Measuring what matters

A Wellbeing Economics Approach to Urban Marginality in High-Income contexts

Jennifer van Beek

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Measuring what matters: A Wellbeing Economics Approach to Urban Marginality in High-Income contexts

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Chapter 2: van Beek, J.E.M., Pouw, N.R.M. and Verrest, H.J.L.M. (2025). Co-creation to measure what matters: the case of Venserpolder, Amsterdam. *Journal of Urban Affairs*, 1-20.

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The PhD candidate was the sole author of the **fourth article (ch. 5**).

Chapter 1

Introduction

1.1 Measuring What Matters in Affluent Cities

In November 2021, I attended my first co-creation workshop in Venserpolder, a neighbourhood in Amsterdam's Southeast district. Several residents had dedicated their Saturday to reflect collectively on what wellbeing meant in their everyday lives and in their neighbourhood community. Their accounts were concrete, relational, and deeply contextual. People spoke about caring responsibilities for elderly parents, the emotional strain of financial insecurity despite living in a wealthy city, the importance of informal support networks, and the frustration of being structurally unheard in decision-making processes that directly affected their lives. These conversations revealed not a lack of knowledge or agency, but a lack of institutional recognition.

This moment marked the empirical and normative starting point of this dissertation. It foregrounded a fundamental tension that lies at the heart of contemporary urban governance: while residents possess detailed, situated knowledge about what enables or constrains their wellbeing, dominant economic and policy frameworks rarely recognise this knowledge as legitimate evidence. Instead, policy priorities in Amsterdam, as in many high-income cities, are largely informed by aggregate economic indicators, administrative datasets, and expert-driven models that only partially reflect lived realities. The distance between what is measured and what matters is not merely technical; it is political, epistemic, and institutional, and can induce durable inequality (Gupta et al., 2015; Tilly, 2017; Pouw, 2020).

At the time, I had already been introduced to wellbeing economics, mainly through Nicky Pouw's (2020) inspiring book on why and how economics needs to change. This also introduced me to the three-dimensional conceptualisation of wellbeing developed by Pouw and McGregor (2014), distinguishing material, relational, and subjective dimensions of human wellbeing. Yet, these ideas only really started to sink in through engagement with residents from which the framework gained empirical substance. What initially appeared as an abstract theoretical model became a practical lens through which people articulated needs, trade-offs, and priorities. This movement, from theory to lived experience and back, forms the backbone of this dissertation.

This thesis is grounded in the conviction that transforming how we measure wellbeing is inseparable from transforming how we govern cities. Measurement systems do not merely describe reality; they shape policy agendas, legitimise certain forms of knowledge, and

structure the distribution of resources (Espeland and Stevens, 2008; Merry, 2016). In affluent urban contexts marked by persistent inequality, rethinking measurement becomes a critical entry point for more inclusive and democratic governance.

1.2 From Economic Growth to Human Wellbeing

For decades, economic growth has served as the dominant proxy for societal progress. Gross Domestic Product (GDP), employment rates, and income growth continue to anchor policy evaluation and public debate at global, national, and municipal levels. While these indicators capture aspects of economic activity, they provide a limited and often misleading picture of how people actually live and are able to provide for themselves (Stiglitz et al., 2009; Fioramonti, 2016). This limitation is now widely being acknowledged in both academic and policy circles, giving rise to global movements such as Beyond GDP and the growing field of wellbeing economics.

The inadequacy of growth-oriented metrics is becoming particularly visible in high-income urban contexts. Despite strong economic performance, these cities experience rising inequality, declining subjective wellbeing, and growing dissatisfaction. This phenomenon has been described in several related ways, most prominently as the urban wellbeing paradox (Lenzi and Perucca, 2023), but also as the urban paradox (Carlsen and Leknes, 2022) or the urban desirability paradox (Finnemann et al., 2024). Across these formulations, a common empirical pattern is observed: city dwellers often enjoy better material conditions on average - such as higher incomes, more diversified labour markets, and better access to services - yet report lower subjective wellbeing, lower social satisfaction, and/or greater discontent regarding local opportunity and advantages, than those in less urbanised settings.

1.2.1 What is the urban wellbeing paradox?

The urban wellbeing paradox refers to the recurring finding, mainly documented in high-income countries, that living in larger and denser urban areas is associated with *lower* average life satisfaction and higher reported dissatisfaction regarding urban life, despite the economic advantages of cities (Lenzi and Perucca, 2023; OECD, 2024). The paradox challenges the "cities are happy" idea and longstanding assumptions in urban and regional economics that agglomeration economies translate into improved quality of life through higher productivity,

wages, and opportunities (see: Glaeser, 2011). It also complicates standard policy narratives that interpret urban growth and competitiveness as self-evident markers of urban and individual progress.

A central focus in recent work is the refinement of where and for whom the paradox holds. Rather than being a universal feature of contemporary urbanisation, the pattern appears strongest in developed welfare states and among groups who face disadvantages, for example, within urban labour and housing markets (Burger et al., 2020; Carlsen and Leknes, 2022; Lenzi and Perucca, 2024). This conditionality is crucial for policy and theory alike: it indicates that urban discontent is not simply a psychological by-product of density but emerges from the interaction between urban opportunity structures and unequal ability to effectively access them.

1.2.2 Empirical and conceptual development

Recent empirical studies strengthen the evidence base for the paradox while expanding its conceptual vocabulary. Using a large sample of UK residents and a refined measure of urbanicity, Finnemann et al. (2024) find that residents in highly urbanised areas score lower on multiple subjective wellbeing dimensions, including social satisfaction, and economic satisfaction, despite higher incomes. They label this the "urban desirability paradox" to highlight a duality: cities remain attractive and sought-after, even as they are associated with lower reported satisfaction for many residents.

At the European scale, Lenzi and Perucca (2024) re-evaluate the role of income inequality in explaining urban dissatisfaction. Rather than attributing lower satisfaction in large cities to inequality alone, the analysis suggests that dissatisfaction is strongly concentrated among individuals experiencing socioeconomic disadvantage (e.g., low income, precarious employment, limited security). That is, as widely hypothesized, residents with low socioeconomic status are more vulnerable and less likely to benefit from urban opportunities and economic advantages, such as job prospects, diverse private and public amenities, and specialized services (Burger et al., 2020; Lenzi and Perucca, 2024; Fachelli et al., 2025). This is important for this dissertation because it aligns with the idea that urban marginality is a condition produced at the intersection of socioeconomic position and opportunity structures, and that this should be considered when assessing the quality and advantages of urban life.

Further literature advances the idea that dissatisfaction in cities may be linked to intra-urban inequality, cost-of-living pressures and relational deficits, rather than urban living per se. Studies increasingly point to housing affordability, commuting burdens, social isolation, and perceived lack of community belonging as mechanisms undermining subjective wellbeing and creating spatial disparities (Veneri and Pontarollo, 2025). All taken together, the paradox therefore appears less as a contradiction of urban advantages, and more as evidence that those advantages are distributed unevenly and have a cumulative effect.

Complementing these studies, the Organization for Economic Cooperation and Development (OECD) has recently synthesised evidence on life satisfaction across the urban–rural continuum, concluding that in developed countries higher material conditions in cities are often found together with lower subjective wellbeing - a pattern that illustrates, and is hence referred to as, the urban well-being paradox (OECD, 2024). The OECD also emphasises that results vary depending on definitions of "city," the scale of analysis, and the domains of wellbeing measured, underscoring the need for fine-grained and context-sensitive approaches.

1.2.3 Mechanisms: why might wellbeing be lower in economically successful cities?

The emerging literature suggests several interrelated mechanisms driving the paradoxical relation between urban economic advantage and declined wellbeing.

(1) Cost-of-living and housing insecurity. In many economically thriving cities, higher wages are offset by higher housing costs and everyday expenses (Burger et al., 2020; Finnemann et al., 2024). Residents may experience persistent financial stress even when formally employed, particularly when their income growth lags behind rent and asset inflation. Such stress can reduce subjective wellbeing directly and indirectly, for example through family strain and reduced perceived control.

Moreover, the focus on keeping up economic growth tends to impose productivity and consumerism as values, while leaving little space for broader human aspirations satisfaction (Robeyns, 2025, p. 164; Yardımcı, 2022).

(2) Inequality and relative deprivation. Cities tend to display sharp spatial and interpersonal inequalities. Even when absolute living standards are high, visible inequality can trigger feelings of unfairness, insecurity, and diminished social status (Suter and Iglesias, 2005).

Importantly, the effect is often strongest among those already disadvantaged (Lenzi and Perucca, 2024).

(3) Relational fragmentation. Urban living may weaken certain forms of social contact, neighbourhood cohesion, or trust, especially in areas with high residential turnover or where institutional interfaces are experienced as distant or punitive. Declines in social satisfaction and community belonging can substantially reduce life satisfaction (Finnemann et al., 2024).

(4) Overburdened urban infrastructures and time scarcity. Congestion, long commutes and waiting times, bureaucratic complexity, and competition for services and opportunities can erode everyday wellbeing (Carlsen and Leknes, 2022). These pressures matter for lived experience but are poorly captured by standard economic and administrative indicators, producing a narrow evaluation of urban life.

(5) Aspirations, expectations, and perceived opportunity structures. Cities often carry a promise of mobility, cultural participation, and economic advancement. When residents experience structural barriers to accessing these promised opportunities, through discrimination, credential barriers, insecure housing, or limited voice, their objective quality of life is not only likely to diminish but the gap between expectation and reality can generate discontent as well (Lenzi and Perucca, 2023).

These mechanisms are not mutually exclusive; they interact across material, relational, and subjective domains. Based on precisely this interaction, the dissertation considers the paradox a wellbeing economics problem rather than a narrow urban economics problem.

1.2.4 Relevance for this dissertation

The urban wellbeing paradox provides a macro-level entry point into the empirical and theoretical concerns of this dissertation. It signals that aggregate prosperity is compatible with, and can even mask, forms of insecurity and exclusion that cluster in specific neighbourhoods. This is particularly salient in Amsterdam, where overall economic performance and high scores on aggregate broad welfare measures coexist with deep internal disparities.

For this dissertation, the paradox is not treated as an abstract empirical curiosity but as a diagnostic of measurement and governance failure. If cities can be economically successful while segments of their population experience declining wellbeing, then it becomes critical

to ask: what kinds of wellbeing deficits are being missed, for whom, and why? This motivates the dissertation's focus on bottom-up, neighbourhood-level measurement and on the governance conditions under which resident-defined evidence can influence policy agendas.

This dissertation situates itself firmly within the critiques on conventional urban development models and policy frameworks that rely on the assumed benefits of economic agglomeration and growth. It draws on the wellbeing economics perspective to consider economic activity not as an end in itself but as a means to support human wellbeing (Pouw, 2020; Fioramonti et al., 2022). Drawing on Wellbeing Economics, this dissertation emphasizes that ***wellbeing*** does not equal material and economic sufficiency but is multidimensional, relational, experiential and context-dependent and as such requires broader policy frameworks. It asks not only how much economic output is produced, but how resources, relationships, and opportunities are distributed, and whether people have the freedom and security to pursue lives they have reason to value (Pouw, 2020; Sen, 1999).

1.3 Capabilities, Needs and the Foundations of Wellbeing

At the meta-theoretical level, this dissertation is positioned between two influential traditions in human development and justice theory: Amartya Sen's capability approach and Martha Nussbaum's capability-based threshold framework. Both traditions emerged as critiques of utilitarian welfare economics and resource-based approaches that equate wellbeing with income, consumption, or preference satisfaction (Nussbaum and Sen, 1993). Both insist that evaluating social progress requires attending to what people can actually be and do - their real opportunities to live lives they have reason to value (Nussbaum and Sen, 1993). Yet they differ in where they locate normativity, how they conceptualise universality, and what they imply for measurement and governance.

1.3.1 The capability approach: evaluative space, agency and public reasoning

Amartya Sen's capability approach redefines the evaluative space of social assessment. Rather than treating resources or utilities as the primary metric, Sen places emphasis on capabilities, the genuine freedoms people have to achieve functionings (beings and doings) that they have reason to value (Sen, 1999). This shift has two implications that are foundational for this dissertation.

First, Sen's approach foregrounds conversion factors: the insight that resources translate into wellbeing outcomes through complex social, institutional, and personal conditions (Sen, 1993; Robeyns, 2005). Two households with the same income may experience radically different levels of basic safety depending on housing markets, discrimination, disability, care burdens, neighbourhood conditions, or institutional accessibility. In affluent cities, this conversion problem becomes especially salient. Welfare states may provide baseline services, yet residents in marginalised neighbourhoods can remain unable to convert these services into stable wellbeing because of cumulative insecurity and relational exclusion.

Second, Sen's approach is explicitly concerned with agency and process freedom. Wellbeing is not only about achieved outcomes; it is also about the substantive freedom to participate in shaping the conditions under which outcomes are pursued (Sen, 1993, 1999). Sen therefore resists a fixed list of capabilities, arguing that the selection of dimensions is irreducibly normative and should be subject to public reasoning and democratic deliberation rather than expert imposition (Sen, 2004). In practical terms, this means that measurement systems should not be treated as purely technical infrastructures, but as institutions of valuation.

This openness is a strength for the dissertation's objectives. It legitimises the use of participatory, bottom-up processes to define what matters for wellbeing in a given context. It also provides a normative basis for considering exclusion from knowledge production as a form of injustice and, as such, to aim for epistemic justice through bottom-up measurement.

1.3.2 Nussbaum's threshold view: dignity, justice and minimum foundations

Martha Nussbaum shares Sen's rejection of utilitarian and resource-based evaluation but argues that justice requires a more explicit normative stance. She proposes a list of central human capabilities that should be secured for all, and she frames these capabilities as threshold entitlements grounded in the moral idea of human dignity (Nussbaum, 2000, 2011). Nussbaum's contribution is particularly relevant for this dissertation in three ways.

First, it highlights that some wellbeing conditions are not merely preferences but non-negotiable "basic safety" foundations. Second, the threshold view supports policy reasoning in contexts where "choice" is constrained by structural insecurity. It avoids the analytical risk of interpreting deprivation as a matter of different values when in reality people face limited options. Third, it provides a justice-oriented foundation for making claims about what institutions owe residents in marginalised neighbourhoods.

The challenge, however, is that universal lists can risk epistemic closure if applied without sensitivity to local meanings and priorities. In affluent cities characterised by diversity and layered inequalities, fixed capability lists may inadequately capture the relational and institutional dimensions through which marginality is produced.

1.3.3 Positioning this research between Sen and Nussbaum

This dissertation does not seek to adjudicate the longstanding debate between openness and specification in the capability approach (Alkire, 2002; Robeyns, 2005; Deneulin and Shahani, 2009). Instead, it positions itself deliberately in the productive space between Sen and Nussbaum.

At the meta-theoretical level, the dissertation explores a dual claim:

1. A foundation of basic safety is necessary for capability expansion. Without minimum stability in housing, finances, health, and perceived safety, higher-order freedoms remain fragile or aspirational. This aligns with Nussbaum's threshold reasoning.
2. The content and prioritisation of wellbeing beyond basic safety must remain open to democratic valuation. People and communities must be able to articulate what they value and to contest institutional and politicized definitions of progress. This aligns with Sen's public reasoning.

This hybrid "open-threshold" positioning is not a theoretical compromise; it is an empirically grounded analytical strategy. It allows to understand foundational needs with epistemic openness, which is important to the dissertation's design and objectives.

1.3.4 Capabilities, wellbeing economics and the relational production of marginality

To operationalise this "open-threshold" positioning without collapsing into either a fixed list or an unstructured pluralism, the dissertation draws on wellbeing economics as an applied framework. Wellbeing economics conceptualises wellbeing as multidimensional and interdependent, integrating material, relational, and subjective dimensions (Pouw and McGregor, 2014; McGregor and Pouw, 2017; Pouw, 2020). This provides a structured way to interpret capability deprivation in affluent contexts.

In this dissertation, ***marginality*** is treated as relationally produced that also depends on personal and subjective conditions. It is not only about low income or weak labour-market attachment, but about unequal access to resources, institutions, and relations that enable stable conversion into wellbeing (Wacquant, 2007; Galster, 2012; Tilly, 2017). This aligns with relational conceptions of justice that stress recognition, voice, and institutional respect (Fraser, 2009; Young, 2008). It also aligns with Sen's emphasis on process freedoms and agency.

The meta-theoretical framework of this dissertation therefore provides the umbrella under which the applied theories, wellbeing economics, participatory governance, and urban regime theory, are positioned. Together, they allow the dissertation to analyse wellbeing measurement as an epistemic and institutional practice: how definitions of wellbeing are produced, how they become credible data, and how they travel (or fail to travel) into governance.

1.4 Applied Theories under a Capability Umbrella

While the capability approach and threshold positioning provides the normative and conceptual anchor of this dissertation, several applied theories are mobilised to address specific empirical and analytical questions. These include wellbeing economics, participatory governance theory, and urban regime theory. Rather than being treated as competing paradigms, these frameworks are deployed as complementary lenses that operate under the capability umbrella and are explicitly connected through a shared concern with epistemic justice: the question of whose knowledge is recognised, valued, and acted upon in the governance of wellbeing.

1.4.1 Measurement, valuation and power

A central analytical claim of this dissertation is that measurement is a political and epistemic act rather than a neutral technical exercise. Indicators do not merely describe social reality; they actively shape it by structuring attention, defining policy problems, and legitimising certain forms of intervention while marginalising others (Espeland and Stevens, 2008; Bowker and Star, 1999; Merry, 2016). What is counted becomes visible, governable, and

actionable; what is not counted risks remaining invisible or being framed as anecdotal, exceptional, or irrelevant.

In Western European urban policy contexts, this dynamic is particularly pronounced. Economic indicators such as income, employment rates, or housing production figures are deeply embedded in administrative routines and performance management systems. As a result, they travel easily across policy arenas and scales. By contrast, experiential dimensions of wellbeing—such as chronic stress, perceived insecurity, lack of voice, or everyday humiliation in interactions with institutions, are rarely measured systematically and therefore struggle to gain policy traction. This asymmetry is not accidental; it reflects historical power relations in the production of knowledge and the privileging of expert-driven, standardised forms of evidence (Power, 1997; Porter, 1995).

The capability approach foregrounds this issue by insisting that evaluation necessarily involves value judgements and that these judgements should be subject to public reasoning rather than technocratic closure (Sen, 1993). From this perspective, the politics of measurement is inseparable from questions of justice. Decisions about what to measure, at what scale, and using which indicators implicitly define what counts as a good life and whose priorities matter.

1.4.2 Epistemic justice and wellbeing measurement

Building on this insight, the dissertation engages explicitly with the epistemic justice literature. Fricker's (2007) distinction between testimonial and hermeneutical injustice provides a useful starting point, but recent governance scholarship shows that epistemic injustice is often institutionalised rather than interpersonal (Mills, 2007; Simon-Kumar, 2018).

In urban governance, testimonial injustice occurs when residents' accounts are systematically afforded less credibility than expert knowledge. This is particularly evident in marginalised neighbourhoods, where residents may be perceived as lacking objectivity, competence, or representativeness. Hermeneutical injustice arises when dominant policy frameworks lack the interpretive resources to make sense of residents' experiences. When institutional vocabularies do not include concepts such as "everyday stress" or "perceived powerlessness," these experiences remain difficult to articulate as policy-relevant problems.

Verrest and Pouw (2026) conceptualise this dynamic as a dual gap in wellbeing governance. The contextual gap refers to the mismatch between standardised indicators and locally lived realities. The legitimacy gap refers to the misalignment between what institutions choose to measure and what residents themselves consider important for wellbeing. Together, these gaps help explain why even well-intentioned wellbeing frameworks may fail to address persistent inequalities when lacking bottom-up approaches.

This dissertation treats bottom-up wellbeing measurement as an epistemic justice intervention. By involving residents directly in defining indicators, the research seeks to reduce hermeneutical gaps by expanding the conceptual repertoire through which wellbeing is understood. By subsequently measuring these indicators rigorously and systematically, it seeks to challenge testimonial injustice by producing evidence that meets institutional standards of credibility while remaining grounded in lived experience. In addition, it helps to reveal disparities beyond socioeconomic inequalities (Fachelli et al., 2025). There is, although, an inherent tension between credibility and representativeness. Building trust with resident groups is also prone to bias. The overall approach should there build-in sufficient steps for meeting the representativeness criterion.

1.4.3 Wellbeing economics and an integrative operational framework

Wellbeing economics provides the primary operational framework through which the dissertation translates the capability–epistemic justice perspective into measurable concepts. Building on Pouw and McGregor (2014) and subsequent work (McGregor and Pouw, 2017; Pouw, 2020), wellbeing is conceptualised as emerging from the interaction between material, relational, and subjective dimensions.

This framework offers three analytical advantages. First, it avoids reducing wellbeing to income or consumption while retaining a clear focus on economic structures and distribution. Second, it explicitly recognises relational and institutional factors, such as trust, voice, and access to collective resources, as constitutive of wellbeing rather than as residual variables. Third, it integrates subjective experiences not as individual preferences detached from context, but as reflections of people's positions within social and institutional arrangements.

As such, the framework conceptualizes wellbeing comprehensively and more reflective of lived realities, and it allows to operationalize experiential and situated knowledge into measurable indicators. So far, however, operationalizations often follow a top-down process

driven by experts or (inter)national agendas (Alkire, 2002; Dalziel et al., 2018; Pouw, 2020; Stiglitz et al., 2009; Cardoso et al., 2022). In addition, those studies that take a participatory approach to operationalization wellbeing indictors provide limited empirical evidence on the added value of those indicators tested against existing policy indicators (Sollis et al. 2022).

1.4.4 Participatory governance and co-production of public knowledge

Participatory governance theory informs how the dissertation conceptualises co-creation and the role of citizens in producing public knowledge. Since the 1990s, participatory approaches have been promoted as responses to democratic deficits, legitimacy crises, and the growing complexity of policy problems (Fischer, 2012; Fung, 2015; Sørensen and Torfing, 2018).

However, participation varies widely in depth and influence. Arnstein's (1969) ladder of participation remains relevant in highlighting the distinction between symbolic inclusion and substantive power-sharing. More recent work emphasises that even advanced forms of participation, such as co-creation, can reproduce inequalities if institutional settings privilege professional expertise and predefined agendas (Leino and Puumala, 2020; Verloo, 2023).

From an epistemic justice perspective, participatory governance is not primarily about voice but about authority over problem definition and evidence. Co-creation becomes transformative only when citizen-defined knowledge is treated as a legitimate input into decision-making, rather than as supplementary or illustrative information. In that vein, this dissertation defines ***co-creation*** as an interactive, longitudinal and non-hierarchical process in which citizens participate as local experts and knowledge co-producers (Cottam & Leadbeater, 2004; Leino & Puumala, 2020).

1.4.5 Urban regime theory and epistemic selectivity

Urban regime theory provides a lens to analyse why participatory knowledge often struggles to gain traction in policy practice. Regime theory conceptualises urban governance as the product of coalitions between public and private actors who mobilise resources around shared agendas (Stone, 2005; van Ostaaijen, 2024).

From this perspective, epistemic selectivity is structurally embedded in governance arrangements. Knowledge that aligns with dominant agendas, performance metrics, and resource dependencies is more likely to be taken up. Citizen-defined wellbeing indicators may therefore face resistance in policy practice, not because they lack validity, but because

they challenge existing priorities and modes of coordination (Bianchi, 2024; Dardot and Laval, 2015; Gaber, 2020; Landemore, 2020).

