planning through more inclusive place-based governance arrangements have been made, little attention has been paid to the recognitional dimension of equity, here understood as recognition of communities' lived experience of deprivation and historic relations with institutions. This thesis takes an intra- and inter-community comparative approach between three areas of Oxford with low, mid-high and high deprivation levels, and varying types of neighbourhood or regeneration plans. Recognitional equity of UGS access is explored through the different motives for which communities value these spaces, knowledge that top-down economics-grounded approaches of the like of ecosystem services risk overlooking. Concerning recognitional equity of UGS planning, the structural inequities affecting differently deprived communities' willingness and ability to participate in public consultations are explored. In addressing communities' involvement in place-based participatory (*mosaic*) governance, sought from institutions to widen social representation in UGS planning, the entanglement of institution-resident trust and deprivation-shaped participation is explored. Through a review of local development plans, walked interviews with residents in their most used UGS, and an art-based method capturing residents' ideal UGS, the analysis finds that deprived communities remain marginal, if not disempowered, as they are structurally less likely to mitigate the systemic lack of attention to recognitional equity. Until *recognitional equity* is considered, efforts aimed at widening deprived communities' access to UGS and their benefits (*distributional equity*), and participation in local governance under a mosaic arrangement (*procedural equity*) are at risk of falling short, or further becoming counterproductive to these very policy ends.

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1. Background

1.1. The importance of UGS and socio-economic deprivation

Recognition of the importance of urban green has gained momentum as institutions realised that cities are the so-defined complex social-ecological systems (Cote & Nightingale, 2012) where most people live, providing them with the opportunity to access the wide set of Ecosystem Services (ES) that accessible Urban Green Spaces (UGS) offer. Accessible UGS are areas 'of vegetation [...] within a landscape or townscape. Greenspace can include blue space (i.e. lakes, rivers and wetlands) and may include built environment features' and where accessibility indicates spaces that 'are freely open to the public without payment and with what amounts to no time restrictions' (Crockatt et al., 2023, p. 8). Attributable to the awareness that UGS are essential to human wellbeing and health (Aerts et al., 2018; Kardan et al., 2015; Rigolon et al., 2021; White et al., 2019), their contributions to environmental targets, and the crucial role they play in maintaining people's connection with nature in an ever more urban world (Wildlife and Countryside Link, 2024), a rich body of knowledge has emerged emphasising the specific benefits that green spaces realise for urban citizens (Andrews et al., 2010; Fan et al., 2011; Larson et al., 2016; Maes et al., 2019; Smith et al., 2023; Twohig-Bennett & Jones, 2018).

These range from air purification and climate regulation through trees and urban forests (Vieira et al., 2018), to supporting physical health recovery from cardiovascular and blood circulation system-related conditions in adult population (Gascon et al., 2016; Yeager et al., 2020), as well as overweightness, diabetes (Bell et al., 2008; Cleland et al., 2008; Dadvand et al., 2016; James et al., 2015), and asthma in children and young people (Lovasi et al., 2008). UGS also support people's mental health by reducing stress, anxiety and depression (Berto, 2014; Mental Health Foundation, 2021; Sudimac et al., 2022), and enhancing life satisfaction, pro-social behaviour (Fleming et al., 2016; MacKerron & Mourato, 2013; White et al., 2013, 2019), environmental awareness (Egea-Cariñanos et al., 2024; Grigoletto et al., 2021; Mental Health Foundation, 2021), and pro-nature behaviour (Richardson et al., 2020). Indeed, the range of benefits UGS provide was enhanced and amplified in the period of the COVID-19 pandemic (Labib et al., 2022; Natural England, 2023a).

Many however point to the uneven distribution of such spaces and the social benefits they realise, with low-income and marginal communities benefitting the least (Crockatt et al., 2023; Natural England, 2023b; Rigolon et al., 2021; Urban Health Council, 2024). Institutional efforts to address UGS inequity come from the uneven spatial distribution determining communities' proximity to such spaces (Barbosa et al., 2007; Landry & Chakraborty, 2009; Schwarz et al., 2015). It is on this spatial definition that a rich body of efforts aimed at incentivising local

governments to increase communities' access to the range of contributions UGS realise have been made, especially in deprived neighbourhoods (Crockatt et al., 2023; Escobedo et al., 2015; Jiang et al., 2023; La Rosa, 2014; Landry & Chakraborty, 2009; H. Li & Liu, 2016; X. Li et al., 2015; Meerow & Newell, 2017; Ridgley et al., 2020; Shen et al., 2017; Xiao et al., 2017).