By integrating wellbeing economics with urban regime theory, the dissertation moves beyond the assumption that "better" indicators and measurement practices automatically lead to improved policy. Instead, it responds to empirically rooted arguments that achieving change requires scrutiny and evaluation of governance structures (Sollis, 2023; Crisp et al., 2023). Although thorough governance analysis is beyond the dissertations' scope, it does set out to examine the institutional conditions under which participatory wellbeing measurement can influence agenda-setting, resource allocation, and governance routines. Aiming for ***inclusive urban governance*** which, in the context of this dissertation, means policies account for localized needs and priorities articulated by residents.

1.5 Marginality in High-Income Urban Contexts

This dissertation focuses explicitly on marginality in a high-income city. Unlike contexts of absolute poverty, marginality in Amsterdam is characterised by relative deprivation and constrained opportunity, cumulative insecurity, and systematic underrepresentation (Wacquant, 2007). Despite the presence of economic opportunity and city-wide availability of basic services and amenities, residents might face barriers in converting these resources into stable wellbeing outcomes. These barriers tend to manifest spatially creating marginalized neighbourhoods.

Urban policies frequently categorise such neighbourhoods as uniformly "deprived," relying on composite indices based on income, employment, and education. While useful for resource allocation, these classifications obscure internal diversity and mask relational and subjective dimensions that produce marginality (Wacquant, 2007; Galster, 2012; Gupta et al., 2015; Musterd, 2022). They also reinforce a top-down logic in which needs are inferred based on institutional expertise and objective indicators rather than articulated through lived accounts.

By working at the neighbourhood level and engaging residents directly in defining multidimensional wellbeing, this dissertation challenges assumptions of homogeneity and explores differences across places and groups (Fachelli et al., 2025). It assumes that even

within similar socioeconomic categories, neighbourhoods diverge in wellbeing needs and priorities depending on demographic composition and institutional interaction (Galster, 2012; Fraser, 2009; Sharkey and Faber, 2014).

1.6 The Amsterdam Policy Context: Wellbeing, Inequality and Urban Governance

1.6.1 Amsterdam as a progressive policy laboratory and a stratified city

Amsterdam is widely portrayed as a progressive and well-performing city. It benefits from strong public institutions, a comprehensive welfare system, a historically large social-housing sector, and a long tradition of spatial planning and social policy (Musterd, 2005; Uitermark, 2009; Fainstain, 2010; Hajer and Zonneveld, 2000; van Gent, 2013). These features make Amsterdam a particularly instructive case for studying wellbeing in a high-income context: the city has both the institutional capacity and the normative ambition to pursue inclusive wellbeing.

At the same time, Amsterdam exemplifies the contradictions that increasingly characterise affluent European cities. Over the past two decades, economic growth, internationalisation, and rising asset prices have coincided with deepening socioeconomic and spatial inequalities. Housing affordability has deteriorated, wealth disparities have widened, and opportunities for secure livelihoods have become increasingly uneven across neighbourhoods (Piketty, 2015; Wacquant, 2007). These dynamics are not merely market outcomes; they are shaped by governance choices and institutional arrangements, including urban development strategies that prioritise competitiveness and real estate-led growth (Atkinson, 2000; Uitermark, 2009; de Koning, 2015).

This dual character positions Amsterdam as a critical policy laboratory: the city is a site of experimentation with alternative economic and wellbeing-oriented frameworks, generally with strong support of local policy actors. However, the change those frameworks become embedded in established policy routines and achieve institutional transformation is constrained by city-level governance structures and persistent power asymmetries (Kvartborg Vestergaard and Schmid, 2026).

1.6.2 From GDP to Broad Welfare – and the limits of top-down frameworks

In response to critiques of GDP as a measure of societal progress, the Netherlands has been an early adopter of broader welfare frameworks. The national Monitor Brede Welvaart (Broad Welfare Monitor) translates wellbeing into a set of economic, social, and environmental indicators and has been adapted to regional and municipal levels (CBS, 2024). In principle, this framework aligns with the global Beyond GDP agenda by recognising multidimensional metrics and using an integrated measurement approach.

Yet the governance role of broad welfare frameworks depends on how they are operationalised. In Amsterdam, broad welfare indicators tend to operate as strategic dashboards that support public communication and interregional comparison rather than as neighbourhood-level diagnostic tools. The indicators rely on standardised administrative and survey data, are selected top-down by expert institutions, and shaped by comparability requirements rather than contextuality. These features create what Verrest and Pouw (2026) describe as a contextual gap (limited sensitivity to local lived realities) and a legitimacy gap (limited resident influence over what is measured).

In practice, this means that Amsterdam may score highly on broad welfare measures while specific neighbourhoods experience persistent insecurity, stress, and exclusion that remain insufficiently visible. This is not an argument against broad welfare monitoring, but an argument about its scale and epistemic architecture: a city-level multidimensional framework can still reproduce invisibility at the neighbourhood level.

1.6.3 Municipal data infrastructures and the politics of what is known

Amsterdam has an advanced statistical and administrative data infrastructure. Municipal departments, research units, and public agencies routinely produce neighbourhood-level statistics on income, education, employment, health, and safety (Municipality of Amsterdam, n.d.; O&S, n.d.). These data infrastructures serve critical functions: they enable targeted resource allocation, support accountability, and provide evidence for programme justification and evaluation.

However, the existence of data does not guarantee epistemic completeness (Verloo and Bertolini, 2020). Administrative datasets are shaped by institutional categories, and they tend to privilege phenomena that are already legible to governance systems (Bowker and Star,

1999; Merry, 2016). Experiences that are informal, relational, or subjective, such as informal care burdens, perceived institutional disrespect, chronic stress, or felt lack of voice, are less likely to be captured. Where they are captured (e.g., through periodic surveys), they are often too coarse or infrequent to provide comprehensive insight and function as actionable signals.

This produces a distinctive form of epistemic inequality in affluent cities: marginalised communities may be surrounded by data infrastructures while their most pressing concerns remain under-measured (Keestra and Verloo, 2020). The result is a policy environment in which the absence of data is easily interpreted as the absence of a problem.

1.6.4. Area-based policy and the logic of unequal investment

To address spatial inequalities, Amsterdam has developed a set of area-based programmes. Two prominent examples are *Masterplan Zuidoost* and the *Nationaal Programma Samen Nieuw-West*. These programmes are guided by a principle that has become central to Amsterdam's equity discourse: unequally investing to create equal opportunities.

Area-based approaches recognise that equal treatment does not lead to equal outcomes. They therefore concentrate investments in urban areas characterised by lower average incomes, weaker labour-market attachment, poorer health outcomes, and higher perceived insecurity. Interventions typically use an integrated approach focusing on education, employment, housing quality, safety, and social cohesion.

Yet area-based policies also tend to rely on composite indices and standardised indicators to define priority areas, which can reproduce a homogenising logic. To illustrate, policy prioritizes 53 "developing" neighbourhoods in Amsterdam, which are both selected and monitored based on aggregated socioeconomic data and dispersed data on perceived liveability (iGGW, 2021). This produces an image of neighbourhood deprivation that can be fixed through material investment while this ignores important relational and subjective drivers. In addition, deficit-oriented categorisations can reinforce stigma, influencing how neighbourhoods are perceived by institutions and outsiders.

1.6.5 Participation commitments and the participation paradox

Amsterdam's area-based and integrated programmes increasingly incorporate participatory rhetoric and formal commitments to resident involvement. In principle, this resonates with broader European trends towards co-creation and participatory governance (Rossi and

Tuurnas, 2021; Sollis, 2023; Termeer et al., 2019). In practice, however, participation often remains consultative rather than decision-shaping.

This reflects what multiple strands of scholarship describe as a participation paradox: while policy discourse emphasises participation, institutional routines and accountability structures constrain the extent to which participatory knowledge can meaningfully shape decisions (Arnstein, 1969; Fung, 2015; Verloo, 2023). Participation may occur after agendas are set, within pre-structured problem frames, or in settings where professional vocabularies dominate. As a result, residents' contributions risk being translated into suggestive inputs rather than treated as authoritative and decisive evidence (Reinert and Sinnig, 1997; Karic, 2024).

1.6.6 Market-oriented governance and persistent policy blind spots

Amsterdam's policy context is further shaped by market-oriented governance logics. Since the 1990s, urban development strategies have increasingly prioritised competitiveness, tourism, innovation, and public–private partnerships (Atkinson, 2000; Spierings, 2012; de Koning, 2015; Yardımcı, 2022). While these strategies have contributed to economic growth and urban renewal, they have also reinforced exclusionary dynamics by privileging indicators related to economic performance, efficiency, and return on investment.

Non-market values, such as informal care, social cohesion, mental wellbeing, democratic voice, are harder to quantify within conventional performance systems and are therefore more vulnerable to underinvestment (Alford and O'Flynn, 2009; Cès et al., 2019). The result is a set of persistent policy blind spots: interventions may focus on labour-market activation or physical neighbourhood renewal while neglecting the relational and subjective conditions that residents identify as crucial for meeting basic needs and achieving wellbeing stability. Even when growth-oriented frameworks are complemented by broader frameworks, blind spots continue to be reproduced as long as economic growth remains decisive and alternative epistemologies excluded (de Koning, 2015; Crisp et al., 2023).

1.6.7 Participatory wellbeing dashboards as policy innovation and epistemic intervention

Within this context, participatory wellbeing measurement emerges as both a technical and institutional innovation. By enabling residents to define what wellbeing means in their own context and translating these definitions into measurable indicators, bottom-up approaches

challenge dominant epistemic hierarchies in policymaking. When structurally used in policy processes, such measurement may contribute to ***citizen empowerment*** - here defined as shifting epistemic and procedural power to citizens.

In Amsterdam, early explorations into bottom-up wellbeing measurement were commissioned by the municipality in response to concerns about the limitations of existing data systems. These explorations identified policy space for neighbourhood-level policy tools, henceforth referred to as the "Wellbeing Dashboards", that could complement official statistics and inform area-based interventions (Verrest et al., 2021).

The Wellbeing Dashboards developed in this dissertation build directly on this policy context. They are designed as boundary objects: tools that can facilitate dialogue across communities and institutions without fully collapsing local meanings into bureaucratic categories (Star and Griesemer, 1989). Their governance potential, however, depends on whether municipal routines recognise them as credible and whether coalitions can mobilise resources around them - questions addressed through urban regime theory in the later chapters.

1.6.8 Why Amsterdam matters beyond Amsterdam

Amsterdam's combination of progressive discourse, strong institutions, and persistent inequality makes it analytically valuable beyond the Dutch case. Many European cities face similar tensions: they adopt wellbeing frameworks and participatory reforms while remaining embedded in growth-oriented governance, performance management, and institutional path dependency. Studying Amsterdam therefore allows this dissertation to contribute to a broader debate about the conditions under which wellbeing-oriented and epistemically just governance innovations can become institutionalized.

1.7 Knowledge gaps

Based on the above, four main knowledge gaps are formulated:

Knowledge gap 1: Operationalising wellbeing economics in an affluent urban area.

Wellbeing economics provides a strong conceptual framework for understanding urban wellbeing as multidimensional, relational, and context-dependent, which has particular

relevance to high-income urban areas facing increased intra-urban inequalities and declined wellbeing levels. Here existing measures largely rely on top-down, expert-defined indicators that insufficiently capture those divergent and lived experiences. However, so far, the framework lacks empirically grounded operationalisations. There is a need to understand how the wellbeing economics framework can be operationalized into robust, neighbourhood-level measurement instruments that are both empirically credible and sensitive to local realities. (e.g. Pouw, 2020; Dalziel et al., 2018) (*addressed in Chapter 2)*

Knowledge gap 2: Integrating experiential and situated knowledge in credible measurement.

Although scholars and increasingly policy practitioners recognise the importance of broader measurement and the use of experiential and situated knowledge for understanding intra-urban inequalities, there is limited methodological insight into how such knowledge can be systematically integrated into measurement without sacrificing validity, comparability, or policy legibility. In particular, little is known about what added value participatory, bottom-up developed wellbeing indicators provide to existing policy indicators and how they can function to better align measurement outcomes with residents' realities. (e.g. Verrest and Pouw, 2026; Verloo and Bertolini, 2020). *(addressed in Chapter 2 and 3)*

Knowledge gap 3: Addressing urban marginality beyond socioeconomic classifications.

Policies to address urban inequality in high-income cities tend to rely heavily on income, employment, and education indicators, often treating neighbourhoods as homogeneous units of deprivation. This overlooks wider notions of marginality and leaves important gaps in understanding relational and institutional conditions that constrain neighbourhood wellbeing. Moreover, there is insufficient comparative empirical evidence on how multidimensional wellbeing priorities and constraints diverge across marginalised neighbourhoods that appear similar in conventional socioeconomic statistics. (e.g. Galster, 2012; Musterd, 2022). (*addressed in Chapters 3 and 4*)

Knowledge gap 4: Understanding governance implications of participatory wellbeing measurement.

While participatory and co-creative approaches to measurement are increasingly promoted in urban policy, there is limited empirical research on their governance effects. Specifically, little is known about the institutional and political conditions under which citizen-defined wellbeing indicators can influence policy agendas, resource allocation, and decision-making

routines. The relationship between bottom-up measurement, epistemic justice, and urban governance regimes therefore remains under-theorised and under-tested. (e.g. Sollis, 2023; Crisp et al., 2023) (*addressed in Chapter 5*)

1.8 Research Objectives and Questions

Aiming to address these gaps, the dissertation seeks to advance knowledge in three interrelated domains:

a. the bottom-up operationalization and measurement of wellbeing in marginalized neighbourhoods.
b. the role of participation in producing legitimate and relevant indicators able to fill in policy blind spots.
c. the governance conditions under which such indicators can shape policy to account for localized needs and priorities.

The overarching question is formulated as: *How can citizen-defined, multidimensional indicators of wellbeing be developed and measured at neighbourhood level in high-income urban contexts, and to what extent can such measurement meaningfully contribute to citizen empowerment and more inclusive urban governance?*

This question is addressed through four sub-questions:

1. How can multidimensional wellbeing indicators be developed through co-creation with residents within a marginalised neighbourhood, and under what conditions does this process contribute to citizen empowerment?
2. What additional insights do bottom-up, citizen-defined wellbeing indicators provide compared to conventional top-down data sources?
3. To what extent do wellbeing indicators converge or diverge across marginalised neighbourhoods, and what does this imply for place-based urban policy?
4. Under what institutional and political conditions can participatory, bottom-up wellbeing measurement influence policy agendas, decision-making, and resource allocation at the neighbourhood level?

These questions[1] are addressed in an embedded case study in Amsterdam (section 1.9.4) through four interlinked empirical articles that together form a cumulative research trajectory.

1.9 Research Approach and Design

1.9.1 Rationale for an Action-Oriented, Community-Based Participatory Approach

This dissertation adopts an action-oriented, community-based participatory research (CBPR) approach. The choice for CBPR is not merely methodological but epistemological and normative and follows directly from the dissertation's positioning within the capability approach and wellbeing economics. If wellbeing is understood as context-dependent, relational, and partly subjective, and if people are seen as agents capable of articulating what they value, then research designs that treat residents as passive data sources are fundamentally inadequate (Sen, 1999; Pouw and McGregor, 2014).

CBPR is specifically designed to address this mismatch between conventional research practices and complex social realities. It aims to generate knowledge with communities rather than about them, and to align scientific inquiry with social change (Adelman, 1993; Minkler and Wallerstein, 2008). In contrast to extractive research designs, CBPR integrates research, reflection, and action, acknowledging that knowledge production is always embedded in power relations and institutional contexts (Flicker et al., 2007; Reason and Bradbury, 2001).

The action-oriented character of this research is particularly relevant in the context of affluent cities, where marginality is often rendered invisible by aggregate indicators and where policy blind spots persist despite extensive data infrastructures. By engaging residents directly in defining, measuring, and interpreting wellbeing, the research seeks not only to improve empirical accuracy but also to contribute to epistemic justice by recognising local knowledge as a legitimate and necessary input for policy (Fricker, 2007; Simon-Kumar, 2018).

[1] The empirical chapters present these question with minor adjustments to fit the scope and format of the submission journals.

1.9.2 Core principles guiding the research design

The research design is guided by a set of core CBPR principles that structure all phases of the project (Israel et al., 1998; Minkler and Wallerstein, 2008). These principles are not treated as abstract ideals but are operationalised throughout the empirical chapters.

First, residents are involved as co-researchers rather than respondents. They participate in refining research questions, defining wellbeing concepts, developing indicators, validating findings, and engaging with policy actors. They are also rewarded for their time. This reflects an explicit shift in epistemic authority: experiential and situated knowledge is treated as the primary source for indicator development, while academic theory provides a structuring and interpretive framework.

Second, the research process deliberately integrates social learning and capacity-building. Co-creation workshops, survey training sessions, and collective interpretation meetings are designed not only to generate data but also to strengthen participants' analytical, communicative, and organisational capacities (Corburn, 2003; Sollis, 2023). This aligns with the empowerment dimension of the capability approach, which emphasises the expansion of people's real opportunities to influence decisions affecting their lives.

Third, the research prioritises reflexivity and iterative validation. Data collection and analysis do not follow a linear trajectory but evolve through continuous feedback loops between residents and researchers. Preliminary findings are repeatedly discussed with participants to assess whether they resonate with lived experience and to identify blind spots or misinterpretations. This iterative process enhances both empirical robustness and democratic legitimacy.

1.9.3 Ontological and Epistemological Positioning

Ontologically, the research adopts a critical realist stance with a strong interpretivist orientation. Wellbeing is understood as socially constructed and experienced differently across contexts, groups, and individuals. Residents' accounts of wellbeing are therefore treated as valid representations of reality rather than as subjective noise to be corrected or averaged out.

At the same time, the research acknowledges the existence of structural conditions that operate independently of individual perception. Institutional arrangements, governance

routines, power asymmetries, and policy frameworks shape both wellbeing outcomes and the space within which residents can articulate and prioritize needs (Bourdieu, 1994; Wacquant, 2007; Stone, 2005). This dual ontological position allows the dissertation to analyse the interaction between agency and structure without reducing one to the other.

Epistemologically, the research embraces pluralism. It combines qualitative and quantitative methods, experiential and statistical knowledge, and academic and non-academic forms of expertise. This pluralism is consistent with Sen's critique of value-neutral economics and his insistence that evaluative judgements are unavoidable in social analysis (Sen, 1993). Rather than attempting to eliminate value judgements, the research makes them explicit and subject to collective scrutiny.

1.9.4 Methodological Architecture and Sequencing

The dissertation is structured around a sequential yet flexible methodological architecture. It addresses the main research question through analysing multiple marginalized, yet distinct, neighbourhoods in Amsterdam[2]. While the four empirical studies build on one another, addressing the sub-questions sequentially, data collection and sub-unit analysis does not follow a strictly linear path. Instead, it unfolds in response to opportunities, constraints, and priorities emerging in the field.

The first research phase focuses on exploratory engagement and trust-building. Semi-structured interviews with residents and local professionals are used to identify salient wellbeing concerns and to assess willingness to engage in participatory research. This phase establishes the relational foundation necessary for meaningful co-creation pursued in following phases (detailed in chapter 2).

The second phase centres on co-creation workshops in which residents collectively conceptualise wellbeing and translate abstract notions into concrete, measurable indicators. These workshops draw on facilitated dialogue, visualisation techniques, and iterative refinement (detailed in chapter 2). Theoretical frameworks, such as the material–relational–

[2] The neighbourhoods are: Venserpolder, G-Buurt, Reigersbos in Amsterdam's Southeast district and Wegener Sleeswijkbuurt in its New West district. The selection, analytical purpose and characteristics of the neighbourhoods is described throughout the empirical chapters 2-5.

subjective distinction, are introduced not as prescriptive templates but as heuristic devices that participants can adapt or contest (detailed in chapter 3).

The third phase involves the quantitative measurement of the co-created indicators through resident-validated surveys that are conducted within the neighbourhoods face-to-face with residents. This step responds to residents' explicit demand for quantitative evidence that can be mobilised in policy dialogues. Survey design, sampling strategies, and data collection are conducted in close collaboration with community members to ensure accessibility, relevance, and local ownership (detailed in chapter 2 and 3).

The fourth phase extends beyond measurement to policy engagement and governance analysis. Wellbeing dashboards are used as boundary objects in interactions between residents, municipal officials, and other stakeholders (detailed in chapter 4 and 5). Observations, interviews, and document analysis are employed to examine how participatory knowledge travels (or fails to travel) and whether policy embedding is possible within existing governance regimes (detailed in chapter 5).

1.9.5 Ethical Considerations and Power Asymmetries

The intensity of engagement inherent in CBPR raises important ethical considerations. Close collaboration with residents creates risks of raising expectations, reproducing dependency, or instrumentalising participation for academic purposes. To mitigate these risks, the research emphasises transparency, informed consent, and continuous expectation management.

Participants are explicitly informed about the scope and limits of the research, including what outcomes can and cannot be guaranteed. Decisions about data ownership, dissemination, and policy engagement are discussed collectively. Where possible, outputs such as wellbeing dashboards are co-owned by community organisations rather than retained exclusively within academic institutions.

The research also adopts a reflexive stance towards power asymmetries between researchers and participants. While CBPR seeks to redistribute epistemic authority, it cannot fully eliminate inequalities related to education, institutional access, or symbolic capital. These asymmetries are acknowledged and analysed rather than denied, particularly in the governance-focused chapters of the dissertation.

1.9.6 Positionality: credibility, trust and the ethics of bottom-up evidence

The research design incorporates explicit reflection on the positionality of the researcher. As an academic affiliated to an established university and not a resident of the neighbourhoods studied, the researcher occupies a position of relative privilege. This positionality shapes access, interpretation, and interaction in the field. It also shapes the epistemic conditions under which resident knowledge can become recognised as credible data.

A central analytical point is that the dissertation's choice for bottom-up measurement is not driven by a normative preference for participation alone. It is driven by an epistemic diagnosis: conventional data infrastructures systematically under-measure key dimensions of lived wellbeing and therefore reproduce policy blind spots. Producing credible evidence on these dimensions requires methodological rigour, but it also requires relational infrastructure.

In conventional policy research, credibility is often treated as a property of technique, sample size, representativeness, reliability, and replicability. In participatory research, credibility has an additional requirement: it depends on the quality of relationships that enable residents to share knowledge, participate in data production, and validate findings (Leino and Puumala, 2020). The research must therefore be credible to policy institutions, but it must also remain credible with the community.

This dual credibility requirement is particularly salient in marginalised neighbourhoods where residents have experienced repeated cycles of consultation without tangible change. Such experiences generate understandable scepticism towards research and policy initiatives. Moreover, residents' time is scarce: participation competes with paid work, care responsibilities, and everyday stress. In this context, participation is not merely a methodological step; it is an ethical and political relationship.

For this reason, the research builds on existing community infrastructures rather than creating parallel structures. Collaboration with local community leaders and both formal and informal community organisations served multiple functions.

- First, these organisations provided relational entry points that increased accessibility and inclusiveness. They helped recruit participants beyond those who are already institutionally connected.

- Second, they enabled ongoing feedback loops that strengthened validity. Residents and organisations could contest interpretations, identify blind spots, and refine indicator meanings.
- Third, they supported mobilisation for surveys and dialogues. This improved response rates and representativeness, thereby strengthening the robustness of the dataset.

Community leaders functioned as epistemic intermediaries. They hold local legitimacy, know which groups are underrepresented, and understand how trust is built across diversity. Working with them requires a partnership ethic: recognising their expertise, negotiating expectations transparently, and ensuring that research outputs remain locally meaningful and usable.

At the same time, collaboration through organisations introduces analytical and ethical challenges. Organisations are not neutral; they may represent particular groups more than others and may have strategic priorities. The research therefore treats community leadership not as a substitute for broad participation but as an enabling condition for reaching broader participation. Throughout the project, recruitment channels were diversified and perspectives triangulated to avoid over-reliance on a single network.