This century's predicted urbanisation trends express an urgency to re-think our city planning strategies based on the ever evolving and dynamic urban landscape, along with new holistic perspectives to understand the very challenges emerging from the ongoing process of formal and informal urbanisation (Elmqvist et al., 2019). Based on such urbanisation prospects, scholars have argued for the need of a new urban science. One that is not vertically scalable across global cities but rather addresses context-specific manifestations of urbanisation through place-based solutions, while recognising universal urban conditions (Acuto et al., 2018). The wider range of social urbanisation-related problems beyond climate targets and nature restoration per se that UGS can support in addressing (Haaland & Van Den Bosch, 2015) have been historically overlooked by a decades-long regime that considered urbanisation mainly from a techno-managerial standpoint (Buizer et al., 2016; Elmqvist et al., 2019; Frantzeskaki & Kabisch, 2016; Hansen et al., 2023), rather than a space for communities to drive positive social change (Heynen et al., 2006; Wijsman & Feagan, 2019).

As city planners realise the potential of UGS in this direction, equity considerations in their access become crucial. UGS inequity however does not stop at the spatial distribution of UGS. In more recent years, it has been discussed also how planning processes of UGS, along with urban planning more broadly, fails to become inclusive and representative of the biocultural and socio-economic diversity that cities host (Buizer et al., 2016; Frantzeskaki et al., 2023; Nesbitt et al., 2019).

1.2. Equity of UGS

A first important difference should be clarified: 'equity goes beyond mere equality by acknowledging and addressing historical and structural disadvantages, aiming to provide individuals with the resources and support they need to achieve equal outcomes' (Frank, 2023, p. 2) [emphasis added]. Social justice includes both individual and collective efforts at the systemic level to ensure that equity becomes structurally embedded in society (Frank, 2023; Joseph, 2015). The traditional institutional focus on distributional equity, and consequential interventions aimed at widening communities' access to UGS and the set of ES they provide, is usually framed through traditional liberal justice theory (Rawls, 1990). Some have however emphasised the role of existing political, economic, and social structures in perpetuating UGS inequity as an urban environmental injustice in their planning processes which in turn

determines their uneven distribution (Bickerstaff et al., 2009; Harvey, 1996; Ordóñez et al., 2022; Schwarz et al., 2015).

The historically narrow understanding of equity in its distributional dimension has been identified as one of the very causes underpinning institutional failures to deliver equitable outcomes (Cleaver & de Koning, 2015). According to this, the sole focus on spatial distribution risks perpetuating uneven distributional outcomes, including of UGS, due to a gap between communities and their cultural situatedness, and the urban planners making decisions affecting those communities. A gap that perpetuates poor or inequitable distributional logics due to 'the lack of stakeholder-informed, city-scale approaches to systematically identify ecosystem service trade-offs, synergies, and 'hotspots' associated with green infrastructure and its siting.' (Meerow & Newell, 2017, p. 62).

Upon this awareness, holistic understandings of equity emerged. Fraser's theorisation of a three-dimensional social justice theory, made of distributional, recognitional, and procedural justice (Fraser, 1997) is a key milestone in post-Rawlsian justice theory. The first dimension is concerned with the distribution of costs and benefits, including outcomes, among different social groups. This is the conceptualisation of justice at the core of Rawlsian theory itself underpinning spatial efforts to widening communities' access to ES. The second dimension of justice in this wider conceptualisation entails the fairness of the recognition of these different groups and the respect fostered around that diversity (recognitional dimension) so to enable the third dimension, namely fairness in processes (procedural dimension).

Based on this conceptualisation, this thesis looks at UGS equity of access and planning (Nesbitt et al., 2018). The former is conceptualised from institutions through a spatial distributional focus. Efforts in this direction aim to widen communities' access to UGS and the range of benefits, or ES, they provide, among the most deprived communities and areas. Equity in planning is instead sought through the facilitation of a mosaic governance arrangement (Buijs et al., 2016, 2019, 2024) and fairer procedural mechanisms, including positive discrimination, to achieve equal representation and weighting of different voices in planning processes (Emami et al., 2015; Meerow et al., 2019). Practically, the facilitation of a mosaic type of governance unfolds in the recent policy developments of Biodiversity Net Gain (BNG), Local Nature Recovery Strategy (LNRS), both under the Environment Act 2021, and the Green Infrastructure Framework (GIF).