Positionality is thus not treated as a biographical note but as part of the research design. It shapes how evidence is produced, how it is validated, and how it can travel into policy arenas. In epistemic justice terms, the role of the researcher includes mediating between knowledge systems without colonising one into the other. This requires continuous attention to language, interpretation, and ownership.

1.9.7 Quality criteria: relevance, robustness, and policy legibility in bottom-up measurement

A further implication of the dissertation's epistemic positioning is that bottom-up measurement must satisfy multiple quality criteria simultaneously. Three criteria are particularly central.

Relevance (contextual validity). Indicators must reflect locally salient realities and priorities. This is achieved through resident-led conceptualisation and iterative refinement. Without relevance, measurement risks reproducing the contextual gap (Verrest and Pouw, 2026).

Robustness (empirical validity and reliability). Indicators must be measurable in a way that produces consistent patterns and allows meaningful comparison over time or across neighbourhoods. This requires careful survey design, piloting, and attention to sampling strategies (UNDP and OPHI, 2019).

Legibility (institutional usability). Indicators must be translated into formats that can travel through governance routines without stripping them of meaning (Verrest and Pouw, 2026). This includes producing clear dashboards, explaining indicator construction, and linking results to policy domains while retaining resident-defined interpretation.

These criteria often pull in different directions. For example, institutional legibility may demand simplification, while contextual validity may demand nuance. The dissertation therefore treats indicator development and dashboard design as a translation challenge: how to maintain interpretive richness while producing data that institutions can act upon.

1.9.8 Trust as methodological infrastructure

The credibility of bottom-up evidence depends on trust at multiple levels: trust between residents and researchers; trust among residents participating in collective meaning-making; and trust between community organisations and municipal actors during dialogues.

Trust is cultivated through continuous presence, transparency, and reciprocity. Continuous presence matters because it signals commitment beyond one-off data extraction. Transparency matters because it reduces the risk of instrumentalization and manages expectations. Reciprocity matters because residents must see that participation produces tangible value, whether in the form of usable evidence, strengthened networks, or improved dialogue capacity.

The dissertation therefore conceptualises trust not as a soft variable but as methodological infrastructure: without it, representative data collection becomes impossible, and interpretation remains fragile. Trust-building is also a governance issue. Where institutions have historically failed to respond to resident input, trust deficits are rational and protective.

1.9.9 Research limitations and analytical implications

Finally, the dissertation recognises that bottom-up measurement cannot fully resolve epistemic injustice on its own. Measurement can make hidden realities visible, but it cannot

guarantee institutional response. Moreover, participation can never be perfectly inclusive; structural barriers will always shape who participates. The research therefore analyses participation and representation as empirical issues rather than assuming inclusion.

These limitations are analytically productive. They motivate the dissertation's later engagement with urban regime theory: understanding the coalitional and resource conditions under which citizen-defined wellbeing evidence can shape agendas and mobilise investments.

Although the collaborative and action-oriented nature of the research is cornerstone to its objectives, it may create limitations when for example conflict arises or critical resources are withdrawn. Both the academic and institutional context in which the research is conducted are expected to enable action-oriented outcomes, however factors such as publishing pressure, limited financial resources and short-term commitment, can also limit this.

1.10 Structure of the Dissertation

Following this introduction, Chapter 2 presents the first empirical article, which develops a bottom-up methodology for co-creating wellbeing indicators in the neighbourhood Venserpolder. Chapter 3 studies these empirically derived wellbeing indicators and examines governance, and urban policy. Chapter 4 extends the analysis through a comparative study of wellbeing indicators derived through the transferable bottom-up method in three different neighbourhoods (Venserpolder, G-Buurt, Wegener Sleeswijkbuurt). Chapter 5 connects participatory measurement to governance analysis in Amsterdam Southeast district using urban regime theory (drawing on data collected in Venserpolder, G-Buurt, Reigersbos). In Chapter 6, the dissertation concludes by reflecting on the implications for wellbeing measurement, participatory governance, and urban policy.

Chapter 2

Co-creation to measure what matters: the Case of Venserpolder, Amsterdam[3]

[3] Based on article 1: van Beek, J.E.M., Pouw, N.R.M. and Verrest, H.J.L.M. (2025). Co-creation to measure what matters: the case of Venserpolder, Amsterdam. *Journal of Urban Affairs*, 1-20.

Abstract

In light of widening urban inequalities, the use of top-down policy approaches and narrowly defined economic indicators is criticized for overlooking broader and divergent wellbeing needs, in objective and subjective terms. Despite growing calls for a human-centred and multidimensional approach to urban policy (Cardoso et al., 2022; Caprotti, 2018; Pouw and McGregor, 2014; Pouw, 2020), there is a dearth in empirical research addressing required instruments. This paper presents a pilot study in which citizens identify broader wellbeing indicators and co-create a local policy instrument ("Wellbeing Dashboard") in Venserpolder, a marginalised Amsterdam neighbourhood. A transferable bottom-up method is derived, entailing co-creation, face-to-face surveys and experimental dialogues, that supports citizen empowerment. Findings indicate how the process empowers citizens through social learning and capacity building. Moreover, the Wellbeing Dashboard provides credible data on wellbeing needs and priorities, otherwise ill-captured in formal economic indicators, and facilitates citizen empowerment once embedded in policy practice.

Keywords: urban marginality, co-creation, urban policy design, citizen empowerment, democratization

1. Introduction

Recently, scholarly interest in the "urban wellbeing paradox" spiked. This paradox shows widening inequalities in access to safe and secure livelihoods and increased discontent with quality of life in European cities, despite the presence of economic growth, strong institutions and welfare systems (Lenzi and Perucca, 2023). Those with limited access to sustainable livelihoods are pushed to the margins, where their experiences and priorities are silenced. Simultaneously, those with access to stable or comfortable livelihoods form a social core that becomes overrepresented in decision-making and whose daily realities become the norm (Tilly, 2017). Moreover, policy design offers limited space for diverging realities of marginalized groups, further limiting opportunities for understanding basic needs and improving wellbeing. Both in policy and scholarly debates the need for more inclusive and participatory urban policy design is increasingly recognized. This ranges from calls to "move beyond GDP" towards human-centred wellbeing approaches at the microlevel of individuals, households and communities (Cardoso et al., 2022; Caprotti, 2018; Pouw and McGregor, 2014 and 2017; Pouw, 2020).

However, most operationalizations of broader economic indicators lack empirical scrutiny and use a deductive approach with limited citizen participation (Cardoso et al., 2022; van Beek et al, 2025; Verrest et al., 2021). There is an urgent need for empirical research on the operationalization of bottom-up defined indicators that systematically: build on local knowledge and measure relevant priorities and needs of marginalised communities to inform urban policy effectively; and increase the democratic nature of policy design. Addressing this gap, this paper aims to understand: (a) how broader policy indicators and a new economic measurement instrument can be developed through co-creation with citizens; and b) under what conditions empowerment of these groups can be achieved. It uses an inclusive development theory lens, elaborating on two of the theory's main pillars: (1) empowerment of marginalised groups in decision-making; and (2) enhancement of multidimensional wellbeing through building of diverse and local epistemic communities (Gupta et al., 2015).

The paper is based on action-oriented and community-based participatory research in Amsterdam Venserpolder, in the period October 2021 to December 2023. A Wellbeing Dashboard was co-created with citizens and researchers, and mobilized in experimental dialogue sessions between citizens, the municipality and other stakeholders. Below, we first position the bottom-up wellbeing measurement research in conceptual and theoretical

debates on marginality and urban policy, broader measurement of wellbeing, and citizen participation in policy practices. Thereafter, we briefly describe the research approach and methods. Section 4 presents the findings structured in three phases: preparation; co-creation of the Wellbeing Dashboard; and experimental dialogues. Section 5 reflects on the process and discusses lessons learnt. We conclude and look at future research directions in section 6.

2. Theoretical framing

2.1 Marginality and urban policy

Urban marginality can be understood as multidimensional and dynamic, embodying various aspects of exclusion, and shaped by social-spatial inequalities – which are becoming starker in cities globally (Sevelius et al., 2020; Van Kempen and Murie, 2009; Van Gent et al, 2009). Being marginalized means being deprived of access and opportunity to participate in mainstream social, economic, political, and/or cultural structures (Sevelius et al., 2020). Marginalization disempowers people and excludes them from economic and political decision-making, whereas the needs and perspectives of more powerful groups are overrepresented in dominant policies (Bourdieu, 1994; Chaffee, 1980; De la Rocha et al., 2014; Riley, 2017; Varghese and Kumar, 2022).

The past decades witnessed, in many cities in high-income countries, the role of the public sector in regulating urban life diminishes and shifts towards private, profit-seeking mechanisms. These prioritize city-wide economic growth and investments in real estate, tourism and multinational business development over investments in public amenities to meet neighborhood-specific needs (Wacquant, 2007; Atkinson, 2000; Uitermark, 2009; De Koning, 2015). Dispossessed urban neighborhoods become increasingly disconnected from mainstream structures and economically growing centers, giving rise to forms of “advanced marginality” in seemingly egalitarian contexts (Wacquant, 2007). Policy interventions incorporate the visions and interests of politically and economically powerful groups and lack sensitivity to place-based needs and potential (de Koning, 2015; Rodríguez-Pose, 2018). Moreover, city-wide policies, as an expression of systems of representation, normalize particular distributions of rights to and understandings of the city detrimental to marginal groups whose voices are under- and misrepresented in policymaking (Gupta et al., 2015; de Koning, 2015). Even if marginal groups are purposefully included in policymaking,

misrecognition and power differences may reinforce processes of exclusion (Verloo, 2020; 2023). Concerned practitioners and scholars advocate for more holistic and participatory approaches to policymaking that incorporate broader wellbeing notions and satisfy wider human needs (Arnstein, 1969; Belausteguigoitia, 2019; Caprotti et al., 2017; Cardoso et al., 2022; Gearin and Hurt, 2024; Stiglitz et al., 2009; Verrest et al., 2021).

2.2 Broader measurement of wellbeing

Calls for newly informed and multidimensional policy measures are embedded in wider debates around the relevance and effectiveness of mainstream economic policy in delivering human wellbeing (Costanza et al., 2007, 2009; Forgeard et al, 2011; Gupta, et al., 2023; Kalimeris et al., 2020; Pouw, 2020; Raworth, 2017; Stiglitz et al., 2009). Critical scholars argue for fundamentally rethinking the economy, including its core methodologies, implying a broader definition of the economy and measurement of how it performs (Helbing and Kirman, 2013; Pouw, 2020; Raworth, 2017). Wellbeing as a measurement approach in economic policy is connected to Wellbeing Economics theory which proposes a multidimensional, relational and context-specific framework of wellbeing. It measures, from localized perspectives, what people regard important for their basic needs and safety and how they assess their level of achievement in relation to that, and evaluates the opportunities, access and resources someone has to improve their wellbeing vis-à-vis those of others (McGregor and Pouw, 2014; OECD, 2013; Pouw, 2020; Stiglitz et al., 2018; Veenhoven, 2007). This approach relies on meaningful citizen participation as it aims to measure wellbeing representative of citizens' understandings and perspectives (Fung, 2015; Gaber, 2019; Manzo and Perkins, 2006; Sollis, 2022; Veneri and Murtin, 2016). It requires epistemological power to be shared equally among diverse groups of citizens (Corburn, 2003; Simon-Kumar, 2018).

Participation not only safeguards representation but also helps citizens to recognize and enhance their capability in voicing local wellbeing needs and priorities (Chowdhury, 2021; Corburn, 2003; Fischer, 2012). Successful participation processes show to empower citizens, most notably through listening to and learning from each other and by gaining access to new information and networks (Sollis, 2023; Duarte, 2024). Although lasting citizen empowerment happens once participation is a starting point for structural partnerships between community groups and local governments (Bianchi, 2024; Gaber, 2019; Landemore, 2020). The formulation of partnership conditions by citizens is crucial to

maintain an equal level playing field, in which power is shared, and citizens have genuine democratic control (Bianchi, 2024; Dardot and Laval, 2015).

2.3 Co-creation

Citizen participation gained popularity to enable democratic engagement and increase the effectiveness and legitimacy of complex problem-solving (Arnstein, 1969; Day, 1997; Fischer, 2012; Fung, 2015; Rossi and Tuurnas, 2021; Sollis, 2023; Termeer et al., 2019). It may also be used to redistribute power to community groups, reduce social exclusion and foster citizen empowerment (Brandsen et al., 2018; Gaber, 2019; Goodlad et al., 2005; Leino and Puumala, 2020). The potential for citizen empowerment, however, strongly depends on the level of participation, how power is distributed and who participates and who not (Arnstein, 1969; Fung, 2015; Sollis, 2023). Poorly designed participation processes may enhance the power of already powerful groups and push more radical egalitarian forms away (Lund, 2017). Moreover, inequalities can be reproduced if particular citizens remain excluded (Verloo, 2023).

Recent studies in the abundant literature on citizen participation consider advancing its inclusion and empowerment potential, through "co-creation" as a progressed form of citizen participation (Brandsen et al., 2018; Leino and Puumala, 2020). Co-creation is an interactive and creative process considering citizens local experts and knowledge co-producers (Cottam and Leadbeater, 2004). Because it draws on plural knowledges, it is seen as an effective way for solving complex problems and increasing public support. Moreover, it fosters social cohesion and improves the position of groups generally ill-represented or excluded from decision-making (Goodlad et al., 2005). Co-creation is a more profound, longitudinal, non-hierarchical and multi-directional approach to problem-solving (Leino and Puumala, 2020). Co-creation requires professionals to shift part of their power to citizens, and subsequently redistributes negotiation and decision-making power (Lund, 2017). As participants have active and decisive roles in planning, designing and implementation of civil services, co-creation could increase the democratic nature of public services and deliver more effective policy outcomes for both citizens and policy officials (Brandsen et al., 2018; Lund, 2017; Jull et al., 2017; Goodlad et al., 2005). Moreover, it is assumed that participants experience a sense of ownership over co-created outputs and can mobilize this to fulfil their needs.

However, co-creation also faces challenges regarding structural inequalities and social exclusion, in particular when outcomes are implemented (Goodlad et al., 2005; Leino and Puumala, 2020; Torfing et al., 2012). Critical consideration of who is participating and represented in co-creation is urgent (Leino and Puumala, 2020). As participation demands time, energy and information, relevant groups may be excluded (Michels, 2011; Bakker et al., 2012). To mitigate this, self-organisation is considered an effective alternative approach to organising and managing participatory processes (Brandsen et al., 2018). Boonstra and Boelens conceptualise this as initiatives "that originate in civil society itself, via community-based networks … which are autonomous (i.e. beyond the control of government) yet also contribute to the development of the urban fabric" (2011, p. 103). Building on the strengths, knowledge, network and ideas of self-organised groups in co-creation, potentially supports inclusive and effective participation.

3. Methods and context

The research presented is an action-oriented and community-based participatory research (CBPR) in Venserpolder, a neighbourhood in Amsterdam Southeast. Its specific methods are interviews, co-creation, face-to-face surveys and experimental dialogues - outlined and detailed in table 1. Iterative reflection on the process and validation of results with citizens happened throughout the research to ensure in-depth participation (Senabre Hidalgo et al., 2018). An action-oriented and CBPR approach was chosen for its intend to create social impact, change in local systems (Adelman, 1993) and an inclusive and democratic research process (Flicker et al., 2007). It connects researchers, communities and other stakeholders, aiming to conduct research and collect evidence with shared added value (Guta and Voronka, 2020). Moreover, CBPR was chosen to enable emancipatory knowledge-creation that represents the community's needs and understandings (Minkler and Wallerstein, 2008; Reason and Bradbury 2001).

Members of the Venserpolder community were involved as local experts and participated in various research stages: refining research questions, collecting and analysing data; and validating and disseminating findings. Contradictory to top-down and consultative research, both researchers and citizens were decisionmakers and knowledge gate keepers, realizing research on wellbeing and local economy; capacity-building to design indicators and policy

instruments; recognition and construction of multiple sources of knowledge; ensuring outcome-oriented results (Israel et al., 2005; Strand et al., 2003b, as cited in Flicker et al., 2007). This level of community engagement is instrumental for developing context-specific wellbeing indicators from the perspective of citizens and for community empowerment through social learning and capacity-building (Israel et al., 2005; Sollis et al., 2022; Sollis, 2023).

Table 1. Overview of methods (source by authors).

	Method	**Sample**	**Location**
1	Interviews for a first understanding of key wellbeing issues and needs in the neighborhood and residents' willingness to participate and their attitudes towards research and how to approach this	8 representatives of care and wellbeing organisation in Venserpolder; Purposive sampling	Online and at social organisations in Venserpolder
2	Three sequential co-creation workshops to co-create the content, function, and design of a Wellbeing Dashboard for citizens	7 residents, all female, ages from 35 to 65, similar ethnic and socioeconomic backgrounds; Snowball sampling	Neighbourhood centre 'Stichting SES' in Venserpolder
3	Face-to-face surveys to collect data on the wellbeing experiences and perspectives from a wider, representative sample of residents	261 residents, representative of neighbourhood population (tested against municipal demographic and socioeconomic data); Stratified sampling and quota sampling	Different locations in Venserpolder including community centres, public spaces (incl. shopping street), elderly home, youth organisation, and online (20% of sample)
4	Validation of survey results and Wellbeing Dashboard	7 residents, all female, ages from 35 to 65, similar ethnic and socioeconomic backgrounds	Neighbourhood centre 'Stichting SES' in Venserpolder
5	Two sequential capacity-building sessions with residents to practice prioritization of needs and using the Wellbeing Dashboard for vocalizing policy needs	8 residents, all female, ages from 40 to 65+, mixed ethnical backgrounds, varying socioeconomic backgrounds.; Purposive and snowball sampling	The University of Amsterdam
6	Two sequential experimental dialogue sessions to practice and test using the Wellbeing Dashboard for formulating policy actions	8 residents, all female, ages from 40 to 65+, mixed ethnical backgrounds, varying socioeconomic backgrounds 4 policy professionals: municipal area broker, district manager of housing association, neighbourhood judge, owner of 'Stichting SES'; Purposive sampling	Municipal community centre in Venserpolder

Many citizens in Venserpolder and the wider district struggle economically, feel detached from political decision-making, and are excluded from urban growth that other districts

benefit from. Moreover, they hardly recognize themselves in urban policies as these generally reflect the needs and lifestyles of the average resident. Although broader policy measurement is growing in the Netherlands, for example through the Broad Wellbeing Monitor from the Central Bureau of Statistics, ex-ante application in policy design is not happening yet. Indicators are defined in a top-down manner and mostly tailored to the better-off (Welzijnsdashboard team, 2023). Venserpolder is considered a "developing neighbourhood" and undergoes a nationally commissioned urban regeneration program, *Masterplan Zuidoost*, from 2021 to 2040. The program is implemented on district level as a partnership between municipal, private-sector and societal organisations to improve liveability and ensure a participatory, democratic and inclusive approach[4]. However, effective realisation is challenged by the distrust of citizens towards the policy system and the lack of participation and representation of diverse citizen groups - in turn increasing the risk of imposing ineffective, or even unwanted, development. To overcome this, the Wellbeing Dashboard has committed support of the municipality.

4. Co-creating a local Wellbeing Dashboard

The following analysis delves into the subsequent steps taken to prepare and implement the Wellbeing Dashboard and dialogue sessions, in co-creation with the participating residents, and draws out lessons on this process in three sections: (1) preparatory phase; (2) development of a broad wellbeing measurement tool; (3) experimental dialogue sessions. Data comes from field notes, workshop reports and interviews collected during January 2021 and December 2023[5]. Quotes from participants are anonymized for privacy and ethical purposes.

4.1 Pre-paring for co-creation: building upon existing strength and creating trust

The research in Venserpolder builds on existing networks and knowledge resources in the neighbourhood. Many residents of Venserpolder take care of family, friends or neighbours and have strong neighbourhood-based networks, especially elderly and long-term residents

[4] Amsterdam Coalition Agreement 2022 – 2026, Amsterdam Municipality

[5] All data sources are listed and labelled for in-text reference in table A1.1 in appendix A1.

(source D). At least 8 self-organised social and care organisations and multiple citizen wellbeing initiatives exist. In 2021 a group of female residents and/or professionals of Venserpolder, established "Cooperating organisations Venserpolder" and developed a vision on improving community living conditions and wellbeing[6]. Based on experience, they knew the importance of bringing quantitative data to support requests for financial support from the government. As such, the collective approached the research team to co-develop a systematic measurement instrument.

Collaboration, however, wasn't immediate and required gaining trust from the collective and other citizens in the neighbourhood. Especially scepticism towards research(ers) needed to be overcome. Venserpolder was subject to many research activities and policy interventions without creating substantial and lasting improvements in the living conditions of residents (source C). To establish trust decisions were made: (1) transfer of decision-making power to local experts; (2) removal of any pressure imposed on residents to approbate the project, (3) following the pace of participants. As such, the advice of local experts regarding whom should participate, what time commitment was reasonable to ask, when and how participation could best take place, and what should be the compensation, was consistently followed (source D).

4.2 Co-creating policy design: broader economic measurement through a dashboard

Prior to the Venserpolder project, the researchers conducted an exploratory study into the added value of a new measurement and policy instrument for the city of Amsterdam. The study showed room for an instrument which measures multiple dimensions and indicators of wellbeing and could be used as a policy instrument. However, it concluded that to create added value it needs to be designed at neighborhood level, in a bottom-up manner putting the perspective of citizens center-stage. This was to (a) counterbalance existing top-down monitors; (b) give context specific information on local priorities and needs of residents; (c)

[6] Vision statement: 'Venserpolder is growing from a development area into a socio-economically healthy, safe and inclusive neighborhood with strong social cohesion, where equality of opportunity is the benchmark, creativity and entrepreneurship is stimulated, informal care structures are recognized and facilitated and where support is offered based on the principle of a welfare economy residents who are not (yet) self-reliant, so that they, like all other residents, have a physical and can lead a mentally healthy and economically stable life.' (Visienotitie Samenwerkende Organisaties Venserpolder 2021, p. 3)

measure and monitor this over time (Verrest et al., 2021). This led to the development and design of the Wellbeing dashboard co-creation project in Venserpolder (source F).

Firstly, three co-creation workshops were organised to shape the content, function, and design of a Wellbeing Dashboard for Venserpolder based on the knowledge and perspectives of local experts. These were designed and led by two anthropologists specialized in participatory methods. The workshops aimed at establishing a set of locally defined wellbeing variables, measured through indicators, reflecting local experiences and needs. The experience, interest and comfortability in developing and vocalizing ideas differed among participants. To mitigate the dominance of ideas conversations were carefully moderated and group activities were alternated with activities in smaller, more balanced, groups. Table 2 provides an overview of topics raised by the local experts and their expressions.

Table 2. Raised topics and deeper expressions from local experts (source by authors).