1.3. Study sites

Based on the 2021 census, Oxfordshire has relatively low levels of deprivation (Oxfordshire JSNA, 2023). It is the 10th least deprived of the 151 upper-tier local authorities in England sitting within the top 10% least deprived counties in England. However, 28 (of 407) Lower-layer Super Output Areas (LSOAs) remain in the most deprived 30% in England (Crockatt et al., 2023). LSOAs can be considered neighbourhoods. They include between 400 and 1,200 households and resident population between 1,000 and 3,000. In census data, each LSOA is assigned with an IMD decile, ranging from 1 (the most deprived), to 10 (the least deprived) (Office for National Statistics, 2021). In Oxford city, ten LSOAs fall within the 20% most deprived – i.e., 1-2 deciles – and remain places of significant hidden inequalities in one of the wealthiest counties in the country (Oxfordshire County Council, 2020). These are 017A, 017B, 017D, 018A, 018B, 018C located in the Civil Parish area of Blackbird Leys; 016A in the city ward of Littlemore; 016E in that of Rose Hill & Iffley; 08B in the ward of Carfax; and 005B in Barton and Sandhills.

To enable the exploration across the spectrum of deprivation, less deprived areas were identified based on the second metric, namely the presence of a local plan. Like this, three study sites were identified: the **Civil Parish Area of Blackbird Leys** (BBL) where regeneration plans are ongoing; the **Headington Neighbourhood Forum Area** (HFA), and **Summertown & St Margaret's Neighbourhood Forum Area** (SSTM) where NPs drive local development. Overall, these study sites are representative of communities of a high, mid-low, and low level of deprivation respectively.

Table 1: Community profile for the study sites summary table

	English city ward (average)	BBL		HFA	SSTM		
City wards	-	Blackbird Leys	Northfield Brook	N/A	Walton Manor	Summertown	Sunnymead & Cutteslowe
Census data year	2021	2021	2021	2011	2021	2021	2021
Source	(OCSI, 2023a)	(OCSI, 2023a)	(OCSI, 2023c)	(Oxford City Council, 2014)	(OCSI, 2023e)	(OCSI, 2023d)	(OCSI, 2023b)
Population	-	6,392	7,075	17,354	5,755	6,512	6,818
		13,467			19,085		
White British	73.5%	3,368 (52.7%)	4,120 (60%)		3,070 (53.3%)	3,853 (60%)	4,002 (60%)

		7,488 (55.6%)		11,280 (65%)	10,925 (57.2%)		
White-non-British	7.5%	724 (11.3%)	873 (12.3%)	2,082 (12%)	1,374 (24%)	1,371 (20%)	1,323 (18%)
		1,597 (11.9%)			4,068 (21.3%)		
Non-White	19%	2,295 (36%)	2,088 (30%)	3,818 (23%)	1,315 (28.8%)	1,289 (20%)	1,494 (22%)
		4,383 (32.5%)			4,098 (21.5%)		
% of population lacking any qualification	18	30	23	10	3	6	7

Table 2 Number of research participants per IMD decile

IMD	LSOA	Study site	n. interviewees	Tot
1	018B	BBL	6	6
2	017B; 017D	BBL	4	4
3	017C	BBL	2	3
	005A*	HFA	1	
4	-	-	0	0
5	007E	HFA	4	4
6	010A	HFA	1	1
7	018D	BBL	1	1
8	002D	SSTM	4	4
9	006C; 006D; 007B	HFA	9	11
	003C; 003E	SSTM	2	
10	007D	HFA	2	8
	002A*; 002C; 002F	SSTM	6	