Topic	Deeper expressions
Variety and quality of shops	"The quality and variety of shops in Venserpolder is very poor. For many groceries I must walk at least 20 minutes" (source E).
Healthy nutrition	"Few fresh and healthy products are available in Venserpolder" and "restaurants in the neighborhood mainly sell fast food"
Local employment and training opportunities	"There are few, and of low variety, jobs offered in the neighborhood. Moreover, hardly any internships or other opportunities to gain work experience for young or unemployed residents" (source E).
Basic facilities and activities	According to the local experts, Venserpolder misses an ATM, community centers and activities, social services, accessible public spaces, and spaces for employment and training (sources E, G, H). Also, "There used to be many more neighborhood activities. Nowadays there is very little to do, especially for the youth". They indicated to "[miss] a community center to get together and for organizing activities" (source E).
Build environment, waste and maintenance	"People, especially those who hang around, throw their waste everywhere. You can always find waste on the streets", and "Housing buildings are poorly maintained. A lot needs to be replaced, and the stairwells are never cleaned" (source E).
Digitalization	It was explained how many, especially elder, residents do not have access to a computer or internet and don't have sufficient digital skills to, for example, pay bills or to get information that they are expected to have. "My children do everything that needs to be done digitally. I can't do that myself" (source E).
Personal wellbeing and connection	Experts indicated the need for measuring psychological-subjective experiences of citizens in Venserpolder. This included loneliness, mental wellbeing and satisfaction levels. They emphasized to measure 'stress' which, based on the experts' personal experiences and observations, is one of the root causes of illbeing and associated with matters like loneliness and financial problems (sources E, H).
Financial health	Experts explained that many residents are struggling, and this is becoming worse. "Costs of living are getting higher, like energy and rent, it all got higher" (source E). Incomes aren't high enough for many people, particularly single mothers.
Municipality	Experts expressed dissatisfaction towards the municipality's way of working. "Reports about waste on the street are often not (quickly) followed up by the municipality. I find that annoying" (source E). They also expressed feeling distance between them and the municipality, often indicating they hardly ever received information from the municipality and that they didn't know who in the municipality to approach for which issues.

Together with one of the local experts, and afterwards validated with the other participating experts, a preliminary list of concrete variables and measurable indicators was distilled from the workshops. The exercise again made clear how co-creative knowledge building requires making trade-offs between different knowledges. For example, the researchers held on to the proposal of wellbeing economics to measure wellbeing through material, relational and subjective dimensions. However, this did not seem properly applicable or speak to the local experts (sources E, L). Therefore, focus was shifted to wellbeing variables measured through indicators. Based on the preliminary list, a survey was developed to collect data and perspectives from a wider sample of residents[7]. Researchers visited the neighbourhood several times per week to meet residents in various places and conduct the survey in-person. In addition, flyers with a QR code to the online survey were distributed (approx. 20% of the sample responded online). This was advised by local experts to ensure representativeness (sources E, K). The survey and further refinement resulted in a dataset of 261 responses to 16 variables of wellbeing measured through 35 indicators that cover material, relational and subjective needs. As such, the quantitative data turned personal stories into measurable indicators on neighbourhood-level and reaffirmed much of the qualitative data. Substantively, the Wellbeing Dashboard shows that 50% of the indicators are about basic needs and safety. These include the need for healthy food and being free from financial stress, which are among the 16 indicators not found in municipal policy data.[8]

The workshops also generated views and ideas of the local experts regarding the function and design of a Wellbeing Dashboard (sources F to K). A physical example of a Dashboard was presented and used for gathering feedback (figure A1.1 in appendix A1). On its function, participants; comments included: “the Dashboard should allow residents to explain wellbeing in their own words”; “[it] should be translated back to residents through physical get togethers”; “[it] makes the connection to concrete policy agreements and commitments” (sources I, J). As for its design, the experts argued that “the Dashboard should not only be online, as not everyone is digitalized and you don’t want to reach the same group constantly”, and “[it] needs to be understandable for residents” (sources I, J). Two User Experience

[7] Sample of 261 residents proved representative when compared to municipal datasets on demographic and socioeconomic characteristics.

[8] Discussed in chapter 3.

designers were involved to design the Dashboard accordingly. A first prototype was developed (figure A1.2 in appendix A1). However, in a validation session local experts judged the clarity of this design insufficient. The measure did not immediately tell them what is important in the neighbourhood and how the neighbourhood is doing (source E). A new prototype was developed accordingly (figure A1.3 in appendix A1). Moreover, residents and professionals indicated a lack of "perspective for concrete action" due to volume of variables and indicators. It was decided that residents identify priority issues follow-up sessions and have these priorities guide policy conversations (sources E, N). Finally hard and soft-copy output (posters, flyers and a website) were developed to disseminate the findings.

Table 3. Steps and learning in co-creation of the Wellbeing Dashboard (source by authors).

Steps		**Intermediate outputs**	**Learnings and reflection**
1	Initiating the project and establishing contact to collaborate with a group of residents as local experts. This involved: overcoming skepticism; building trust; removing hierarchical barriers	- Core group of residents participating in the project as local experts (compensated for their time through vouchers for large variety of shops and restaurants) - Acceptance towards the project and presence in the neighborhood	- Co-creation takes time to set up as it requires a non-imposing approach - Involving citizens as local experts generates both trust and crucial knowledge - Achieving sufficient representation and diversity in the participating group is difficult
2	Interviews with representatives of local care and wellbeing organizations	- General understanding of key wellbeing issues and needs in the neighborhood - Insights on residents' willingness to participate and their attitudes towards research and how to approach this	- Many citizens in the neighborhood feel disadvantaged, neglected or insecure - Citizens are skeptical towards researchers and municipal interventions
3	Three co-creation workshops to explore the possibilities and challenges of a Wellbeing Dashboard for Venserpolder; and to co-create its content, function, and design	- In-depth understanding of neighborhood issues and needs - Understanding of institutions and organizations relevant to these issues - Substance to a survey for collecting neighborhood relevant data on a larger scale - Prototype visual of a Wellbeing Dashboard	- Just and dynamic distribution of power to realize trust and facilitation of equal participation essential - Small and rather homogenous sample requires surveys to collect data on wellbeing experiences and needs from a larger and representative sample
4	Face-to-face surveys to measure the set of wellbeing variables from a larger and representative sample	A database that adds unique information to top-down and less granular municipal data by enabling measurement of: - 35 locally defined, neighborhood specific indicators of wellbeing to be measured and monitored in the Dashboard based on 261 respondents; - socioeconomic and demographic data, allowing for analysis of different sub-groups	- Time and research capacity are crucial for conducting face-to-face surveys - Face-to-face instead of digital surveys are crucial for inclusion and diversity - Presence in the neighborhood leads to further acceptance and trust of the research project

5	Dashboard construction and validation, and dissemination	- Prototype visual of a Wellbeing Dashboard validated by local experts - A website for presenting the Dashboard online and posters and flyers for presenting the Dashboard physically in the neighborhood. - Enhanced capacity of local experts to vocalize their ideas and strengthened confidence in the value of their expertise	- A right balance between research expertise and local expertise must be sought - Interpretations and perceptions of dashboard designs differ depending on the role of the perceiver - Measures and numbers only become sufficiently understood and useful when presented in a format that is designed from the perspective of citizens
6	Evaluation and planning of next steps	- Ideas for testing the instrument in policy through 'dialogue sessions'	- Need for bringing in focus and perspective on concrete action through the prioritization of issues - The Wellbeing Dashboard is not functional before the connection to policy practice is made

4.3 Co-creation towards policy embedding: experimental dialogue sessions

Co-creating the Wellbeing Dashboard for Venserpolder gave voice to the local expertise of citizens and built new policy knowledge accordingly. Citizens become empowered in policy design when the Wellbeing Dashboard interacts with policy officials, forms a basis for policy conversations and becomes embedded in policy practice (sources K, L, M). Therefore, as a next step in the co-creation process, experimental dialogues between citizens and policy officials were organised to explore the Dashboard's ability to vocalize citizens' policy needs, facilitate democratic decision-making, and produce concrete actions (source N). During preparation, the local experts stressed that the dialogues should lead to concrete actions rather than just discussing the Dashboard, that the perspective of citizens should remain central, and that the group of participating local experts should become larger and more diverse (source O). They also expressed feeling insecure and not yet ease with having to explain the Dashboard and policy needs in their own words (source O). Therefore, two capacity building sessions were organised in which citizens practised how to convey their needs clearly and concretely in policy conversations and how to, collectively, prioritize themes from the Dashboard that are important to the entire neighbourhood (source P). Prioritization is important as it clarifies urgent policy needs and creates opportunities for action. Moreover, prioritization required the citizens to think about collective problems, instead of individual problems only, which is an important step in social learning – something they struggled with in previous sessions (source R). Priorities were chosen based on which variables received the highest number of votes; a method for achieving collective agreement chosen by the expert group (sources Q, R).

Parallel to the preparation with citizens, interviews and a preparation session were held with policy officials to get an understanding of their ways of working and perspective on the Wellbeing Dashboard (sources Q, R). The group consisted of policy implementers directly involved in the neighborhood or connected to district level projects. To better understand citizens' needs, perspectives and experiences regarding policy, the policy officials expressed a need for knowledge exchange, as was also indicated by the local experts. In addition, they emphasized the importance of getting the right people at the table during the dialogues. However, identifying policy officials, and having them participate, proved difficult at this stage due to a lack of time on the side of the policy officials (source R). It takes time and the right political network to establish interest and collaborative relations within the municipality. To overcome this and leave enough room for capacity building, the dialogues were deliberately set up as experiments.

The dialogues showed how the Dashboard facilitates policy conversations by making policy officials aware of policy needs priorly unknown to them and by stimulating in-depth exploration around these needs. For example, policy officials had the chance to ask why current financial support initiatives aren't sufficient or helpful in Venserpolder and what citizens need to change this. A participant noted how currently, "to receive financial support you need to go to a shop that is quite public and in which other residents can see and hear you. That is embarrassing and stops a lot of people from going there" (source R). Regarding the concerns about the lack of activities and services in Venserpolder, citizens pointed out how a lack of information also plays a role here, "I honestly don't even know what activities there are. There is very little information about this" (source R). Which opened a conversation about the role of the municipality in providing information and effective ways to do this.

Policy officials reported that they learnt from the personal stories behind indicators and that the conversations enhanced their understanding of issues from the perspectives of citizens. While citizens enhanced their ability to effectively conversate with policy officials and to translate their stories into measurable indicators and formulate concrete policy demands. However, it proved difficult to remove hierarchical barriers in the dialogues (sources R, S, T). Compared to participating behaviour in the workshops, (perceived) differences in power among participants were more present and influential (source R). Due to their vast experience, some policy officials talked more, listened less and tended to explain things to

other participants. This caused some citizens to become less confident and more hesitant in speaking up, hence limiting their participation and pushing their views to the background. For example, when one of the local experts raised a personal concern, this was repeatedly ignored by the professionals (source S).

Upon completing the co-creation workshops and dialogues reflection and evaluation took place with researchers and leading local experts. Issues that were raised and brought forward as learnings into subsequent neighborhood studies included: (i) the need to have a representative group of participants in the co-creation workshops (ii) the fact that more women are inclined to participate than men (iii) the importance of having local visibility and (permanent) presence so that a neighborhood residents have a point of contact (iv) the balancing act between working with "active" residents versus representativeness. The discussion on this topic with the participating residents proved as a reality check. They pointed out the limitations and constraints of involving people who cannot afford the time, energy or social space to participate. Although it was also noted participation ability fluctuates and can be enabled later, for example, once the Wellbeing Dashboard is used as a community method in the long run. This way, participation of more and different residents can grow over time and linked to the agenda setting addressing specific themes in a targeted manner.

Table 4. Steps and social learning in experimental dialogue sessions (source by authors).

Steps		**Intermediate outputs**	**Learnings and reflection**
1	Identifying the needs of citizens for participating in dialogue sessions	- Agreed plan of action for the organizing the dialogues	- Sufficient time for preparation and capacity building is required - Clear goals and structure of dialogues needed - Expert group needs expansion and diversification (demographically and socio-economically)
2	Preparation sessions with local experts to discuss expectations and design of the dialogues	- Enlarged group of participants and enhanced feelings of ownership - Understanding of local experts' needs and preferences regarding the dialogue sessions and potential issues	- Diversity and inclusive representation of citizens is difficult to create - Organizational support and leadership are beneficial to citizens, provided they remain in charge of knowledge building and communicating policy needs
3	Interviews and preparation dialogue with policy officials	- Understanding professional's working practices, pitfalls and needs - Preliminary understanding of opportunities to implement the Wellbeing Dashboard in policy practice	- Time and network needed to involve relevant policy officials - Effective dialogues develop from clarity among policy officials about their role and the potential of integration of the Wellbeing Dashboard in their work practices

4	Preparation dialogue with citizens to set the agenda, enhance conversation skills, and prioritize variables for discussion in dialogue sessions	- Enhanced skills to explain the Dashboard, convey ideas and needs, - Three wellbeing variables from the Dashboard that are identified as priority issues	- Prioritization of variables helps to bring focus and support citizens to talk beyond individual problems. - Need clear policy information and structured knowledge exchange with policy officials
5	Two experimental dialogue session between citizens and policy officials to: test the function of the Wellbeing Dashboard in policy conversations; exchange knowledge for effective dialogue	- Priorities of citizens and policy practice connected - Enhanced capacity of policy officials to understand issues from the perspective of citizens - Enhanced capacity of citizens to translate neighborhood issues to policy needs and to vocalize these needs to policy officials - Knowledge exchange on ways of working and communicating to prepare for future dialogue sessions - Insights on how the Dashboard is understood and translated to practice	- Power dynamics challenged equal citizen participation both in terms of knowledge building and decision-making - The control of citizens over agenda setting and communicating policy requires careful safeguarding - Policy officials should be invited based on their relevance to the issues discussed and their (access to) decision-making power - The dashboard facilitates conversations and gives substance and depth to the variables it measures - Residents naturally select issues that are considered important in municipal data and add context-specificity and a subjective angle that improves solutions
6	Evaluation and identification follow-ups	- Improvement in design, content, frequency and ownership of future dialogues - Protocol and transferable method for subsequent neighborhood studies	- Representativeness is key and must be actively pursued - Local visibility and (permanent) presence in the neighborhood are important for inclusive participation and representation - Facilitation of future dialogues requires a governance model with clearly defined, accepted and practiced roles, responsibilities and ownership

5. Discussion and lessons learnt

The following reflects on the co-creation process to develop a Wellbeing Dashboard in Venserpolder and discusses three key learning points regarding its potential for citizen empowerment. First, as put forward in the literature (Brandsen et al., 2018; Leino and Puumala, 2020; Lund, 2017), co-creation is a participatory practice that can empower citizens provided they are meaningfully involved in decision-making and knowledge creation throughout the co-creation process. Participating citizens must be given active and decisive roles for which power is to be shared equally and, beyond consultation, citizens should have control over what is decided and how and when (Arnstein 1969; Fischer, 2012). Besides a well-designed participation process, as extensively discussed in the literature (e.g. Fung, 2015; Sollis, 2023), we found preparation towards co-creation important. Particularly in

sensitive contexts like Venserpolder, building trust and good relationships in the community is crucial and requires time before the actual co-creation process. It is an important phase for researchers to understand the needs, culture and ways of working of the community and to design the process accordingly. Nonetheless, pre-set processes and organisational ideas are bound to change, mostly depending on who eventually participate and how. An important lesson is therefore to incorporate time for experimenting and for making mistakes, so that shared learning is achieved and the co-creation process as well as outcomes do justice to citizens. This is described for co-creation in general (e.g. Goodlad et al., 2005; Leino and Puumala, 2020) yet we see particular relevance for co-creatively measuring broad wellbeing due its complexity and need for emancipatory knowledge creation.

In the Venserpolder case citizens were involved as local experts whose knowledge, in multiple forms including stories, meanings and interpretations, produced the Wellbeing Dashboard as a measurement of local and broad wellbeing. Ensuring this happens inclusively, co-creative knowledge building should not just bring diverse knowledge together but must entail constant interaction between different ways of knowing and thinking (Corburn, 2003; Cottam and Leadbeater, 2004). Particularly when aiming to representatively define a complex and subjective concept like wellbeing, researchers should bridge epistemological differences without distortion of actual meanings. We learnt that seemingly individual experiences and perspectives often hold collective meaning and formed the basis of the identified wellbeing issues on neighbourhood level. Thus, as also common in CBPR (Israel et al., 2005), researchers are tasked to find connections, patterns and overarching meanings in individual contributions from which collective knowledge is build. We learnt that to avoid distortion or exclusion of certain views it is crucial to organise separate validation sessions with all participants.

Naturally, expertise differs across participants and should be utilized in ways that adds value to collective objectives. Particularly during the co-creation workshops, each participant contributed based on their strength and an organic balance between inputs and views was achieved. However, from the experimental dialogue sessions, in which policy professionals also participated, it is learnt that continuous evaluation is required regarding who is participating, and in what manner, and how participants relate to one another. Power imbalances are rigid and can be subtle, especially in interaction between people with varying levels of accustomed (formal) authority and experience in vocalizing opinions and needs. An

important lesson is to, beforehand, collectively develop and monitor an agreement with clearly defined objectives, roles and responsibilities. Moreover, reflection and reconsideration are important in co-creation; researchers must remain critical to breakdown hierarchical barriers and ensure power is shared equally. The role of citizens can change in ways that either weakens or improves the process, most clearly illustrated in Venserpolder when policy officials became included. Overall, co-creation process can be made effective in its design and implementation by ensuring plural knowledge creation, redistribution of power, and considerations regarding exclusion, using self-organizing capacity of participants.

Second, the empowerment potential of the Wellbeing Dashboard relates to local capacity building. Sustained citizen control and structural use of the Dashboard require specific skills and enhanced self-organizing capacities. Learning, listening and accessing information, indeed, proved crucial here (Sollis, 2023; Duarte, 2024). Citizens learnt how to design and measure indicators and to formulate policy priorities from this, preparing them for taking control and ownership over the Dashboard. This level of participation was new for citizens and hence required a shift in their way of working but also how they perceive their capabilities and position vis-à-vis policy professionals. Moreover, citizens should be able to vocalize what should be, and eventually is, measured in the Wellbeing Dashboard into concrete policy needs. Through the workshops they learned how to go from personal stories and individual needs towards identifying policy priorities on neighborhood level. For the experimental dialogues it proved particularly important to enhance the confidence of citizens through preparation, which included practicing the use of the Dashboard and training on how policy professionals are organized in the municipality and how they work. Towards the end of the process, yet particularly during validation sessions, changes in citizens' way of thinking and attitudes towards the research became visible. They indicated that the co-creation process made them feel heard and respected, which is something they didn't experience before in neighborhood projects or interventions. They also expressed how they started to view their neighbourhood differently and consider what they can do for it. Moreover, they started to recognize that their knowledge of the neighbourhood offers unique value to policy. In addition, the experts learnt a "new language" that includes policy and research terms. For example, one of the participating citizens explained how she now interacts with policy officials from a new perspective and with a new language. During a

meeting in which municipal officials presented a new initiative for the neighbourhood, she asked them “Alright, but how are we going to measure this? What are the indicators?”. Because of their enhanced knowledge, citizens gained more trust in themselves and feel like they developed themselves. This not only empowers them but also supports the continuation of the neighbourhood project and sustained use of the Wellbeing Dashboard. Participants requested a place for them as “team Wellbeing Dashboard” on an organizational map of Venserpolder, which points to a sense of ownership over the project. These findings speak to literature on the importance of inclusion in conversations and knowledge building (de Koning, 2015; Rodríguez-Pose, 2018; Verloo 2020; 2023), and on what the process of participation does to participants. More specifically, it confirms that participation not only safeguards representation but also helps citizens to recognize and enhance their capability in voicing wellbeing needs and policy priorities (Chowdhury, 2021; Corburn, 2003; Fischer, 2012).

Third, and finally, the Wellbeing Dashboard needs to be embedded in policy practice. As most recently pointed out by Bianchi (2024), citizen empowerment happens once participation is a starting point for structural partnerships between community groups and local governments. Indeed, we found that while the Wellbeing Dashboard formalizes the knowledge of generally marginalised citizens into policy needs and priorities, and is designed as a policy tool, it only empowers citizens once giving them a decisive voice in policy design. The current research phase enabled citizens to effectively communicate with local policy practice and to take control and ownership over this. A next step is to organise a permanent infrastructure in which citizens and policy professionals work together as partners, using the Wellbeing Dashboard as a basis for policy design. Citizens must remain owners of the Wellbeing Dashboard and be given equal decision-making power in policy mechanisms. As such, besides a well-designed process, enhanced capabilities and commitment from the local community, the effectiveness of the Wellbeing Dashboard requires policy embedding and an equal partnership with genuine democratic control for citizens (Bianchi, 2024; Dardot and Laval, 2015). Moreover, for bottom-up developed Wellbeing Dashboards to report credible, representative and scalable data to policy, a robust economic methodology is of critical importance. Validation with the broader community, local organisations and official data needs to take place in each step. The scalability and analytical rigour of the methodology is discussed in a separate paper (Pouw and Perotti, n.d.).

The pilot study in Venserpolder led to the development of a protocol and bottom-up method for developing Wellbeing Dashboards that is transferable to other contexts. It entails a sequencing of separate and joint steps shown in figure 1. While specificities, such as timelines and sample composition, differ per context, it is learnt successful implementation is contingent on the following conditions:

- Time is invested in receiving citizens' trust and setting up a process that is reflexive to citizens' needs and based on existing strengths. Throughout this process the perspective of citizens, as local experts, is central throughout; knowledge is built and validated by citizens; and equal participation in decision-making and equal consideration of perspectives is ensured.
- A workplan is developed, and monitored throughout, with all stakeholders that outlines collaboration conditions, responsibilities and collective objectives.
- Participating citizens represent the full spectrum of diversity in a neighbourhood with careful attention to those most often excluded. Surveys are conducted face-to-face with residents in the neighbourhood, using a sampling strategy that optimizes inclusion, both in terms of approach and outcomes.
- Policy professionals and other stakeholders are invited based on relevance to the needs and actions that flow from the Wellbeing Dashboard (in terms of their position, expertise and decision-making power).
- Local capacity building ensures citizens can structurally articulate their policy needs through Wellbeing Dashboard and remain in charge of its use in policy design. They form an epistemic community that has the recognition, capabilities and support to bring their knowledge into policy design.
- Policy needs are prioritized by citizens and translated into actions through dialogue sessions in which citizens set the agenda and oversee the conversation.
- Structural use of the Wellbeing Dashboard follows a clear governance model that ensures local ownership over knowledge building and the prioritization and communication of policy needs, and long-term policy support without comprising the vision and needs of citizens.

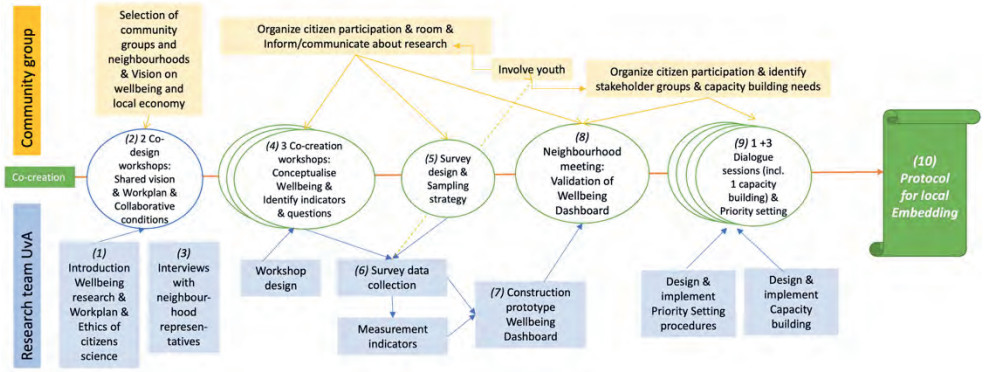


Figure 1: Research process (source by authors from Protocol Wellbeing Dashboard Venserpolder 2024).

6. Conclusion and looking ahead

This paper presented the findings of a pilot study in Amsterdam that aims for citizen empowerment in urban policy. A Wellbeing Dashboard was co-created and designed as a democratic policy instrument that uses a multidimensional perspective on economic wellbeing. The findings indicate that: (a) meaningful participation of citizens through co-creation, their self-identification of indicators on the Wellbeing Dashboard, and practising its' use are important for social learning and capacity building – facilitating citizen empowerment; (b) the bottom-up method provides credible, representative and scalable data on needs and priorities of marginalised citizens, otherwise ill-captured in formal economic indicators; (c) the added-value of the Wellbeing Dashboard lies in its application as a democratic deliberation tool in dialogues with policy professionals; (d) together, these are first steps in towards citizen empowerment in urban policy, which requires formal embedding and concrete follow-up in order to develop further and have lasting impact.