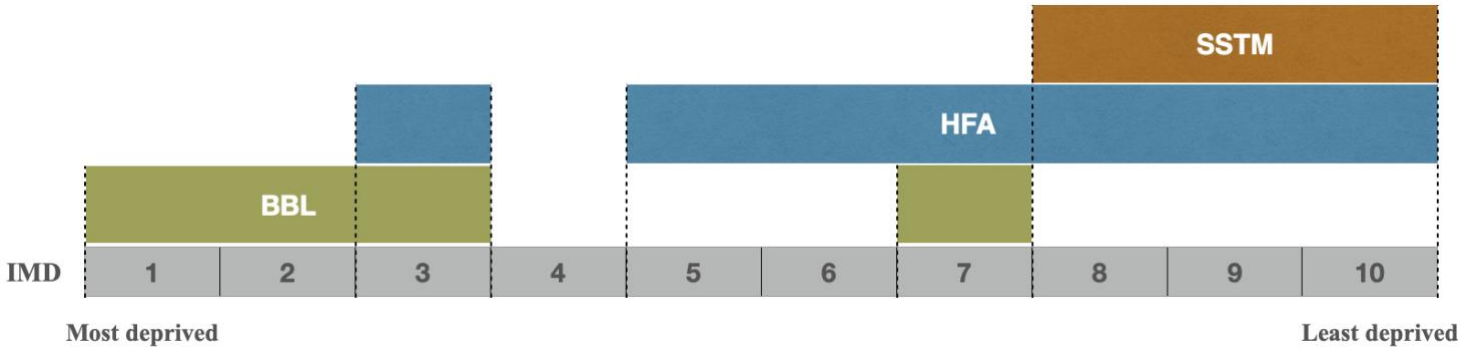


Figure 1 IMD deciles captured in each study site

Table 3 Summary of key features of study sites

	BBL	HFA	SSTM
First layer of governance (resident-led)	Civil Parish Council	Neighbourhood Forum	Neighbourhood Forum
Area made of	City wards of Blackbird Leys and Northfield Brook	Does not match any specific city ward boundaries	City wards of Walton Manor, Summertown, and Sunnymead & Cutteslowe
Local development through	Regeneration / Redevelopment Plans	Neighbourhood Plan	Neighbourhood Plan
type	Top-down- from urban planners' eyes, but in consultation with residents	Bottom-up- residents make their own plan for how the area should develop like	Bottom-up- residents make their own plan for how the area should develop like

2. Methods

This research project employed a combination of Qualitative and Participatory methods (QPMs).

2.1. Documentary analysis

Through documentary analysis of local plans, the investigation has considered the different planning provisions driving local development across the three study sites, namely the Neighbourhood Plans for HFA (Headington Neighbourhood Forum, 2017) and SSTM (Summertown & St. Margarets Neighbourhood Forum, 2019); and the plans submitted for redevelopment of Blackbird Leys (Oxford City Planning Committee, 2023). Documentary analysis supported the project on two levels: (1) it was the foundation to consider how local development is planned and what exactly is planned for the areas considered, and (2) corroborate specific insights emerged from the direct engagement with residents through semi-structured walked interviews.

2.2. Walk, Talk & Draw

The interview arc model adopted (Boden et al., 2019) offered the opportunity to be less prescriptive than both scientific categories – in this case less prescriptive of knowledge and value-systems inherent to the intersectional positionality of the main researcher – and traditional semi-structure interviews channelling from the general to the particular. This model allows for a more genuine flow based on four stages which invited the participants to:

- visualise themselves in their ideal UGS – i.e. *(i) mapping the self*;
- look at the wider set of community priorities from their own perspective – i.e. *(ii) mapping important others*;
- consider the values they see as community members in UGS and the one in which the interview took place – i.e., *(iii) standing back*; and
- imagine and narrate to the artist the ideal change they would like to see happening to their most lived or nearby UGS captured through the drawing-based method– i.e. *(iv) considering change*.
    - In considering change, the walked interview temporarily took the form of a static chat usually on a bench in the UGS in question. The statism of this moment however is only apparent as the interviewee was asked to verbally feed the artist present to support the implementation of the drawing-based component. As the artist would start drawing the ideal UGS residents had in mind, participants started to engage with the drawing to make sure this reflected what they had in mind, or as an input to start considering what they had in mind but had not yet ever voiced.

3. Findings

By enquiring UGS recognitional equity, the analysis suggests that institutional efforts aimed at addressing distributional inequity of UGS so far have been largely made through ES frameworks to provide monetary valuations to policymakers and urban planners and are therefore grounded in economic analytical devices (how we know). Economic tools however risk overlooking the plurality of values that co-exist in complex bio-cultural and socio-economic diverse urban environments (here defined as situated value pluralism), continuing to limit our knowledge about what people value in their most accessible UGS and why (what we know). The implementation of procedural mechanisms to foster more inclusive spaces for citizen participation in what it is here referred to as mosaic governance aims instead to address inequity of UGS planning (who knows) (Emami et al., 2015; Meerow et al., 2019; Nesbitt et al., 2018).

In short, to consider recognitional equity in UGS planning means not only to create a procedurally inclusive, representative, and respectful space to allow different voices and social groups to participate in planning process. Rather, this means to account for residents' willingness and ability to participate in such processes so to shape interventions that can reflect and address the socio-economic conditions, other than different values, determining distributional outcomes.

3.1. Recognitional equity of UGS access

- This is given by the recognition of different socio-economic, and historic needs of communities and the different values people withdraw from accessing such spaces (i.e., value pluralism). The situated value pluralism across the communities engaged is summarised below (table 4, p,.12).