The pilot study produced a bottom-up method, that is evidence-based and transferable to other contexts, for developing Wellbeing Dashboards that provide unique policy insights on local needs. This adds empirical knowledge to debates on operationalizing broad economic measures and on the inclusion of marginalized groups in high-income urban contexts. As a next step the authors of this paper are co-creating Wellbeing Dashboards in other Amsterdam neighbourhoods and conducting a deeper analysis of the relations underlying the co-created indicators and their relation to urban marginality, comparative analysis of Wellbeing

Dashboards across neighbourhoods, and investigating determinants of movement across wellbeing levels (basic safety, stability and comfort). A follow up paper will present these results and discuss what we can learn from self-identified indicators.

Chapter 3

Local economic wellbeing indicators for people-centred development: a bottom-up method in Amsterdam [9]

[9] Based on article 2: van Beek, J.E.M., Pouw, N.R.M. and Verrest, H.J.L.M. (under review). Local economic wellbeing indicators for people-centred development: a bottom-up method in Amsterdam.

Abstract

Economic wellbeing is typically measured using top-down indicators that fail to capture the social and personal realities of marginalized groups. Conventional economic metrics often overlook those not fully participating in formal economies, whose primary needs are often non-economic. Drawing on the human development and capabilities approach, this paper argues for a multidimensional, bottom-up measurement of economic well-being. We operationalize three dimensions of human well-being – material, relational, and subjective – through a participatory case study in Venserpolder, a low-income neighborhood of Amsterdam. Neighborhood residents defined 35 indicators of well-being, yielding context-specific measures of material conditions, social relationships, and subjective perceptions. We compare these citizen-defined indicators with official municipal data and analyze their interrelations. The findings demonstrate that the bottom-up indicators capture previously unrecognized needs and aspirations – particularly in the subjective and relational domains – that are absent from municipal data, thereby filling critical blind spots in policy knowledge. We conclude that a participatory, multidimensional approach to economic wellbeing provides a more holistic and human-centered understanding of needs, offering valuable insights for human development policy and measurement. This bottom-up method deepens and complements official indicators, enables targeted neighborhood-level policy inputs, and supports more inclusive and context-sensitive development strategies.

Key concepts: multidimensional wellbeing indicators, Human Development, Capability Approach, bottom-up measurement, local policy, citizen science

1. Introduction and theoretical framing

1.1 Measuring Wellbeing beyond Economic Indicators

Conventional economic indicators – such as income, employment rates and GDP – remain dominant in orienting global and national policies, yet they are widely acknowledged as inadequate for comprehensively understanding human wellbeing. As Veneri and Edzes (2017) note, *"what we measure"* and at what scale critically shape our view of development progress. Narrow economic metrics fail to capture many social, environmental, and personal factors that determine quality of life (Cardoso et al., 2022; Caprotti, 2018; Fioramonti, 2016; Forgeard et al., 2011; Pouw, 2020; Raworth, 2017; Stiglitz et al., 2009). This limitation disproportionately harms poor and vulnerable groups whose lived realities and needs often fall outside the scope of standard economic data (Austin, 2015; Gupta et al., 2015; Nayyar and Malhotra 2023; Robeyns, 2025; Sen, 1979). In urban contexts, for example, communities with low formal economic participation or persistent poverty may have pressing concerns – safety, social inclusion, mental health, etc. – that are not reflected in economic data and policy (Pouw 2020; Nayyar and Malhotra 2023). Recognizing these gaps, scholars and practitioners have called for broader approaches to measuring wellbeing and development that move "beyond GDP" to incorporate social and human dimensions of progress.

Over the past decades, human development and welfare economics research have proposed alternative metrics and frameworks to address these shortcomings. Since its conception in 1980's Amartya Sen's capability approach is a foundational contribution, reframing wellbeing in terms of people's capabilities to pursue lives they have reason to value, rather than just material utility or resource holdings. This approach emphasizes that human beings are not merely rational economic agents but social beings whose wellbeing depends on various factors – personal, social, and environmental – and the freedom to achieve valued outcomes (Sen, 1985a; 1993a; 1999). Building on these ideas, the United Nations' Human Development Index (HDI) and related indices introduced multidimensional measures, and quality-of-life research and subjective well-being studies (e.g. life satisfaction, happiness) further expanded the scope of wellbeing measurement (Alkire, 2002; Diener et al. 1999; OECD, 2011: Stiglitz et al., 2009; UNDP, 1990). These strands of research converge on the view that wellbeing is multidimensional, encompassing material welfare, social relationships, and subjective states.

In the human development and capabilities literature, it is broadly accepted that focusing on a single indicator or purely economic proxy provides an incomplete picture of human wellbeing. Basic needs theorists and capability scholars alike stress the plurality of human needs - from health and education to security and social belonging - and the importance of context and values in determining what matters for a good life (Griffin, 1986; Sen, 1967; Ul Haq, 1995). Sen (1993) underscores that the selection of dimensions and indicators inherently involves value judgments and should be sensitive to the context and people's priorities. This has led to conceptual frameworks that define multiple dimensions of wellbeing. Notably, Pouw and McGregor (2014) propose that human well-being consists of three interacting dimensions: the *material*, *relational*, and *subjective*. The material dimension refers to the objective resources and conditions that people can attain – such as income, employment, housing, food, and the physical environment. The relational dimension concerns the social and institutional relationships that affect one's quality of life - including family and community ties, social capital, civil rights, access to services, and power dynamics. The subjective dimension captures individuals' internal evaluations and feelings about their life - their life satisfaction, aspirations, sense of security, mental well-being, and other self-assessed aspects. These three dimensions align with the idea that human well-being involves *having* the material means for a good life, relating to others and society in positive ways, and feeling satisfied and secure (McGregor and Pouw 2017). Importantly, the dimensions are interdependent and often overlap in practice. As Pouw and McGregor (2014) illustrate, wellbeing can be visualized as intersecting sets: material, relational, and subjective aspects intersect to produce complex states of wellbeing or illbeing (see figure 2). For instance, good health has material facets (physical condition), relational facets (support networks, healthcare access), and subjective facets (personal stress or satisfaction).

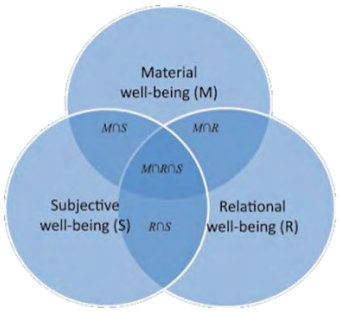


Figure 2: Multidimensional Wellbeing Intersecting (source: Pouw and McGregor, 2014).

While such multidimensional frameworks are widely endorsed in theory, operationalizing them in practice is challenging. Wellbeing is highly context-specific and partly subjective, making universal indicators difficult to define. The selection of which dimensions and indicators to measure often remains a top-down process driven by experts or international agendas, which may not capture local values or the experiences of marginalized communities (Alkire, 2002; Dalziel et al., 2018; Pouw, 2020; Stiglitz et al., 2009). Indeed, many multidimensional wellbeing indices and poverty measures have been derived from theoretical reasoning or normative criteria (e.g. the Sustainable Development Goals indicators), rather than emerging from the perspectives of the people whose wellbeing is measured. Recent reviews find that most wellbeing frameworks developed with participatory input vary considerably and often lack a coherent methodological basis (Sollis et al. 2022). In general, high levels of citizen participation in defining wellbeing indicators are still rare in quantitative research and few studies systematically compare such bottom-up indicators with standard data (Sollis et al. 2022). For example, Cardoso et al. (2022) propose a theoretical multi-dimensional model of wellbeing, but without empirical validation by communities, illustrating the persistent gap between conceptual frameworks and grounded measurement. Consequently, in accordance with Sen's emphasize on the importance of value judgements in economics throughout its works, there have been calls for more people-centered metrics that reflect what people themselves consider important to their wellbeing.

The conceptualization of human wellbeing as material, relational and subjective (Pouw and McGregor 2014; McGregor and Pouw 2017) offers a promising broad framework. However, empirical operationalizations with direct input from citizens are scarce and the added value of such locally derived wellbeing indicators for policy remains under-explored. In particular, we lack studies that compare citizen-generated well-being data with official policy indicators to evaluate what new insights a bottom-up approach can provide (Sollis et al. 2022). Addressing this knowledge gap, this paper shows the results of a robust bottom-up methodology to identify and measure multi-dimensional economic wellbeing indicators with active participation of community members (van Beek et al., 2025) and examines how these citizen-defined indicators differ from or complement municipal data in an urban policy context. We frame our approach within the capability and human development paradigm, viewing the human being as a social being with plural needs, and we build on the Wellbeing Economics framework advanced by Pouw (2020) that calls for reorienting economics toward

multidimensional human wellbeing. Through a case study in a marginalized urban neighborhood, we ask: How can economic wellbeing be operationalized in a multidimensional, context-specific way through citizen participation, and what is the value of the resulting indicators for understanding human development needs compared to conventional top-down data? In pursuing this question, our study contributes a novel method for bottom-up wellbeing measurement and provides empirical evidence on the importance of scope and scale in human development indicators (Nayyar and Malhotra 2023). The following sections present the case and methodology, the results of the bottom-up operationalization and comparative analysis of indicators, and a discussion of the implications for human development policy and measurement.

2. Methods and materials

2.1 Research context and case study

The research presented in this paper is part of an action-oriented research project in Amsterdam, the Netherlands. Here, following global trends, income and wealth inequality become more extreme over the past decades. [10] In response and following (inter)national debates on sustainable development and broad economic measurement, the Dutch government introduced the Broad Welfare monitor. The monitor measures economic, social and ecological welfare of populations on national, regional and municipal scales (including Amsterdam which uses the Broad Welfare metropolitan region Amsterdam). Based on its top-down defined indicators, the monitor describes the Netherlands as *"a socially well-connected society with high subjective wellbeing, high material wellbeing and many employment opportunities*" (CBS, 2024, p.2). Simultaneously it also shows growing poverty rates and recognizes increased livelihood insecurity faced by low-income households. However, it fails to address structural and broader forms of inequality that have pushed 20% of the population into the margins of society (Vrooman et al., 2023). Following concerns over the mismatch between data and actual realities, the municipality of Amsterdam commissioned the authors of this paper to explore room for a new broad economic instrument

[10] In the last decade household income in the lowest deciles of standardized disposable grew between -35% and 38%, while household income in the highest deciles steadily increased between 61% and 68% (Vethaak and Jongen, 2024).

(Verrest et al., 2021). This research concluded there is policy room for a bottom-up policy instrument that measures multidimensional wellbeing from the perspective of citizens. This conclusion prompted the current research project in Amsterdam, which involves the development of neighborhood Wellbeing Dashboards as a broad economic measurement tool informed by and validated with residents. The Wellbeing Dashboard answered to the needs of a self-organized resident collective in the neighbourhood Venserpolder. The collective asked the research team for quantitative data on wellbeing in their neighborhood, which they needed to apply for funding to realise their vision[11]. Venserpolder is a so-called "development neighbourhood" in Amsterdam. The neighbourhood's average household income is among the lowest 6% of all Amsterdam neighbourhoods; 40% of households in Venserpolder fall in the lowest quintile of standardized disposable household income (O&S, 2021) and; 18% of its residents are vulnerable in terms of employment / education, income and health (O&S, 2019).

2.2. Method for indicator development

The local wellbeing indicators are developed through a participatory process using a robust bottom-up method, shown in figure 3, that follows steps common to many multidimensional poverty measures (van Beek et al., 2025; Perotti and Pouw, 2025; UNDP and OPHI, 2019). This includes: 1) interviews with neighbourhood representatives to become familiar with and get a first understanding of the neighbourhood; 2) co-creation workshops with residents to define local wellbeing and operationalize indicators (van Beek et al., 2025); 3) and face-to-face surveys to collect demographics (OECD, 2013) and data on each indicator from a representative sample. In the Venserpolder case study this method produced 16 key topics measured through 35 multidimensional wellbeing indicators that are specific to the neighbourhood and residents' daily realities (as shown in figure A1.3 in appendix A1). The

[11] Vision statement: 'Venserpolder is growing from a development area into a socio-economically healthy, safe and inclusive neighborhood with strong social cohesion, where equality of opportunity is the benchmark, creativity and entrepreneurship is stimulated, informal care structures are recognized and facilitated and where support is offered based on the principle of a welfare economy residents who are not (yet) self-reliant, so that they, like all other residents, have a physical and can lead a mentally healthy and economically stable life.' (Visienotitie Samenwerkende Organisaties Venserpolder 2021, p. 3)

indicators don't have set cut-offs as to what constitutes well- and illbeing and no counting method is applied.

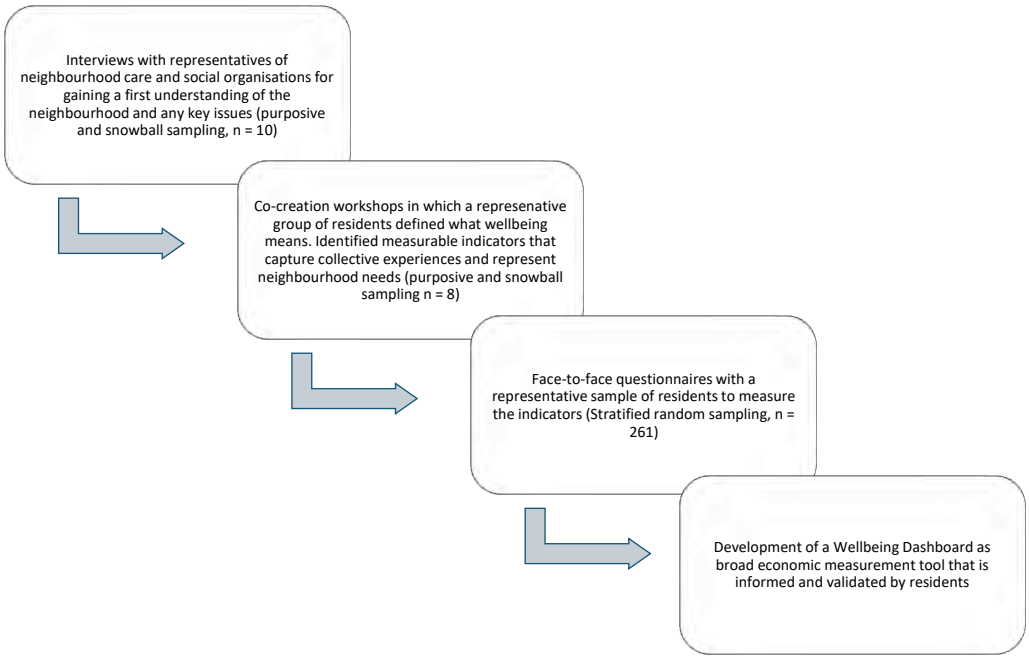


Figure 3: Bottom-up method for indicator selection and measurement (source by authors)

As mentioned, the operationalization of the wellbeing indicators departures from Pouw and McGregor's (2007; 2014; 2020) three-dimensional conception of human wellbeing. The theoretical definition of each dimension is given in table 5 (Pouw and McGregor, 2014, p. 16; Pouw, 2020, p. 44).

Theoretically each dimension is defined as a separate set. However, figure 2 showed how the dimensions can intersect in various ways. The results section below offers definitions of intersecting dimensions derived from the empirical operationalizations and *a posteriori* categorization.

Table 5. Theoretical definitions of material, relational and subjective wellbeing (Pouw and McGregor, 2014, p. 16; Pouw, 2020, p. 44).

Material wellbeing	The material dimension resonates with the narrower definition of welfare by looking at material determinants of quality of life. Material refers to the objective, observable outcomes that people can achieve, such as food, accommodation, possessions, income, work, physical and built environment.
Relational wellbeing	The relational dimension considers people's quality of life in respect of the relationships that are important for them in their social and physical environment. Relational refers to the resources that people have and their relations with others and their natural surroundings that allow them to fulfil their needs and aims, such as civil rights, security, self-determination and power, partnership, solidarity, altruism, networking, sustainability and freedom.
Subjective wellbeing	The subjective dimension of wellbeing recognizes the quality of the material and relational achievements, which are then translated into a person's subjective evaluation of their quality of life. This raises questions about how satisfied people are with what they can have and do in any given natural and societal context. Subjective refers to the meanings and values that people ascribe to the needs and aims they can achieve and the processes that they can undertake for this purpose, such as (dis)satisfaction, frustration, internal conflict, (in)security, happiness, aspiration and mental wellbeing.

3. Results

3.1 Empirical operationalization of wellbeing indicators

The operationalization of wellbeing indicators in Venserpolder proceeded through participatory co-creation, resulting in 35 locally validated indicators rooted in residents' lived experiences. While the three conceptual dimensions - material, relational, and subjective- were not explicitly introduced during the workshops, they served as a guiding framework for interpretation in the subsequent analysis (Pouw and McGregor, 2014). This alignment with the multidimensional conception of wellbeing reinforces the utility of bottom-up methods for capturing the complex and situated nature of human development (Sen, 1999; Nayyar and Malhotra, 2023).

Combining theoretical with empirical knowledge from the workshops, the separate dimensions and intersections are defined as:

- **Material** is about physical resources and physical/build environment. Although at first less straightforward, the indicator "having a paid job" (14a) is also categorized here, as it was derived from residents' need to measure whether residents generate a stable income and therefore categorized as material. "Completeness of the built environment" (7) was first categorized as subjective-material, however residents

noted that with indicator 7 they aimed for a more "objective" measure of whether the neighbourhood is complete in terms of resources (indicator "satisfaction with neighbourhood" is meant as a more subjective measure of this)

- **Relational** is about access, opportunities, participation, cohesion/connection. In practice, this was straightforward for the indicators explicitly measuring opportunity (2a and 12b). In addition, the indicators measuring whether residents' needs are met (6a and 10a) were also identified as relational since residents noted it is concerned with the question: does doing a certain activity or using a certain service enable someone as intended? does it meet someone's needs and hence provide opportunity or access?

- **Material ∩ relational** is about access and opportunity provided by material resources. The "social services meeting needs" and "employment meeting needs" (5a and 14b) are categorized here, as they are derived from residents' interest in understanding if the presence of employment and social services in fact gives people access to what they need.

- **Subjective ∩ relational** is about how someone perceives and experiences access, opportunities, participation, cohesion/connection. For example, the indicators that measures residents' perception as to whether there are enough neighbourhood activities and educational institutes in the neighbourhood (6b and 12a) is categorized here, as it is derived from residents' concern over lack of opportunity to socialize and build/maintain social networks (6b) and the lack of opportunity for their children due to limited number of schools (12a).

- **Subjective** is about personal matters, focused on the individual. In practice, "feeling lonely" (3a) measures how someone experiences and feels loneliness, not necessarily how that person actually relates to others. Subjective here is not solely an opinion; the matter an opinion is asked about must also be "subjective".

- **Subjective ∩ material** is about experiences or perceptions of physical resources/ facilities in the neighbourhood, such as "satisfaction with number of social services" (5b) and other material matters, such as "satisfaction with work situation" (1b).

The categorization of indicators, shown in table 6, was informed by residents' meanings and interpretations, demonstrating that even within a robust conceptual model, empirical flexibility is essential. For instance, "having a paid job" (14a) was categorized as material, as residents emphasized income stability over formal labor participation, aligning with broader critiques of economic measures that prioritize employment rates without considering adequacy (Bonvin and Laruffa, 2024; Veneri and Edzes, 2017). Indicators such as "employment meeting needs" (14b) were placed at the intersection of material and relational wellbeing, reflecting the conversion factors that shape whether access to resources translates into genuine capabilities (Sen, 1993).

Subjective indicators such as stress, loneliness, and satisfaction with life captured internal states that mediate individuals' ability to pursue valued goals. Their intersection with other domains revealed important nuances. For example, "perceived number of educational institutes" (12a) was classified as subjective ∩ relational, incorporating both access and perceived sufficiency. Such overlaps mirror empirical findings in wellbeing literature that underscore the importance of perception and meaning in shaping wellbeing outcomes (Diener et al., 1999; McGregor and Pouw, 2017).

Table 6. Result of *a posteriori* categorization the 35 multidimensional wellbeing indicators from Venserpolder, Amsterdam (n=261), into dimensions of wellbeing (source by authors).

Material (M) – 14% share in Dashboard	**M ∩ R – 6% share in Dashboard**
7 Completeness of built environment	5a Social services meeting needs
14a Having a paid job	14b Jobs offered meeting needs
15a Making ends meet	
15b Financial problems	
16b Computer and internet at home	

Relational (R) –14% share in Dashboard	**R ∩ S – 20% share in Dashboard**
2a Opportunities for healthy lifestyle	3b Feeling connected to neighbourhood residents
6a Neighbourhood activities meeting needs	6b Perceived number of neighbourhood activities
10a Municipal policy meeting neighbourhood needs	8a Experiencing nuisance in neighbourhood
11 Political participation	10c Feeling heard by local policy officials
12b Educational opportunities meeting needs	10b Feeling involved in local decision making
	12a Perceived number of educational institutes
	12c Perceived educational opportunities for self
Subjective (S) – 20% share in Dashboard	**S ∩ M – 26% share in Dashboard**
1a Satisfaction with life	1b Satisfaction with work situation
2b Satisfaction with leisure time	5b Satisfaction number of social services
3a Feeling lonely	8c Satisfaction with neighbourhood
4a Emotional stability	9a Perceived housing stock
4b Stress	9b Perceived housing quality
8b Feeling safe outside	9c Perceived price of housing
16a Self-evaluated digital skills	9d Satisfaction with own housing
	13a Satisfaction with shops
	13b Satisfaction with facilities and commercial services

3.2 Correlation between wellbeing indicators

Correlation analysis supported the multidimensional structure of wellbeing by revealing interdependencies among domains. Table A2.1 in appendix A2 shows found Spearman correlations between economic and non-economic local wellbeing indicators.

Financial sufficiency, as central material indicator, measured through being able to "make ends need" and having no "financial problems" positively correlated with emotional stability (respectively r=0.326 and r=0.154), opportunities for a healthy lifestyle (respectively r=0.233 and r=0.211) and satisfaction with life (respectively r=0.502 and r=0.349, $p<0.05$), at $p < 0.01$. These findings reaffirm the importance of looking beyond material indictors to understanding how people are doing; recognizing the role of psychological wellbeing, and the ability to live a satisfied and healthy life (Cardoso et al., 2022; Caprotti, 2018; Pouw, 2020).

Moreover, stress as a central subjective indicator, negatively correlated with the ability to make ends meet ($r = -0.221$, $p < 0.01$) and social connectedness ($r = -0.221$, $p < 0.01$), while positively correlating with loneliness ($r = 0.289$, $p < 0.01$). This reflects the cumulative and interactive nature of wellbeing deprivations described in the capability literature (Pouw and McGregor, 2014; Pouw and Perotti, n.d). Residents' felt need to be "heard" by policy officials, measured through an original local indicator (10c), was strongly correlated with satisfaction across several domains, including shops ($r = 0.323$) and public facilities ($r = 0.264$), as well as involvement in decision-making ($r = 0.526$) and satisfaction with neighborhood policy ($r = 0.538$), all at $p < 0.01$. This validates the inclusion of localized relational-subjective wellbeing indicators, which are largely absent from municipal frameworks (Sollis et al., 2022).

The inclusion of digital indicators- self-evaluated digital skills and access to computers/internet -introduced a novel domain of wellbeing absent from municipal metrics. These indicators correlated positively with not having financial problems (respectively $r=0.259$ and $r=0.271$, at $p<0.01$), perceived educational opportunity (respectively $r = 0.236$, at $p <0.05$ and 0.385, at $p <0.01$), and employment (respectively $r = 0.234$ and $r= 0.232$, at $p < 0.01$). These findings suggest that digital inclusion functions as a foundational capability, shaping access to other opportunities and enhancing social and economic participation (Bonvin and Laruffa, 2024).

3.3 Comparison to municipal indicators

The added policy value of the wellbeing indicators is explored through the municipal's publicly available database called the Basis Bestand Gemeente Amsterdam (BBGA). The BBGA is an integrated and central dataset that includes more than 800 variables, categorized in 23 themes and measured at various scales (O&S, 2023). The data mostly informs policies in separate domains and is integrated to show underlying relations across domains. The bottom-up defined wellbeing indicators were used as a starting point in the comparative analysis and their equivalents were looked for in the BBGA.

The comparative analysis with Amsterdam's BBGA database revealed that 18 of the 35 indicators were unique to the bottom-up dataset, particularly in the subjective and relational domains. These include stress frequency, emotional stability, perceived involvement in

decision-making, and digital access—areas not captured in municipal metrics but central to residents' wellbeing. A further eight indicators were partially similar, meaning they addressed a similar topic but were measured on a different scale and/or through different underlying questions, leading to different insights on the same topic. For example, both datasets address financial hardship, however the local wellbeing indicator (15a) asks residents whether they face any type of financial problems (58% says yes) while the BBGA reports 4.7% payment arrears in Venserpolder registered by formal institutions, demonstrating how subjective and experiential data reveal hidden forms of deprivation.

In contrast, only nine indicators aligned closely with BBGA data, mostly in the material domain, such as employment and housing quality. This suggests that while top-down metrics capture structural resources, they often fail to register how these resources are perceived or experienced, echoing longstanding critiques in human development research (Sen, 1999; Pouw, 2020). Table 7 shows a summary of the results (full results are shown in table A2.2 in appendix A2).

Table 7. Summary of Results Comparative Analysis with Municipal Database (source by authors, based on field-survey data Venserpolder (n=261) and BBGA data).

18 indicators unique to municipal data	1a. Satisfaction with life; 1b. Satisfaction employment situation; 2a. Opportunities for healthy lifestyle; 2b. Satisfaction leisure time; 4a. Emotional stability; 4b. Frequency of stress; 5a. Social services meeting needs; 7. Completeness of built environment; 9a. Perceived housing stock; 9b. Perceived housing quality; 10a. Municipal policy meeting neighbourhood needs; 10b. Feeling involved in local decision-making; 10c. Feeling heard by local policy officials; 12b. Educational opportunities meeting needs; 12c. Perceived educational opportunities for self; 14b. Jobs offered meeting needs; 16a. Self-evaluated digital skills; 16b. Computer and internet at home
8 indicators partly similar to municipal data	3b. Feeling connected to neighbourhood residents; 5b. Perceived number of social services; 6a. Neighbourhood activities meeting needs; 6b. Perceived number of neighbourhood activities; 12a. Perceived number of educational institutes; 13a. Satisfaction with shops; 13b. Satisfaction with facilities and commercial services; 15a. Financial problems due to fixed expenses
9 indicator similar to municipal data	3a. Feeling lonely; 8a. Experiencing nuisance in neighbourhood; 8b. Feeling safe outside; 8c. Satisfaction with neighbourhood; 9c. Perceived price of housing; 9d. Satisfaction with own house; 11. Political participation; 14a. Having a paid job; 15b. Making ends meet

4. Discussion

This discussion interprets the findings through seven interrelated insights: (1) the co-produced indicators substantiate and operationalize a multidimensional wellbeing framework; (2) local metrics reveal hidden needs and priorities; (3) wellbeing domains are deeply interwoven; (4) subjective indicators hold particular policy salience; (5) stress functions as a systemic constraint; (6) gaps between institutional and experiential data expose blind spots; and (7) participatory measurement can redistribute epistemic power and inform integrated policy design.

First, operationalizing the wellbeing economics framework in co-creation with residents produced conceptual, empirical, and policy-relevant insights. The participatory development of 35 indicators substantiates and refines the theoretical model of material, relational, and subjective wellbeing (Pouw and McGregor, 2014; McGregor and Pouw, 2017). In addition, the results demonstrate how local indicators can illuminate specific needs and priorities otherwise obscured in aggregate data, aligning with calls for citizen-defined metrics in human development (Sollis et al., 2022). This study does not distinguish between capabilities and functionings in its analysis, as these depend on personal values and contextual conditions (Sen, 1993). For instance, access to neighborhood activities may represent a capability for one individual and a functioning for another. Future research could incorporate quantitative combined with qualitative causal analysis to better understand these dynamics, as well as explore heterogeneity across groups in capability realization.

Second, the classification of indicators, often based on residents' explanations, underscores that wellbeing dimensions are not mutually exclusive but deeply interwoven. Indicators like "social services meeting needs" (5a) reflect both material availability and relational effectiveness. Similarly, indicators such as "perceived educational opportunities" (12c) capture both structural access and individual aspirations. These findings validate the multidimensional wellbeing framework as not only theoretically sound but practically operationalizable in a contextualized manner (Sen, 1993; Pouw, 2020).

Third, the indicators contributed most substantially to the policy conversation were those in the subjective domain, such as emotional stability, satisfaction with life, and perceived policy responsiveness. This confirms earlier empirical work suggesting that subjective wellbeing is often a more reliable predictor of policy efficacy than objective metrics alone (Diener et al.,

1999; Nayyar and Malhotra, 2023). Notably, the indicator “feeling heard by local policy officials” (10c), which is not captured in BBGA, showed strong correlations with satisfaction across public services and infrastructure. This suggests that perceived inclusion and procedural justice may significantly affect residents’ experience of development.

Fourth, the correlation analysis offered a window into the underlying structure and drivers of wellbeing. The prominence of stress as a mediating variable, correlated with 13 indicators, suggests its role as a systemic outcome of multidimensional deprivation. These dynamics resonate with Pouw and Perotti’s (n.d.) notion of threshold wellbeing, where certain negative experiences (e.g., stress) inhibit the realization of capabilities across domains. Such insight is vital for designing integrated wellbeing policy responses that recognize compounding disadvantages, rather than addressing needs in isolation (Bonvin and Laruffa, 2024).

Fifth, the comparative analysis between bottom-up and top-down indicators revealed both complementarities and tensions. While some municipal indicators, such as housing satisfaction or employment rates, aligned with local measures, others failed to capture lived realities. For instance, the discrepancy between reported financial problems (58%) and registered arrears (4.7%) illustrates how experiential indicators capture hidden forms of vulnerability not reflected in institutional datasets (Vethaak and Jongen, 2024). Moreover, relational-subjective indicators like perceived educational opportunity or connection to local decision-making are simply absent from official data—despite their clear importance to residents.

Sixth, the participatory nature of the Wellbeing Dashboard presents an opportunity for democratizing knowledge production and policy formation. As Sen (1999) and Pouw (2020) argue, development must be grounded in people’s own valuations of what they have reason to value. The locally defined indicators offer a mechanism for turning these values into actionable metrics. However, for this to be effective, residents must retain ownership of the indicators and be empowered to use them in dialogues with policymakers. This aligns with Gupta et al.’s (2015) argument that inclusive development depends not only on recognition but on redistribution of epistemic power. It is important though that future applications of the bottom-up method developed in Venserpolder expand sample size and diversity, particularly during co-creation.

Seventh, and finally, the inter-dimensional interactions revealed in this study echo the framework proposed by Pouw and Perotti (n.d.), which differentiates between basic needs, stability, and comfort. Indicators such as digital access or emotional stability may serve as "threshold" conditions, enabling transitions across levels of wellbeing. Understanding which indicators serve enabling or constraining functions, particularly in marginalized communities, can inform trade-offs in resource allocation. While this paper reports correlations only, future work should test causality using multivariate techniques to determine which indicators most effectively enhance or inhibit capability expansion.

5. Conclusion

Substantiating the theoretical premises of Wellbeing Economics, this paper has described and analysed the outcomes of a robust bottom-up methodology to identify and measure multi-dimensional economic wellbeing indicators with active participation of community members. The empirical results demonstrate that shifting from conventional, top-down metrics to participatory, multidimensional indicators significantly reconfigures the conceptual weight from economic growth and material resources toward subjective and relational dimensions of wellbeing. This echoes theoretical critiques of GDP-centric measurement and affirms the practical relevance of alternative frameworks grounded in human development and capabilities (Sen, 1999; Pouw, 2020). The policy relevance of this shift lies in its alignment with inclusive development paradigms, which prioritize human needs, agency, and values over aggregate economic output. Rather than treating subjective indicators as secondary or supplementary, the bottom-up approach positions them as central to understanding lived experience and guiding responsive interventions. This more holistic understanding of economic behaviour reveals that improvements in standard economic indicators (e.g., income) correlate strongly with enhanced subjective (e.g., satisfaction with life, emotional stability) and relational wellbeing (e.g., educational opportunity, social connectedness), thereby supporting integrated policy design.

Based on the comparison with municipal policy data, the multidimensional wellbeing indicators of Venserpolder and their bottom-up method of operationalization show to add value to policy through i) measuring material, subjective and relational wellbeing needs and aspiration within a broader economic measurement framework; ii) identifying citizen-

validated needs and aspirations in marginalized communities to fill in blind spots in existing municipal data; iii) offering data for targeted and integrated policy at neighborhood level; iv) providing a base for exploring complex interactions between wellbeing indicators and across dimensions; v) and through supporting democratization and foster broad-based participation and inclusion of marginalised citizens. These contributions are not merely methodological but also epistemological, challenging the authority of expert-driven indicators and proposing alternative models of value rooted in everyday experience. As highlighted in the discussion, this resonates with calls to redistribute epistemic power in development processes (Gupta et al., 2015).

Future research should explore and test causal relationships between indicators using multivariate techniques. In a follow up paper, the authors are exploring differences in wellbeing outcomes between social groups, adding nuance to the analysis. In addition, there is scope for further research into neighbourhood transcending dynamics and external structural conditions, such as institutional exclusion or access to housing, that may exert significant influence on local wellbeing but remain unmeasured in current indicators.

Chapter 4

"The" deprived neighbourhood? Comparing community wellbeing across three Amsterdam neighbourhoods [12]

[12] Based on article 3: van Beek, J.E.M., Pouw, N.R.M. and Verrest, H.J.L.M. (under second review). "The" deprived neighbourhood? Comparing community wellbeing across three Amsterdam neighbourhoods.

Abstract

Urban policies often assume residents of marginalized neighbourhoods share uniform living conditions and needs, as they are informed by narrow economic-oriented indicators that don't capture broader and divergent experiences. This paper examines what bottom-up, localized wellbeing indicators reveal about commonalities and differences across three deprived neighbourhoods in Amsterdam. It compares three wellbeing dashboards that measure citizen-defined indicators of wellbeing across material, relational and subjective domains. Results show a consistent foundation of "basic safety" - comprising financial sufficiency, housing stability, perceived safety, mental balance, and relief from stress - as the essential baseline of wellbeing. Above this foundation, neighbourhoods diverged in their priorities and relative emphasize on higher-order needs: residents in one community emphasized personal and financial health and the importance of a support network; others stressed physical health and family stability; while others prioritised equal opportunity, safety, and social cohesion. These findings demonstrate that marginalized neighbourhoods in a high-income city are neither homogeneous nor entirely distinct and that wellbeing is contextually constructed through the interplay of demographic composition, social relations, and local institutions. Localized wellbeing indicators provide granular and policy-relevant insights that complement official statistics. They help operationalize Amsterdam's principle to "unequally invest to create equal opportunities" by safeguarding shared basic safety while tailoring further interventions to neighbourhood-specific priorities. The study advances the methodological and practical use of bottom-up wellbeing measurement for inclusive, evidence-based urban policy.

Keywords: multi-dimensional wellbeing; community indicators; basic safety; neighbourhood inequalities; participatory measurement; inclusive urban policy.

1. Introduction

Economic growth has long been used as a proxy for societal progress. Yet it is now widely recognized that related aggregate economic indicators, such as GDP per capita or household income, provide an incomplete picture of how people actually live and feel (Costanza et al., 2009; Fioramonti, 2016; Raworth, 2017; Stiglitz et al., 2009). They fail to capture the multidimensional character of wellbeing, spanning material conditions, social relations, and subjective experiences, that determines quality of life (Forgeard et al., 2011; Pouw, 2020). In response, an expanding body of research seeks to develop multidimensional and context-sensitive indicators that complement conventional measures and reveal how wellbeing varies across places, groups and time (Bartelet and de Gooyert, 2025; Cardoso et al., 2022; Caprotti, 2018; Sollis et al., 2022; Veneri and Edzes, 2017). In high-income countries the persistence of social and spatial inequality reinforces this need. Challenging urban agglomeration economics (see: Glaeser, 2011), many prosperous cities combine overall economic success with decreasing average life satisfaction and concentrated pockets of deprivation; a pattern described as the urban wellbeing paradox (Lenzi and Perucca, 2023). In these contexts, standardized or top-down indicators often obscure internal variation, especially across neighbourhoods of similar socioeconomic status. The assumption that residents in "deprived" urban areas share uniform living conditions or needs is rarely tested against locally generated data. As a result, urban policies designed to improve wellbeing may fail to reflect the diversity of lived experience among those they aim to support.

The present study responds to this gap by analysing indicators of multidimensional wellbeing defined by residents in three marginalized neighbourhoods in Amsterdam: Venserpolder, G-buurt, and Wegener Sleeswijkbuurt. While all three are characterized by lower income levels, weaker social capital, and less access to economic activity compared to other parts of the city, they differ in demographic composition, housing stock, and social dynamics – all influential to wellbeing outcomes (Galster, 2012). The central question guiding this paper is:

What do bottom-up wellbeing indicators reveal about shared and diverging needs across marginalized neighbourhoods, and how can these insights inform targeted and inclusive urban policy?

Answering this question contributes to both the measurement of and policy debates on urban wellbeing. From a measurement perspective, it builds on recent methodological advances that take a bottom-up approach and integrate citizen participation into indicator development and validation (Pouw and McGregor, 2014; van Beek et al., 2025). By enabling residents to define what wellbeing means in their context, bottom-up approaches expand the scope of existing indicator systems to include relational and subjective dimensions that are otherwise underrepresented - such as stress, perceived safety, or feelings of belonging. From a policy perspective, citizen-defined indicators can improve the fit between local priorities and public interventions by grounding policy decisions in the experiences of those most affected (Goodlad et al, 2015; Gupta et al., 2015; Simon-Kumar, 2018).

Theoretically, this study draws from the wellbeing economics framework, which conceptualizes wellbeing as a multidimensional, interdependent system of material, relational and subjective factors (Pouw, 2020; McGregor and Pouw, 2017). The framework emphasizes that wellbeing cannot be reduced to income or consumption, but emerges from the interaction between resources, relationships, and personal meaning. Operationalizing this framework through localized indicators provides an empirical lens for examining how wellbeing is distributed within and across urban areas.

The study also engages with the extensive literature and debated perspectives on neighbourhood effects; the idea that neighbourhood characteristics influence people's life chances and wellbeing outcomes (Wilson, 1987; Sampson et al., 2002; Friedrichs et al., 2003; Galster, 2012; Musterd, 2022). While deprived neighbourhoods often share structural features such as low income and poor housing quality, empirical studies show that differences in residents' wellbeing are only partly explained by these compositional factors (Mouratidis, 2020; Sharkey and Faber, 2014). Individual experiences depend on both local environments and personal attributes such as age, gender, or employment status (Fauth et al., 2007; Jokela, 2015). However, most research on spatial wellbeing relies on aggregated data at the city or regional level (Ala-Mantila et al., 2018), leaving micro-level differences between neighbourhoods largely unexplored. The present study addresses this gap by comparing localized, citizen-generated wellbeing indicators across three neighbourhoods within a single metropolitan context.

The social relevance of this research lies in its direct connection to Amsterdam's municipal policy framework. The city's current strategy to *"unequally invest to create equal opportunities"* (Municipality of Amsterdam, 2025) recognizes that achieving equality requires differentiated investments—allocating more resources to areas facing the greatest challenges. Yet, in practice, these investments are guided primarily by aggregated administrative data at district level. Programs such as *Masterplan Zuidoost* and *Nationaal Programma Samen Nieuw West* rely on broad area-based approaches that largely assume homogenic needs across various neighbourhoods. While these programs acknowledge the need for local participation, resident involvement has largely remained consultative. By providing and comparing neighbourhood-specific, citizen-defined indicators, this study offers an empirical foundation for implementing the principle of unequal investment more effectively, identifying both the shared baseline needs and the distinctive priorities of different neighbourhoods.

Methodologically, this paper makes inferences using three co-created "wellbeing dashboards" that present neighbourhood wellbeing across material, relational and subjective domains of life. Indicators of wellbeing were first defined by citizens and subsequently measured and validated through neighbourhood surveys and analysed using descriptive and comparative techniques. The resulting datasets, ranging from 35 to 59 indicators per neighbourhood, capture both objective conditions (e.g., financial sufficiency, housing, employment) and subjective experiences (e.g., perceived safety, emotional stability, connectedness). Previous analysis (chapter 3) demonstrated that approximately half of all citizen-defined indicators provided new policy-relevant information not captured by existing municipal datasets. For example, local indicators revealed widespread stress and financial insecurity that were invisible in official statistics and highlighted the perceived lack of voice among residents in municipal decision-making. Such insights underscore the policy value of integrating citizen perspectives into the measurement of wellbeing, especially in marginalized communities where official data may fail to capture hidden vulnerabilities.

The comparative analysis in the current paper identifies which indicators recur across all neighbourhoods and which are unique to specific contexts, providing a detailed view of commonalities and divergences in local wellbeing structures. This approach does not aim to estimate causal effects of neighbourhood characteristics on wellbeing, but to explore how residents' own definitions and experiences of wellbeing vary between neighbourhoods often

categorized under the same policy label of "deprived." By comparing these citizen-generated datasets, the paper examines whether marginalized neighbourhoods can be meaningfully treated as a single analytical category or whether their internal diversity calls for differentiated policy responses. The findings have broader implications for wellbeing measurement in urban contexts, where heterogeneity within small spatial units may be as important as differences between them.

The paper proceeds as follows. Section 2 reviews theoretical perspectives on multidimensional wellbeing measurement and urban spatial inequality, highlighting how these literatures inform the study's conceptual approach. Section 3 describes the participatory methodology through which localized wellbeing dashboards were developed and validated. Section 4 presents comparative results on indicator selection, wellbeing outcomes and priority-setting across the three neighbourhoods. Section 5 discusses the implications of these findings for urban policy, focusing on how bottom-up policy instruments and indicators can complement top-down planning instruments such as Amsterdam's *Masterplan Zuidoost* and *Nationaal Programma Samen Nieuw West*. Section 6 concludes by summarizing the key contributions to wellbeing measurement and policy and suggesting future research directions for integrating citizen-defined indicators into broader statistical and governance systems.

2. Theoretical framing

2.1 From economic performance to human wellbeing

The growing recognition that economic growth does not necessarily equate to human progress has prompted a paradigm shift from measuring performance to measuring wellbeing (Fioramonti et al., 2022; Stiglitz et al., 2009; Pouw, 2020). Traditional macroeconomic indicators such as GDP per capita or household income capture aggregate economic activity but not the distribution or lived quality of that activity. This shortcoming is especially salient in high-income contexts, where economic prosperity often coexists with deep social and spatial inequalities, a phenomenon sometimes described as the urban wellbeing paradox (Lenzi and Perucca, 2023). As a result, scholars and policymakers increasingly turn to integrated frameworks that consider the interaction of multiple objective and subjective factors to assess wellbeing beyond economic progress (Jurčišinová et al., 2025; Mouratidis, 2020; Wesz et al., 2023). Within this shift, wellbeing economics has emerged as a coherent

theoretical foundation for integrating economic reasoning with human development and social sustainability (Fioramonti et al., 2022; McGregor and Pouw, 2017). It reframes the economy as a means rather than an end, one that should support people's ability to live well in relation to themselves, others, and the environment (Pouw, 2020). Instead of assuming that monetary wealth automatically translates into wellbeing, wellbeing economics emphasizes the distribution and quality of resources, relationships, and capabilities that enable people to pursue valued lives (Dalziel et al., 2018; Sen, 1999). This framing provides a basis for exploring the differentiated wellbeing of communities within the same city, where opportunities and vulnerabilities often map onto spatial and social inequalities.

At its core, wellbeing economics integrates three interdependent dimensions: material wellbeing, relational wellbeing, and subjective wellbeing (Pouw and McGregor, 2014; McGregor and Pouw, 2017):

- Material wellbeing refers to the tangible resources and living conditions, such as income, housing, food, and services that enable people to meet basic needs.
- Relational wellbeing concerns the quality of people's relationships with others and with institutions, including social networks, participation, trust, and access to collective resources.
- Subjective wellbeing relates to how people evaluate and experience their own lives, encompassing feelings of safety, satisfaction, and perceived control.

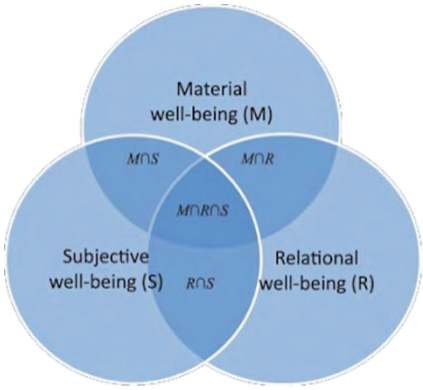


Figure 4: Multidimensional Wellbeing Intersecting (source: Pouw and McGregor, 2014).

Figure 4 illustrates how these dimensions are mutually reinforcing. For example, financial insecurity (material) can generate stress (subjective) and weaken social ties (relational),

which in turn can reduce employability or civic participation (material/relational). Conversely, supportive social relations can buffer material insecurity and sustain subjective wellbeing even under economic pressure. This interdependence distinguishes wellbeing economics from narrower approaches such as the capability or happiness frameworks, which tend to focus on either resources or subjective evaluations alone. In operational terms, the framework assumes that wellbeing emerges from the interaction between individual agency and structural conditions (Pouw, 2020). It thus accommodates both personal and contextual determinants. This duality is particularly relevant for urban studies, where the neighbourhood constitutes a meso-level structure shaping individuals' access to opportunities, exposure to risks, and social integration (Friedrichs et al., 2003; Galster, 2012; Hoogerbrugge and Burger, 2018). In this sense, localized wellbeing indicators can illuminate how structural and individual factors combine to produce differentiated experiences of wellbeing.