- Residents largely value UGS based on place-based experiences of UGS they have access to locally or can access elsewhere thanks for great mobility and financial disposable income to allocate to leisure time and travelling.

- What seems to be shaping situated value pluralism is the "why" – i.e., socio-economic and cultural motives – for which communities develop different meanings of similar values such as well-being, intrinsic or eco-centric, and aesthetic values.

- A **valuative gap** is identified by residents in most deprived areas where development is driven by top-down regeneration plans less likely to capture those motives informing community-specific meanings of categories of values (*benefits*) they withdraw from accessing local UGS.

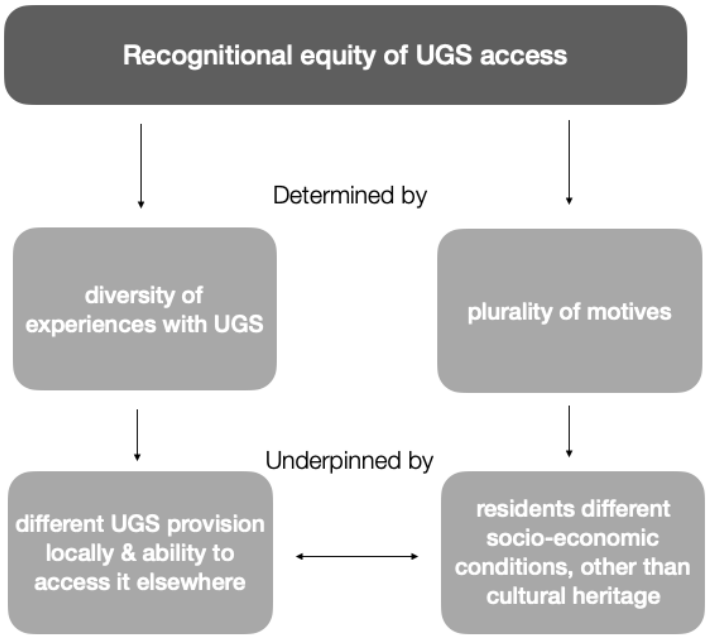


Figure 2 Components making up recognitional equity of UGS access

Table 4 Valuing UGS for their "biodiversity and wildlife" across different value categories, and related shared meanings of these values across different IMD deciles

Intangible value	Shared meanings of intangible value across deprivation ranges.
Well-being	• Across all deciles, well-being in UGS is understood as an opportunity to escape or "withdraw" from life. • Among low deciles, this sense of escape is mostly voiced in relation to material and financial constraints. • In mid deciles, this sense of escape is mentioned in relation to modern life: a break from this and the digital world, a backup to reconnect with themselves, but also mental health recovery. • In high deciles, well-being starts to relate to aesthetic considerations. Even if residents are still voicing a feeling of well-being when witnessing and connecting with wildlife and biodiversity in UGS, they understand this value as a break from the life in the city and the built environment which is said to be less aesthetically beautiful.

Eco-centric & Intrinsic [1]	• The intrinsic value of wildlife and biodiversity that UGS hosts was expressed across all deciles. • In low deciles, the intrinsic value comes from personal experience of the specific UGS and the environments it hosts through a relational (community-UGS) meaning. Those with some environmental knowledge also expressed an eco-and climate-centric value. • In people with environmental knowledge from mid-high deciles, the value is more intrinsic. For some, the intrinsic value seems to find motive in the ecological importance of specific ecosystems that UGS host and the human-nature sense of balance, detached from the specific UGS in question, which was instead the case in lower deciles.
Aesthetic	• The aesthetic value was predominately voiced among high deciles. • When voiced, among low deciles, aesthetic value is again related to the sense of escape looking at something "beautiful" and "amazing" species that inhabit their nearby accessible UGS where the interview was taking place. • Mid deciles begin to frame the aesthetic value more for rarer species than the usual ones they manage to access in their private garden. • Mid-high deciles frame the aesthetic value in a way that reflects the positivist aesthetic account for which if something is happening in nature, and even if not equipped with technical environmental knowledge to fully understand it, this is found anyway beautiful. Among these deciles, comparison with other UGS, or nature people used to or still access elsewhere (e.g. in previous stages of life, or through holidays and second homes) is often voiced to inform what they find aesthetically beautiful in UGS they access locally and to inform their imagination of the ideal UGS captured through the drawing-based method.

[1] i.e., Humans as part of nature worth being cared for and conserved because of an intrinsic value in itself and for intergenerational justice reasons (Büscher et al., 2012; Büscher & Fletcher, 2020; Sullivan, 2009), thus beyond utilitarian environmentalism (Muradian & Gómez-Baggethun, 2021; Wolff, 2008).

3.2. Recognitional equity of UGS planning

- **Deprived communities remain marginal in planning** processes as they are structurally less likely to mitigate the systemic lack of attention to recognitional equity.

- A **higher experience of the cost of time** and **lower likelihood to navigate the system to voice dissent** among more deprived community members affect their ability to participate public planning processes.

- A different financial but also expertise capacity to initiative and sustain legal processes to call for local UGS conservation and push back developments perceived as unsustainable by locals because happening on community valued green space is registered across study sites.

    - HFA and SSTM have successful instances of extensive legal actions against development such as Warneford Meadow in the former and the Trap Grounds Nature Reserve in the latter.
    - Pursuit of legal action was not mentioned among BBL residents currently witnessing a loss of UGS on the Knights Rd site even if resulting in the erosion of some of the key values people withdraw from their local green space.

- A **sense of unmeaningful engagement** of residents in public consultations, which is perceived across different socio-economic communities, results into a **sense of marginalisation** among the more deprived, affecting their willingness to participate in public planning processes.

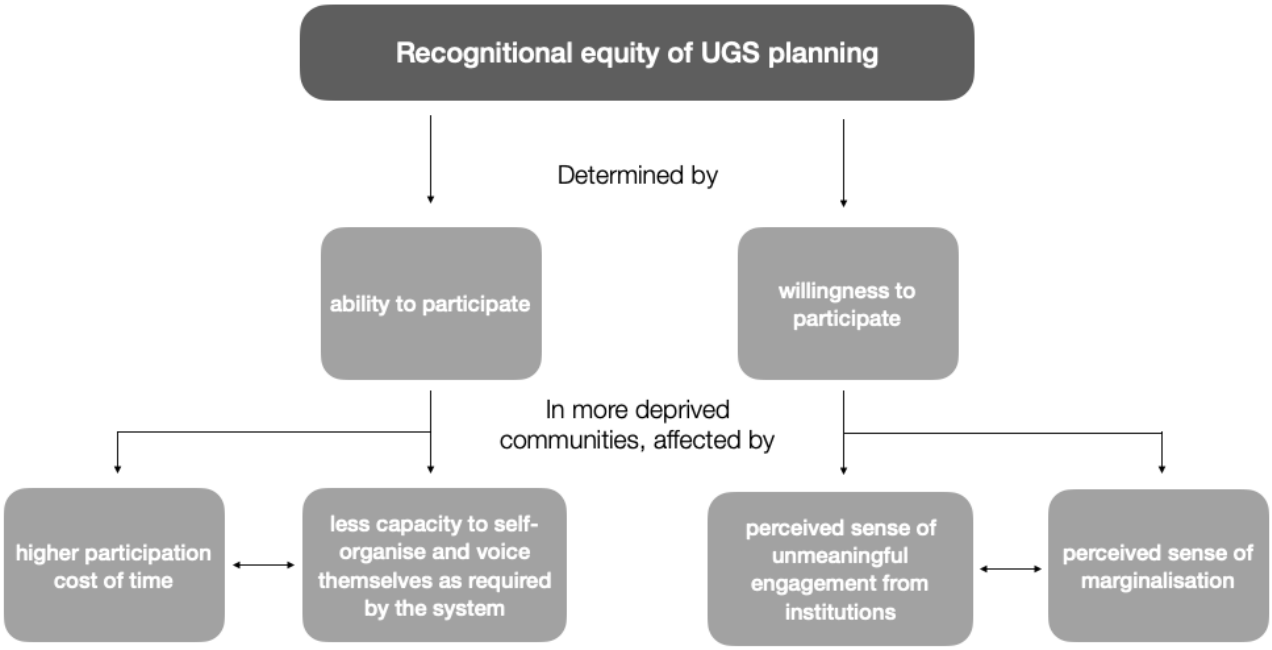


Figure 3 Socio-economic inequities faced by more deprived community members underpinning their experience of recognitional inequity in UGS planning

3.3. The four modes of resident participation

- Emerged from the drawing-based method among deprived communities, the ideal change was not perceived as possible through institutional action, pointing to the overall sense of distrust or reluctancy characterising historically marginalised communities.
    - Emerged from the drawing-based method, among community members in BBL, natural landscape features were seen as more likely to prevent further unsustainable development. These include badger sets, water streams and the pond in Spindleberry Nature Park and BBL more in general.