2.2 Neighbourhoods as contexts of wellbeing

The literature on neighbourhood effects provides a rich foundation for understanding how place and wellbeing are intertwined. Seminal work by Wilson (1987) and Sampson et al. (2002) posited that neighbourhood characteristics, such as social composition, institutional resources, and collective efficacy, affect residents' life chances and outcomes across domains including health, education, and employment. This perspective helped justify place-based policies that seek to "fix" neighbourhoods by redesigning infrastructure, safety, or services (Grander et al., 2021; Koster and Van Ommeren, 2023; Manly et al, 2013. Yet other research shows that the relationship between neighbourhoods and wellbeing is complex, mediated by both compositional and contextual factors (Galster, 2012; Sharkey and Faber, 2014). Compositional factors refer to the characteristics of individuals living in a neighbourhood (e.g., income, education, ethnicity), whereas contextual factors relate to the physical and social environment itself (e.g., amenities, cohesion, stigma) (Pinkster et al., 2020). Studies indicate that neither dimension alone fully explains wellbeing disparities (Small and Feldman, 2011). For example, Poortinga et al. (2008) found that health differences between neighbourhoods were partly compositional but remained significant after controlling for individual socioeconomic status, suggesting that contextual factors such as housing quality, safety, and perceptions of place also matter. In addition, while neighbourhood-based social capital in terms of actual social contact and perceived social cohesion, relates residents' life satisfaction, it varies among groups (Pinkster and Loomans, 2024; Kirsten and Bonga-

Bonga, 2025) and is particularly important for those who are living on welfare, lower educated, divorced or widowed, elderly and/or retired, and in poor health (Hoogerbrugge and Burger, 2018). In this light, neighbourhoods are viewed as relational spaces where social, economic, and institutional dynamics intersect (Amin, 2004). People's wellbeing is shaped not only by the facilities available but also by how they interact with, perceive, and use them. Ala-Mantila et al. (2018) show that subjective perceptions of urban environment, such as felt safety and observed aesthetics, often correlate more strongly with life satisfaction than objective structural variables like density or transport availability. These findings align with wellbeing economics' multidimensional framing: wellbeing arises from both tangible and intangible relations which are also recognized to vary spatially and temporally.

This in turn aligns with the strong spatial and temporal component of differentiated access and exposure to opportunity in urban areas (Musterd, 2005; Manley et al., 2011; Hoogerbrugge and Burger, 2018). Over time, these inequalities can reinforce disadvantage through cumulative processes of spatial entrapment, where low-income households are constrained to remain in less resourced areas due to housing costs, discrimination, or social networks (Sampson, 2012; Sharkey, 2013). At the same time, inequality can trigger spatial movement which today is particularly enforced through the housing crisis and processes of gentrification occurring in many affluent urban areas (Lees et al, 2013; Booi, 2024; Hochstenbach et al., 2015). While driven by neighbourhood transcending processes, gentrification is shown to be influenced by neighbourhood-level factors and has contextual implications (Finio, 2022; Hochstenbach et al., 2015; Lees et al., 2013). Spatial clustering of deprivation also reflects broader structural dynamics. Bourdieu (1985, 1989) conceptualized social space as structured by unequal distributions of capital, economic, social, and cultural, that shape people's positions and preferences. Individuals' housing choices, mobility, and sense of belonging are expressions of their habitus and available capital. In this view, neighbourhoods are not neutral backdrops but expressions of social hierarchy. Urban space thus becomes a mirror of accumulated advantage and exclusion. Recent studies underline the magnitude of within-city and even within-neighbourhood inequality. Márquez et al. (2019) estimate that within-neighbourhood inequality accounts for nearly one-quarter of total income inequality across Europe, suggesting that even "deprived" areas are internally diverse. Again, this underlines the longstanding critique on place-based policies when assuming homogeneity across deprived neighbourhoods and highlights the need for finer-

grained and contextual data to understand micro-level differences in wellbeing (Small and Feldman, 2011).

2.3 From deprivation indices to wellbeing indicators

Traditional measures of neighbourhood deprivation, such as the Index of Multiple Deprivation (IMD), aggregate objective socioeconomic indicators like income, education, and employment. While useful for comparative analysis, such indices capture only a narrow segment of the wellbeing spectrum and exclude relational and subjective dimensions. Moreover, they are typically constructed through top-down processes that reflect administrative priorities rather than residents' lived realities (te Lintelo et al., 2018; Sen, 1993). Wellbeing economics and related multidimensional approaches advocate a broader measurement lens. Frameworks such as the OECD Better Life Index, the UNDP Human Development Index, and the European Social Progress Index have expanded the scope of measurement but remain largely expert-driven. Participatory approaches, by contrast, introduce citizen-defined indicators that reflect local conceptions of what it means to live well (Pouw and McGregor, 2014; van Beek et al., 2025; Barrington-Leigh and Escande, 2018; Sollis, 2023). These indicators often capture intangible aspects, such as stress, safety, or sense of belonging, that are both deeply felt and policy-relevant but rarely recorded in official statistics. Empirical evidence supports the value of integrating subjective and relational measures. Poortinga et al. (2008) found that perceptions of neighbourhood safety and social cohesion mediate the relationship between objective deprivation and health outcomes. Similarly, Ala-Mantila et al. (2018) showed that subjective neighbourhood satisfaction predicts wellbeing more robustly than urban density or transport access. These findings suggest that understanding wellbeing at the neighbourhood level requires combining objective conditions with subjective evaluations and relational dynamics, precisely the integration achieved by bottom-up measurement.

2.4 Linking wellbeing economics to neighbourhood analysis

Bringing wellbeing economics into dialogue with urban inequality and neighbourhood theory provides an integrated conceptual framework for this study. Both perspectives share an interest in understanding how structural and relational contexts shape individual outcomes. However, wellbeing economics goes beyond the explanatory question of how neighbourhoods influence wellbeing; it emphasizes how wellbeing is constituted through the

interplay of material, relational and subjective dimensions within those neighbourhoods. This integrative lens enables several analytical advances:

1. From deprivation to wellbeing: Rather than focusing solely on deficits or risks, wellbeing economics examines what enables people to live well. This shifts attention from pathologies of poverty to capabilities, assets, and social connections.
2. From aggregate to differentiated spaces: Instead of assuming that all residents in a deprived area share the same needs, the framework acknowledges diversity in experiences and aspirations within and across neighbourhoods.
3. From outcomes to processes: Wellbeing is not only an outcome of neighbourhood characteristics but also a process shaped by everyday interactions among residents, institutions, and environments.
4. From top-down to co-produced knowledge: By engaging residents in defining and measuring wellbeing, the framework democratizes data production and enhances the legitimacy and precision of local policy.

The theoretical framework guiding this research can be summarized as follows. Wellbeing in urban neighbourhoods is conceptualized as a multidimensional construct emerging from the interaction between individual characteristics (agency, resources, and perceptions) and neighbourhood contexts (infrastructure, social relations, and institutional engagement). These interactions shape three interdependent wellbeing dimensions: material, relational and subjective (figure 4, conceptual model). Applying the framework's conceptualization to neighbourhood level this means:

- Material wellbeing captures access to income, employment, housing, and basic services.
- Relational wellbeing reflects social connectedness, trust, and participation, as well as perceived responsiveness of (local) institutions.
- Subjective wellbeing encompasses emotional stability, perceived safety, and life satisfaction.

Neighbourhood-level differences in these domains are expected to reflect both compositional variations (e.g., demographic or socioeconomic make-up) and contextual conditions (e.g., neighbourhood amenities, cohesion, or perceived neglect). Importantly, the analysis does not

aim to establish causal effects between these variables but to compare patterns across neighbourhoods categorized as deprived. This comparative approach explores whether similarities and divergences in citizen-defined indicators correspond to shared or distinct wellbeing experiences and needs, thereby testing the implicit assumption of homogeneity underlying many place-based policies.

The combination of wellbeing economics and neighbourhood theory carries important implications for urban policy and measurement. Theoretically, it extends neighbourhood effects literature by incorporating subjective and relational dimensions and allowing for local differentiations informed by residents. Empirically, it provides an evidence base for refining municipal strategies that aim to "unequally invest to create equal opportunities" (Municipality of Amsterdam, 2025, p.1). Finally, this theoretical framing contributes to the broader wellbeing measurement literature by demonstrating how citizen-generated data can enhance multidimensional analysis. Whereas conventional indices often reduce wellbeing to aggregate scores, localized participatory approaches illuminate the underlying structure of wellbeing, how different domains interrelate and vary spatially. In doing so, they offer a more nuanced and democratic basis for understanding and improving quality of life in urban contexts.

3. Methods and data

The research presented in this paper is part of a community-based participatory research project in Amsterdam, the Netherlands. For its comparative analysis, the current paper focuses on three neighbourhoods (G-Buurt, Wegener Sleeswijkbuurt, Venserpolder) where local wellbeing indicators are developed in co-creation with residents through a participatory process using a robust bottom-up method (van Beek et al., 2025). As shown in table 8, this includes: 1) semi-structured interviews with neighbourhood representatives to become familiar with and get a first understanding of the neighbourhood. In the interviews representatives are asked to explain their connection to and activities in the neighbourhood, describe the neighbourhood in terms of wellbeing and elaborate on central and/or urgent issues, and whether and how a Wellbeing Dashboard can benefit the neighbourhood; 2) three sequential co-creation workshops with residents to define local wellbeing and operationalize indicators. During the co-creation workshops residents participate in group discussions and

small (creative) exercises (examples of outputs are shown in images A3.1, A3.2, A3.3, A3.4 in appendix A3). First this stays at a rather personal level; making them define what wellbeing means to them and how they experience this in their neighbourhood. Then they are nudged into taking a wider perspective and think of collective wellbeing experiences and needs in their neighbourhood. The three workshops gradually lead to a list of general wellbeing topics (e.g. mental health) and more concrete sub-topics (e.g. frequency of stress and emotional stability). The researchers translate these sub-topics into measurable indicators that are validated by the residents. After validation the researchers formulate statement-based questions on each indicator to build the survey (e.g. on the topic "I feel connected to other residents in the neighbourhood"). Respondents rate their agreement on each statement on a 1 to 5 scale (1 strongly disagree, 2 disagree, 3 in between, 4 agree, 5 strongly agree); 3) conducting the stratified random sampling surveys with population-proportionate allocation (age, gender, house ownership or rental, education level, non-/employed). The surveys are primarily conducted face-to-face with neighbourhood residents in the language most appropriate to the respondent (Dutch, English, Turkish and standard Arabic) for purposes of inclusion and representation; 4) validation by residents of survey results and design of wellbeing dashboard. In each neighbourhood this produced 16 to 17 key wellbeing topics measured through 35 to 59 multidimensional wellbeing indicators that are specific to residents' daily realities and neighbourhood conditions.

Following this, residents prioritized wellbeing topics (outcomes shown in Table 3) and practice using the Wellbeing Dashboard for vocalizing policy needs. After the first pilot in Venserpolder, the prioritization method was refined into a structured strategic game to make the ranking of wellbeing priorities more systematic, transparent, and comparable across neighbourhoods. The game format introduced a two-round decision process that combined individual choice with collective deliberation. In the first-round residents gather in small groups around a table on which the wellbeing topics of their Dashboard are presented on separate cards and a ladder is visualized on a poster (image A3.5 in appendix A3 shows an example). They choose the topic most important to them and take turns in moving this topic up the ladder. This is all done in silence to reduce the influence of dominant voices and allowing all participants to express their priorities while still observing others' preferences. This round produces a top five of wellbeing topics per group, which are then brought together to produce a collective ranking of two to three priority topics (image A3.6 in appendix A3

shows an example). As a result, the method balances deliberative depth with procedural rigour, transforming a qualitative discussion into a reproducible participatory ranking process.

Pouw and McGregor's (2007; 2014; 2020) conceptual dimensions of human wellbeing - material, relational and subjective – are used as a starting point for operationalization and serve as a guiding framework for interpretation in subsequent analysis. The dimensions were not explicitly introduced to residents during workshops, giving full space to residents' meanings and interpretations and allowing for empirical flexibility (van Beek et al, 2025).

Table 8. Overview of methods (source by authors).

	Method	**Samples**
1	Interviews for a first understanding of key wellbeing issues and needs in the neighbourhood and residents' willingness to participate and their attitudes towards research and how to approach this	- G-Buurt: 9 representatives of local care and wellbeing organisations - Wegener Sleeswijkbuurt: 2 interactive conversations with a group of 8 representatives from various local care, wellbeing organisation - Venserpolder: 8 representatives of local care and wellbeing organisations Purposive sampling
2	Three sequential co-creation workshops to co-create the content, function, and design of a Wellbeing Dashboard for citizens	- G-Buurt: 30 residents, predominantly female, ages 30+, mixed ethnic and socioeconomic backgrounds - Wegener Sleeswijkbuurt:18-29 residents, predominantly females, ages mixed, diverse ethnic background, mainly working class - Venserpolder: 7 residents, all female, ages from 35 to 65, similar ethnic and socioeconomic backgrounds Purposive and snowball sampling
3	Face-to-face surveys to collect data on the wellbeing experiences and perspectives from a wider sample of residents[13]	- G-Buurt: 299 neighbourhood residents above 18 years and older - Wegener Sleeswijkbuurt: 273 neighbourhood residents above 18 years and older - Venserpolder: 261 neighbourhood residents above 18 years and older Stratified sampling and quota sampling
4	Validation of survey results and Wellbeing Dashboard	- G-Buurt: 15 residents, man and female, age 35+, mixed ethnic and socioeconomic backgrounds - Wegener Sleeswijkbuurt: 24 residents, mainly female, age 25 plus, mixed ethnic and socio-economic backgrounds. - Venserpolder: 7 residents, all female, ages from 35 to 65, similar ethnic and socioeconomic backgrounds
5	Prioritization of needs by residents and practice of using the Wellbeing Dashboard for vocalizing policy needs	- G-Buurt: 20 residents, man and female, age 30+, mixed ethnic and socioeconomic backgrounds

[13] The structure of each dataset and composition of the samples is shown in table A3.1 in appendix A3.

		- Wegener Sleeswijkbuurt: 18 -28 residents, predominantly female, ages 30+, mixed ethnic and socio-economic backgrounds - Venserpolder: 8 residents, all female, ages from 40 to 65+, mixed ethnic and socioeconomic backgrounds Purposive and snowball sampling

The resulting datasets provide both empirical and normative insights: they reveal how people assess their circumstances and what they consider necessary for improvement. Based on previous analysis and comparison to municipal data, the bottom-up data complements administrative statistics in several ways. First, they uncover hidden vulnerabilities that may be invisible in official data, for example, widespread stress or financial anxiety despite adequate income levels. Second, they reveal interactions between wellbeing domains, such as the correlation between financial sufficiency, emotional stability, and perceived opportunities. Third, they enhance policy relevance by identifying which issues residents deem most urgent and actionable. Together, these features make bottom-up indicators a valuable complement to conventional datasets, especially in urban contexts where inequality manifests locally.

4. Results

The comparative analysis of the three neighbourhood datasets demonstrates how wellbeing economics' three dimensions - material, relational and subjective - manifest locally. Consistent with the theoretical framework, residents' indicators span all wellbeing dimensions, reflecting the interplay between tangible resources, social relations, and subjective evaluations. Table 9 lists the 25 indicators identified and measured through the bottom-up method in all three neighbourhoods, forming the empirical basis for cross-site comparison (Table A3.2 in appendix A3 shows how these indicators score in each neighbourhood).

Across all sites, residents emphasized indicators related to basic safety - financial sufficiency, housing stability, perceived safety, and stress relief - confirming the foundational role of existential security in wellbeing. Yet the neighbourhood-specific indicator sets reveal distinct emphases shaped by demographic composition and local context. Wegener Sleeswijkbuurt, for example, focused more on family support and education, while G-Buurt residents

highlighted cultural participation and environmental quality. Venserpolder, in contrast, showed stronger concern for time and capacity to engage in leisure, reflecting capability-oriented priorities rather than material consumption. These patterns prefigure the divergent priorities explored below and link conceptually to neighbourhood effects theory, where local social composition interacts with context to shape wellbeing outcomes.

Table 9. Overview of thematical overlap and the 25 indicators measured in each neighbourhood (source by authors).

Topics	**Indicators**
Social connectedness	Feeling connected with other residents
	Frequency of feeling lonely
Neighbourhood activities	Satisfaction with number of neighbourhood activities organised
	Satisfaction with type of neighbourhood activities organised
Financial sufficiency	Getting by from income
	Experiencing financial issues
Mental balance	Satisfaction with life
	Emotional stability
	Frequency of experienced stress
Employment	Satisfaction with employment situation
	Alignment employment offer
Neighbourhood liveability and facilities	Satisfaction shops
	Access to sports and exercise
	Access to healthy food
	Access to care and social services
	Feeling safe
	Experiencing nuisance
Educational access	Amount of education institutions
	Experienced educational opportunities
Housing stability	Satisfaction with own house
	Availability of housing
	Maintenance and state of housing

Local government and policy	Feeling heard by the municipality
	Feeling informed and involved by the municipality
	Voting for local, regional and national elections

While the neighbourhoods predominantly measure the same indicators, several differing aspects between the neighbourhoods are found when comparing the composition of each indicator set. As shown in figure 5, differences relate to demographic composition and relative emphasize on higher-order needs.

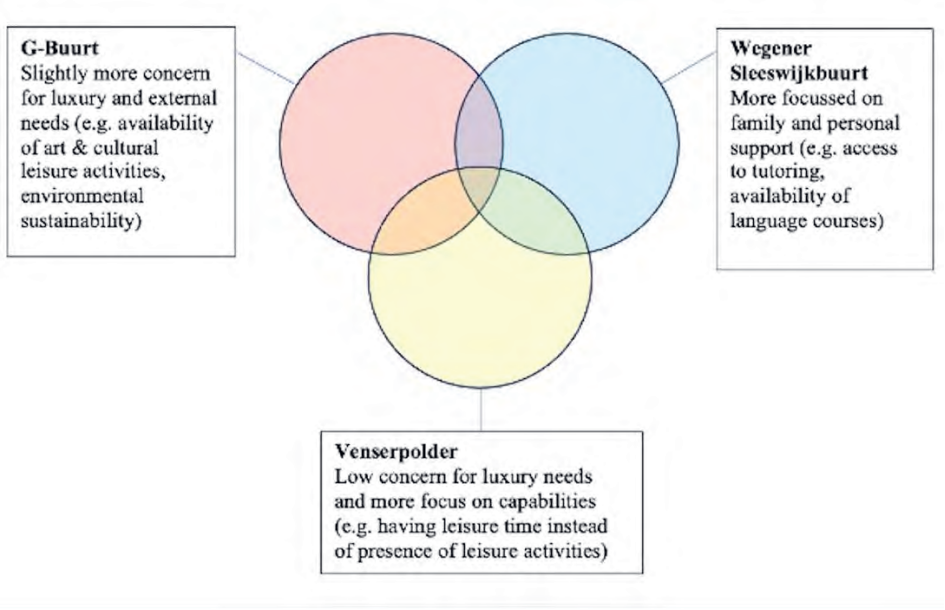


Figure 5: Differences between neighbourhoods in terms of localized wellbeing indicators (source by authors).

Building on this, the prioritization results illustrate how residents make trade-offs between foundational and higher-order needs. By comparing these citizen-defined priorities with municipal programmes, we can assess not only what matters most locally but also where top-down policy alignment succeeds or falls short, a theme elaborated in Section 5.

Second a comparative analysis was done on the neighbourhood priorities to understand a) how neighbourhoods compare in terms of priority setting and; b) how the bottom-up approach to making trade-offs compares to municipal programs represented by the urban redevelopment programs *Masterplan Zuidoost* (MPZO) in G-Buurt and Venserpolder and *Nationaal Programma Samen Nieuw West* (NPSNW) in Wegener Sleeswijkbuurrt. Table 10 shows the results of the comparison.

Table 10: Comparison of bottom-up and top-down established priorities (source by authors).

G-Buurt		**Wegener Sleeswijkbuurt**		**Venserpolder**	
Bottom-up	MPZO	Bottom-up	NPSNW	Bottom-up	MPZO
Equal opportunities: Experienced employment and/or educational opportunities, access to care and support, self-assessment of opportunities relative to others.	Equal opportunities is mentioned as key policy concern and concrete policy goals are formulated.	**Physical health:** Access to healthy food and exercise possibilities.	Sport facilities and healthy & accessible nutrition are mentioned in a contextual manner and in relation to neighbourhood liveability and individual health. However no further mention nor formulated policy goals are found.	**Healthy lifestyle:** Access to healthy food and exercise possibilities, sufficiency of leisure time.	Sport facilities is mentioned, in a contextual manner, in relation to neighbourhood liveability. However no further mention of healthy lifestyle nor formulated policy goals are found.
Safety & nuisance: Experiencing safety, feeling able to express oneself freely and openly, experiencing nuisance.	Safety is mentioned as key policy concern and concrete policy goals are formulated.	**Financial health:** Getting by from income, and (outlook on) financial stability.	Financial health mentioned as key policy concern and concrete policy actions are formulated (including support in paying off debt and ensuring financial stability).	**Financial health**: Getting by from income, and resolving financial issues.	Financial issues is mentioned as a key issue in the contextual description of the district. It is also a reoccurring policy focus in related policy documents. However formulated policy goals are not found.
Social cohesion: Feeling connected to others, availability of social meeting places.	Social cohesion is mentioned, in a contextual manner, as an important aspect of liveability. However no further mention nor formulated policy goals are found.			**Neighbourhood activities**: Satisfaction with the amount and type of activities in the neighbourhood.	Not mentioned.

Thematically, the priorities set by residents align with the general policy focus of the redevelopment plans, improving neighbourhood liveability and enhancing socioeconomic opportunities for residents (MPZO, 2021; NPSNW, 2024). However, the priorities set by residents through the Wellbeing Dashboards add more detailed and neighbourhood-specific input for the formulation of policy goals. Examples are discussed in Section 5.

Neighbourhood-specific differences are particularly instructive. Financial health is prioritized in Wegener Sleeswijkbuurt and Venserpolder, indicating a shared perception of financial resilience as essential to stability. The G-Buurt, by contrast, expresses a more

collective concern regarding equality of opportunity - likely reflecting its more mixed demographic composition and rapid regeneration. Physical health, which residents describe as a foundational element of overall wellbeing, is prioritized in Wegener Sleeswijkbuurt and Venserpolder, while neighbourhood activities are prioritized in Venserpolder due to their role in fostering social connection and strengthening informal care network, which are key components of relational wellbeing (Hoogerbrugge and Burger, 2018). The G-Buurt's emphasis on safety and social cohesion, two interconnected concerns, may reflect residents' sense of disconnection or social fragmentation, particularly among newer, upwardly mobile families whose social networks extend beyond the neighbourhood.

Together, these patterns reinforce the dual insight emerging from the theoretical framework: while basic safety functions as a universal wellbeing foundation, higher-order priorities are context-specific expressions of residents' relational and subjective needs. This duality provides the empirical bridge to the discussion section, where the results are interpreted through the lens of wellbeing economics and their implications for differentiated, inclusive urban policy is explored.

5. Discussion

This study examined what citizen-defined wellbeing indicators reveal about shared and divergent needs across three marginalized neighbourhoods in Amsterdam. The analysis compared locally defined wellbeing indicators measured in co-created wellbeing dashboards to identify patterns in indicator selection, measured outcomes, and resident-defined priorities, situating these within the theoretical frameworks of wellbeing economics and neighbourhood effects. The findings illuminate how experienced wellbeing is both structurally determined and socially enacted, and how bottom-up measurement can contribute to more inclusive and context-sensitive urban policy.

5.1 Common foundations of wellbeing: The persistence of basic safety

Across all three neighbourhoods, residents consistently identify indicators that cluster around a foundational layer of basic safety, comprising financial sufficiency, housing stability, mental and emotional stability, perceived safety, and freedom from stress. This convergence underscores the central tenet of wellbeing economics: that material, relational and subjective

dimensions of life are mutually reinforcing and jointly determine overall wellbeing (McGregor and Pouw, 2017; Pouw, 2020). Even within a high-income welfare state, these results indicate that existential insecurity remains a defining feature of marginalized urban life.

The persistence of basic safety across distinct neighbourhood contexts suggests that it functions as a necessary, though not sufficient, condition for higher-order wellbeing. Without this baseline, relational and subjective domains, such as social participation or self-efficacy, cannot be fully realized. In theoretical terms, the findings empirically validate the multidimensional interaction between "having," "belonging," and "being" that wellbeing economics posits as the core of human flourishing (McGregor and Pouw, 2017).