- Trust in institutions plays a crucial role in determining types of citizens engaging with the place-based (mosaic) governance. Modes of engagement are summarised in table 4 below:

    - active citizens and residents who are happy to outsource local deliberation to fellow active residents are found in non-deprived communities;

    - disempowered or reactive citizens are registered in more deprived neighbourhoods due to their perceived sense of marginalisation.

- Until recognitional equity is considered, efforts aimed at widening deprived communities' access to UGS and their benefits (*distributional equity*), and participation in local governance under a mosaic arrangement (*procedural equity*) are at risk of falling short, or further becoming counterproductive to these very policy ends.

- Possible unintended consequences of urban regeneration and greening with little attention to recognitional equity in planning processes include (as per engagement of residents in BBL):

    - Further alienation rather than increased access of residents to their local UGS due to erosion of those specific community-specific values and benefits of UGS.

    - Fostering disempowered rather than active citizens who due to a perceived sense of marginalisation end up leaving their communities.

    - Fostering more social groups who do not see a value in neither accessing local UGS but also engaging with local planning and management of public spaces.

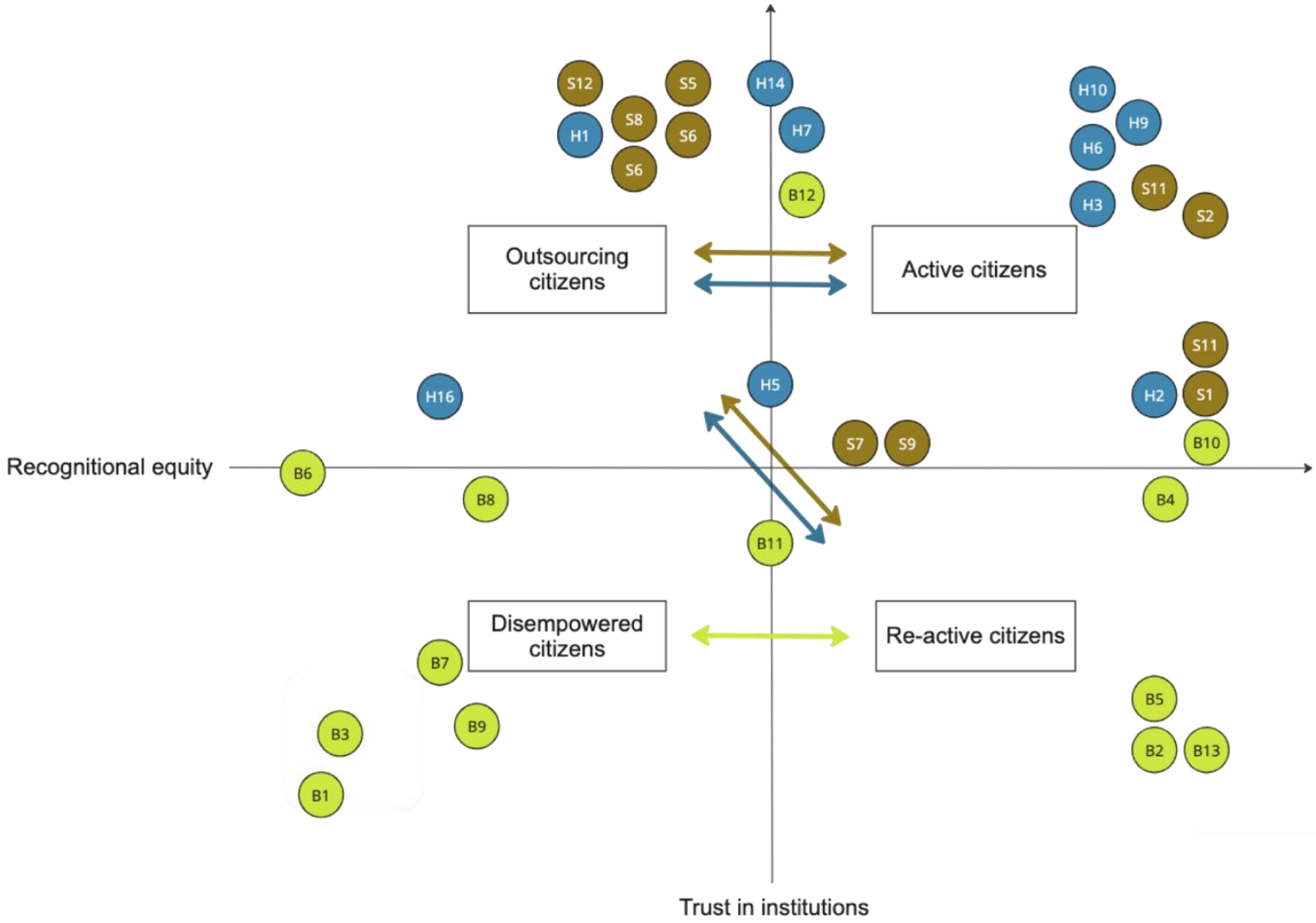
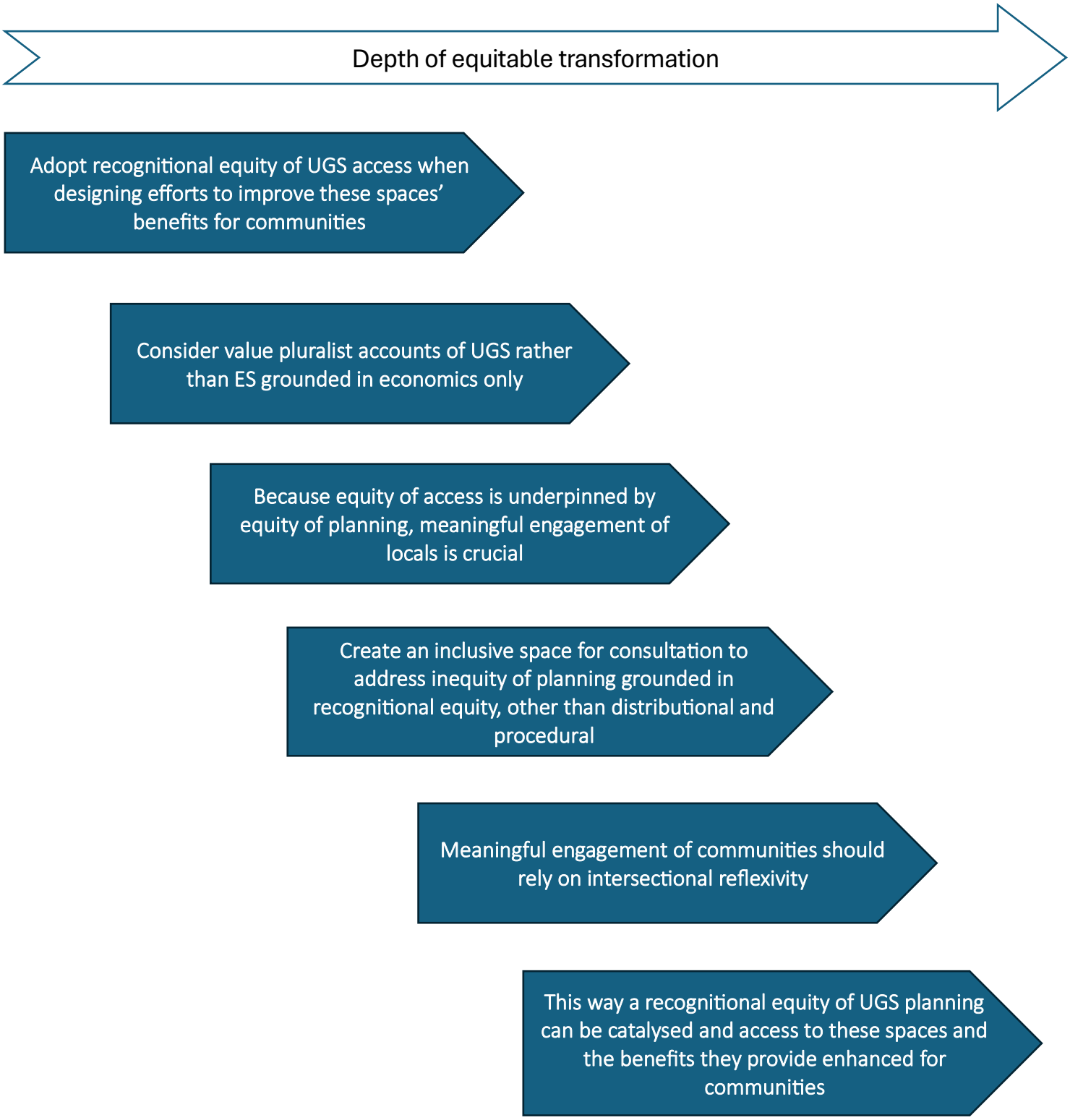


Figure 4 Participants across study sites based on four types of resident involvement in mosaic governance based on intersection of recognitional equity in UGS planning and trust in institutions.

4. Recommendations



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