From a methodological standpoint, the recurrence of these indicators across independently co-created dashboards enhances construct validity. It demonstrates that participatory measurement can generate a shared conceptual structure without imposing external categories. The robustness of the basic safety construct across sites also supports the claim that bottom-up indicators can identify cross-contextual regularities while maintaining sensitivity to local nuances. This is an advantage over top-down indices that treat wellbeing as a uniform construct.

5.2 Divergent priorities and the contextuality of wellbeing

Beyond this shared foundation, neighbourhoods diverge in the relative emphasis placed on higher-order needs. In Venserpolder, residents focused on lifestyle and financial health for daily stability, and neighbourhood activities as levers for social connection and informal care networks. In Wegener Sleeswijkbuurt, priorities centred on physical health and financial resilience, reflecting the demographic profile of multi-generational and migrant households seeking stability and future prospect. In the G-Buurt, equal opportunity, safety and social cohesion dominated, indicating collective concerns about fairness and inclusion in a rapidly changing urban environment.

These divergences corroborate the neighbourhood effects literature, which conceptualizes neighbourhoods as relational systems where individual composition interacts with contextual features such as social mix, institutional responsiveness, and perceived status (Galster, 2012; Hoogerbrugge and Burger, 2018). The findings show that even within administratively similar "deprived" areas, local social ecologies shape how wellbeing is defined and pursued.

Whereas deprivation indices typically classify such neighbourhoods as homogenous, citizen-defined indicators reveal meaningful internal differentiation, consistent with recent evidence that within-neighbourhood inequality can rival between-neighbourhood inequality (Márquez et al., 2019).

5.3 Comparing top-down to bottom-up prioritization

Contrasting the bottom-up priorities with municipal redevelopment programs, i.e. *Masterplan Zuidoost* and *Nationaal Programma Samen Nieuw West*, reveals both alignment and dissonance. While thematic alignment exists around liveability, safety, and opportunity, divergences emerge in emphasis and formulation. For instance, residents in Venserpolder identified "healthy lifestyle" as a key wellbeing priority, connecting access to healthy food and sport facilities to personal stability. Yet municipal plans mention sport facilities only tangentially, omitting nutrition and wellbeing linkages. Similarly, residents' emphasis on financial health exposes design flaws in existing support mechanisms, where access points compromise privacy and perpetuate shame.

These differences illustrate what Rodríguez-Pose (2018) terms the "revenge of the places that don't matter": when institutional frameworks misrecognize or mis-prioritize local realities, trust deteriorates. This is reflected empirically in the consistently low scores across neighbourhoods for "feeling heard by the municipality." While city strategies increasingly invoke "co-creation" and "participation," they remain largely consultative, with limited feedback loops from resident-defined evidence to formal policymaking. Bottom-up indicators thus provide not only descriptive but diagnostic value, identifying where governance gaps coincide with wellbeing deficits.

The contextual variation in higher-order needs also highlights how demographic composition mediates wellbeing concerns. The emphasis on language support and tutoring in Wegener Sleeswijkbuurt reflects the needs of migrant families, while G-Buurt's focus on cultural participation aligns with a higher share of higher-income and retired residents. Such findings substantiate the wellbeing economics proposition that wellbeing is not merely the absence of deprivation but the presence of context-specific capabilities and relational opportunities.

5.4 Methodological contribution: validating bottom-up measurement

The triangulation across three localized dashboards demonstrates the methodological robustness of the bottom-up approach. The combination of participatory indicator development, quantitative validation, and cross-neighbourhood comparison enables a rare integration of inductive and deductive reasoning. Inductively, residents' lived experiences inform indicator formulation; deductively, the recurrence of specific constructs across contexts affirms their analytical generalizability. This dual process enhances both construct validity and external reliability, which are key criteria for scientific rigour in social indicator research (Alkire, 2015).

Moreover, the participatory method addresses two enduring limitations in conventional wellbeing measurement: the contextual and legitimacy gaps (van Beek et al., 2025). By grounding indicators in lived experience, it bridges the contextual gap between abstract policy metrics and local realities. By positioning residents as co-producers of data, it narrows the legitimacy gap, making measurement both epistemically and democratically inclusive. This aligns with Small and Feldman's (2011) argument that the relational embeddedness of wellbeing becomes empirically accessible only when indicators emerge from the social fabric they intend to measure.

The approach thus moves beyond participatory tokenism toward methodological innovation. It transforms participation from a procedural formality into an epistemological principle, one that generates new empirical knowledge about how wellbeing is constituted at the neighbourhood scale.

5.5 Implications for urban policy: Balancing equity and diversity

Empirically identifying both shared and context-specific wellbeing dimensions provides a practical decision rule for inclusive policy design: safeguard a universal baseline of basic safety while tailoring additional investments to local priorities. This "dual-layer" principle operationalizes Amsterdam's commitment to unequally invest to create equal opportunities, translating an abstract ideal into actionable policy logic.

The comparative findings suggest that universal investments should target the foundational dimensions common across all neighbourhoods, income security, housing stability, perceived safety, and stress reduction, while differentiated interventions should address the particular

constellations of needs that emerge locally, such as financial literacy, youth programs, or social cohesion initiatives. This structure allows for redistributive fairness without imposing uniformity, aligning with wellbeing economics' call for equity in diversity (Pouw, 2020).

Importantly, the participatory measurement process itself constitutes a governance innovation. It strengthens residents' collective efficacy and voice, thereby enhancing relational wellbeing and trust in institutions. Embedding citizen-validated dashboards into municipal monitoring systems could institutionalize this co-production of knowledge, making wellbeing both a policy goal and a participatory practice.

6. Conclusion

This study examined what bottom-up wellbeing indicators reveal about shared and diverging needs across marginalized neighbourhoods in Amsterdam, and how such insights can inform targeted and inclusive urban policy. By comparing citizen-defined and -validated wellbeing dashboard from three neighbourhoods, the analysis demonstrates that locally generated indicators yield a more nuanced and empirically grounded understanding of urban wellbeing than conventional top-down measures.

Across all three sites, residents identified a consistent foundation of "basic safety" - comprising financial sufficiency, housing stability, perceived safety, mental balance, and relief from stress - as the essential baseline of wellbeing. This shared layer indicates that even in a high-income welfare state, existential insecurity remains a persistent constraint on human flourishing. Above this foundation, neighbourhoods diverged in their higher-order priorities: Venserpolder residents emphasized financial health and social network; Wegener Sleeswijkbuurt residents stressed physical health and family stability; and G-Buurt residents prioritised equal opportunity, safety, and social cohesion. These divergences reveal that neighbourhoods conventionally classified as "deprived" are internally heterogeneous and that wellbeing is contextually constructed through the interplay of demographic composition, social relations, and local institutions.

The findings validate the multidimensional structure of wellbeing economics, in which material, relational and subjective dimensions interact dynamically to shape people's capacity to live well. They also extend neighbourhood-effects theory by demonstrating that

relational and subjective indicators can capture intra-neighbourhood differentiation that compositional models fail to detect. In doing so, the study shifts the analytical lens from explaining why neighbourhoods differ to understanding how wellbeing is produced, manifested and maintained within them.

Methodologically, the participatory approach bridges two long-standing gaps in wellbeing measurement: the contextual gap between standardized indicators and lived realities, and the legitimacy gap regarding whose values inform policy. By grounding measurement in citizen experience and validating it through comparative analysis, the study demonstrates that bottom-up indicators can achieve both construct validity and external reliability. This approach thereby transforms participation from a normative ideal into a methodological principle for generating credible, actionable knowledge.

In policy terms, the results suggest a practical framework for inclusive urban development: safeguard a universal baseline of basic safety while tailoring additional investments to neighbourhood-specific priorities. This dual-layer principle offers an empirical method for implementing Amsterdam's commitment to "unequally invest to create equal opportunities." Moreover, the participatory process itself enhances relational wellbeing by strengthening local agency and institutional trust, indicating that measurement and governance can be mutually reinforcing. Several limitations temper these conclusions. The cross-sectional design precludes causal inference; demographic underrepresentation may bias findings; and the focus on a single metropolitan context limits generalizability. Future research should therefore apply longitudinal and comparative designs, integrate citizen data with administrative datasets, and explore statistical clustering of wellbeing profiles within neighbourhoods. Institutionalizing participatory dashboards in municipal monitoring systems could further align measurement precision with lived experience.

Overall, the study shows that marginalized neighbourhoods share a common foundation of wellbeing yet differ in the pathways through which it is achieved. Recognizing this duality allows urban policy to move beyond uniform deprivation metrics toward differentiated, evidence-based investments that reflect residents' own definitions of what it means to live well.

Chapter 5

Collective organization for community wellbeing: towards a Wellbeing Regime in Amsterdam Southeast [14]

[14] Based on article 4: van Beek, J.E.M. (under review). Collective organization for community wellbeing: towards a Wellbeing Regime in Amsterdam Southeast.

Abstract

In many high-income urban areas, progressive movements seek to democratise policy processes and broaden the definition of progress beyond economic output. In Amsterdam, these developments have generated a series of community-initiated experiments with participatory, multidimensional wellbeing measurement, resulting in several community-owned "Wellbeing Dashboards" that articulate resident-defined wellbeing priorities. This article examines whether and under what conditions such participatory tools can acquire and sustain local governance influence. By integrating Wellbeing Economics with Urban Regime theory, the analysis moves beyond assessing the quality or relevance of participatory indicators alone, towards understanding the coalitional, institutional, and resource conditions that shape their policy traction. Findings show that while the Wellbeing Dashboards generate substantive epistemic value and foster new arenas for dialogue, they currently operate within governance arrangements that significantly constrain their transformative governance potential.

Keywords: Wellbeing Economics; policy co-creation; community empowerment; Urban Wellbeing Regime; collective organization

1. Introduction

Since the 1980's, urban governance across Western Europe has been shaped by a dominant neoliberal policy paradigm that privileges economic competitiveness, real estate-led development, and public–private partnerships (Atkinson, 2000; Spierings, 2012; de Koning, 2015; Yardımcı, 2022). In this model, market-oriented instruments and entrepreneurial governance are expected to generate prosperity that "trickles down" and benefits everyone. Yet extensive research shows how benefits disproportionately accrue to already advantaged groups and places, while marginalized communities experience persistent exclusion from the economic and social opportunities required for a flourishing life (Uitermark, 2009; Bouteche and Bougdah, 2024; Hubbard, 2016). As Wacquant (2007) argues, these governance configurations have actively contributed to "advanced marginality," particularly in high-income cities where investment priorities systematically overlook neighbourhood-specific needs. It tends to incorporate a vision of the "good city" that normalises a market-driven urban landscape and consumption-driven behaviour, while neglecting alternative views and needs (de Koning, 2015; Yardımcı, 2022).

One mechanism reinforcing these inequalities is the continued reliance on standardised, city-level indicators to diagnose urban conditions and shape intervention strategies. Such indicators insufficiently capture the lived realities of residents facing social exclusion, financial precarity, or cumulative disadvantages (Sauri et al., 2025). Empirical work shows that top-down indicators routinely miss locally salient needs and inadvertently silence marginalised communities, who hold little influence in shaping what is measured or prioritised (Tilly, 2017; Gupta et al., 2023). This misalignment contributes to what recent scholarship identifies as the "urban wellbeing paradox": many affluent European cities, including Amsterdam, London, Oslo, and Paris, experience economic growth alongside declining subjective wellbeing and rising dissatisfaction with local opportunity structures (Carlsen and Leknes, 2022; Finnemann, 2024; Jurčišinová et al., 2025; Lenzi and Perucca, 2023).

In response, global movements such as Beyond GDP and New Municipalism seek to democratise policy processes and broaden the definition of progress beyond economic output (Bianchi, 2024; Stiglitz et al., 2018; Thompson, 2020). In Amsterdam, these developments have generated a series of resident-initiated experiments with participatory, multidimensional wellbeing measurement, resulting in several community-owned Wellbeing Dashboards.

Developed through a robust bottom-up methodology, the Dashboards articulate resident-defined indicators across material, relational, and subjective dimensions of wellbeing and neighbourhood life. Prior studies show that these processes and tools enable epistemic and procedural community empowerment by enhancing vocalization skills, elevating their priorities and offering context-sensitive evidence that complements official statistics (Bianchi, 2022; Moulaert, 2010; Sollis, 2023; van Beek et al., 2025). However, these and other studies also show how the transformative potential of community-owned tools depends on yet is simultaneously challenged by their interaction with policy structures and practice (Bianchi, 2024; Dardot and Laval, 2015; Gaber, 2020; Landemore, 2020; van Beek et al., 2025). Despite the presence of progressive coalitions and experimental spaces for participatory reforms in Amsterdam, changes are slow and incremental. Municipal structures and policy routines remain shaped by hierarchical, target-driven, and efficiency-oriented logics that are not readily commensurable with principles of shared ownership and co-governance (Verrest et al., 2021; van Beek et al., 2025).

In this context, the following article investigates efforts to institutionalise the Wellbeing Dashboards within local governance through multi-stakeholder collaboration involving residents, municipal officials, (formal and informal) welfare organisations, and local professionals. The central empirical question is whether resident-defined wellbeing needs can meaningfully shape policy agendas, decision-making processes, and resource allocation at neighbourhood level, and under what institutional or political conditions this might occur. To address this, wellbeing economics theory is integrated with Urban Regime theory. Whereas wellbeing economics explains why multidimensional, resident-defined measurement is essential for identifying neighbourhood needs, Urban Regime theory clarifies how existing governance arrangements influence whose needs become actionable policy priorities. This combined perspective allows us to examine the structural, relational, and resource-based constraints that shape the prospects for a wellbeing-oriented transformation in urban governance afresh.

The article draws on action-oriented, community-based research conducted in Amsterdam between 2021 and 2025. Data include interview transcripts, observations, meeting notes, and materials produced during the participatory development and experimental policy use of the Wellbeing Dashboards, covering multiple neighbourhoods and actors across different levels of the urban governance system. By applying a heuristic regime framework (Stone, 2005;

van Ostaaijen, 2024), the article analyses how agendas are set, which coalitions form, what resources can be mobilised, and how cooperation unfolds around the Dashboards. In doing so, it contributes theoretically by proposing the concept of a Wellbeing Regime, that is a governance configuration in which community-defined wellbeing needs structure agenda-setting and resource mobilization, and empirically by identifying the opportunities and constraints for such a regime in Amsterdam's contemporary governance context.

The remainder of the article is organised as follows. First Wellbeing Economics theory is elaborated on as participatory and contextual measurement framework and linked to Urban Regime theory to propose a heuristic Wellbeing Regime framework (section 2). This is followed by a brief description of the research approach, methods and contexts (section 3). Section 4 analyses the emerging collaborative structures around the Wellbeing Dashboard through the proposed framework, organized into the four building blocks: agenda, governing coalition, resources, scheme of cooperation. Then the outcome and potential for sustained community-led collective organization is discussed (section 5). Section 6 concludes and looks at limitations and future research directions.

2. Theoretical framework

2.1 Wellbeing Economics as a Participatory, Context-Specific measurement Framework

Wellbeing economics challenges the assumption that economic growth provides an adequate proxy for quality of life (Pouw and McGregor, 2014; Pouw, 2020; Sollis et al., 2022). Research consistently shows that subjective wellbeing does not necessarily move in tandem with GDP or other macroeconomic indicators and is even declining alongside economic flourishing in various urban areas (Costanza et al., 2007; Stiglitz et al, 2009; von Wirth et al., 2015). As a result, scholars and institutions increasingly call for integrated, multidimensional measurement frameworks that encompass material, relational, and subjective domains (Durand and Exton, 2019; Exton and Shinwell, 2018; Pouw, 2020; OECD, 2023).

Such integrated frameworks offer three main contributions. First, they capture lived experiences that remain invisible in conventional statistics, thereby revealing forms of deprivation and opportunity that matter for everyday life (Cardoso et al., 2022; Gupta et al., 2015). Second, they improve policy evaluation by serving as early warning indicators for

emerging social tensions (e.g. lack of trust; polarization) that economic metrics alone cannot detect (Blanchflower and Oswald, 2020; OECD, 2024). Third, they promote a holistic understanding of progress that aligns more closely with what residents value and need (Costanza et al., 2007; Pouw, 2020; Sollis, 2022; Stiglitz et al., 2018).

A growing body of work argues that wellbeing measurement must also be participatory, responding to two persistent limitations of top-down indicator systems. First, the contextual gap, where standardised metrics fail to reflect local realities, limiting policy relevance (Pouw, 2020; Verrest and Pouw, 2026). Second, the legitimacy gap, where measurement frameworks reflect expert or institutional priorities rather than resident-defined concerns (Rodríguez-Pose, 2018; Sollis, 2023; van Beek et al., 2025).

Participatory approaches position citizens as producers, not merely subjects, of knowledge. This shift resonates with longstanding traditions in social innovation scholarship, which emphasise that governance transformation requires identifying and responding to community needs comprehensively and representatively (Moulaert, 2010; Baker et al., 2015; Galego et al., 2019). The co-production of knowledge is thus both an epistemic process (capturing situated experiences) and a political one (redistributing voice and authority). Wellbeing economics is therefore well-suited to identifying what matters to residents (Sollis et al., 2022; Sollis, 2023). Yet its transformative promise depends on whether governance systems act upon these insights. While measurement can illuminate needs, it cannot by itself shift agendas, reconfigure power relations, or mobilise resources. For such changes to occur, we must examine the institutional structures and coalitional dynamics that govern how evidence enters policymaking. Urban Regime theory provides precisely this lens.

2.2 Urban Regime Theory: Understanding Power, Coalitions, and Governance Constraints

Urban Regime theory conceptualises local governance as a process of coalition-building, whereby public and non-public actors align their resources and interests to pursue shared agendas (Stone, 2005). Rather than focusing solely on formal institutions, regime theory highlights how informal institutions, norms, interdependencies, and long-standing practices determine what cities prioritise and how they act (van Ostaaijen, 2024). Four core insights of regime and wider urban governance theory are particularly relevant for analysing participatory wellbeing initiatives:

1. Agenda-setting is shaped by power and position.

Agendas emerge from negotiation among actors with uneven power, influence, and access (Stone, 2005; van Ostaaijen, 2024; Lukes, 2005). Actors whose priorities align with dominant values and institutional logics, or have the (latent) power to influence those, are more likely to shape what counts as a policy problem (Lukes, 2005; Kühn et al., 2016). The distribution of power amongst actors and their level of participation (e.g. tokenism vs. partnership) strongly determines the outcome of the agenda (Arnstein 1969; Fischer, 2012).

2. Coalitions form based on resource complementarities.

Effective governance requires combining resources, i.e. finances, legitimacy, knowledge, organisational capacity, that no single actor possesses (van Ostaaijen, 2024). Coalitions tend to privilege actors who bring valued resources, generally marginalizing community groups and overlooking local knowledge as valuable resources, despite proven policy value (Belausteguigoitia, 2019; Chowdhurry, 2021; Kühn et al., 2016).

3. Institutional routines create path dependency and lock-in.

Research in European cities shows that even well-designed participatory initiatives often fail due to bureaucratic hierarchies, risk-averse cultures, and fragmented responsibilities (Grander et al., 2021; Temenos and Lauermann, 2020). These structures limit the sustained influence of resident-defined knowledge. Dependencies on set policy frameworks and top-down targets tend to create a "participation-paradox", as this constraints the influence of participation once the process moves towards decision-making and implementation phases (Reinert and Sinnig, 1997; Karic, 2024). Institutional routines may also build exclusionary process into participatory governance approaches by only recognizing institutionally aligned narratives and acts (Verloo, 2023).

4. Democratization depends on institutional innovation, not participation alone.

Advances towards higher citizen participation, such as co-creation processes, often outpace policy practice (Arnstein, 1969; Metzger et al., 2014; Swyngedouw, 2005; Bertolin and Salone, 2024). Numerous studies highlight barriers including bureaucratic language, excessive formalism, limited horizontal coordination, lack of organization wide and hierarchical support, and rigid power structures (Arnstein, 1969; Bakker et al., 2012; Fung,

2015; Torfing et al., 2012; Leino and Puumala, 2020; Sollis, 2023; Mizzau et al., 2025). New municipalism literature argues that meaningful democratisation requires institutional arrangements that support self-management, co-production/ -creation, and democratic control, ideally achieving "non-appropriability", the condition in which communities retain substantive influence over policy processes (Laval and Dardot, 2015; Bianchi, 2024).

Despite these barriers, municipalities, especially in decentralised systems like the Netherlands, remain promising sites for governance innovation. Their proximity to residents enables more tailored responses to local needs, and their organisational flexibility allows experimentation with participatory approaches (UNDP, 1999; Geva and Rosen, 2023; Mizzau et al., 2025). Local municipal officials can proactively lead participatory projects and act as essential mediators between institutional and community actors. They can "[frame] a problem institutionally in a way that meets administrative constraints as well as the local agenda" (Mizzau et al., 2025, p. 345). On the other hand, bottom-up organizations have proven potential to empower resident communities and innovatively contribute to local welfare production, especially when they receive normative and material support and are inscribed in transformative governance visions (Bianchi, 2022; Moulaert, 2010).

2.3 Integrating both Lenses: Towards a Wellbeing Regime

Combining wellbeing economics with urban regime theory enables a holistic analysis of participatory wellbeing measurement within local governance structures:

- Wellbeing Economics explains what residents need, why multidimensional indicators matter, and how participatory measurement enhances legitimacy and contextual relevance.
- Urban Regime theory explains how governance structures mediate the uptake of these needs through agendas, coalitions, and resource dynamics.

This integrated perspective supports the conceptualisation of a Wellbeing Regime: a governance configuration in which community-defined wellbeing priorities hold substantive influence over agenda-setting and resource mobilisation. To assess whether such a regime is emerging in Amsterdam, or could emerge over time, a heuristic framework proposed by van Ostaaijen (2024, p. 524) is used and combined with a wellbeing economics perspective. The original framework operationalises Urban Regime analysis into four dimensions: agenda,

governing coalition, resources, and scheme of cooperation. The integration of wellbeing economics results in the urban Wellbeing Regime framework shown in table 11.

Analysing the case in Amsterdam Southeast through this combined framework enables the identification of enabling conditions and structural barriers for the institutionalisation of participatory wellbeing measurement in Amsterdam Southeast. It also allows us to evaluate whether the emerging collaborative structures around the Wellbeing Dashboards demonstrate characteristics of a Wellbeing Regime, or whether existing governance logics currently prevent such a transformation.

Table 11. Urban Wellbeing Regime framework (source by author).

Building blocks	**1. Agenda**	**2. Governing Coalition**	**3. Resources**	**4. Scheme of Cooperation**
Questions for analysis	Which problems are prioritised, how do resident-defined wellbeing needs enter agenda-setting, and where do tensions emerge between community wellbeing priorities and institutional objectives.	Which actors participate in implementing the wellbeing agenda, what roles do they play, and how do power asymmetries shape coalition dynamics.	Which tangible (funding, staff) and intangible (legitimacy, knowledge, networks) resources are available, who controls them, and to what extent can they be mobilised for community-defined wellbeing priorities.	How do actors collaborate, which institutional routines facilitate or constrain cooperation, and to what extent do these arrangements allow for sustained, community-led influence.

3. Methods and data

3.1 Approach

This article is part of an action-oriented and community-based participatory research (CBPR) in Amsterdam that involves the bottom-up development and use of community-owned policy tools - the Wellbeing Dashboards. An action-oriented and CBPR approach is used for its intend to create social impact, change in local systems (Adelman, 1993), and an inclusive and democratic research process (Flicker et al., 2007). It connects researchers, communities and other stakeholders, aiming to conduct research and collect evidence with shared added value (Guta and Voronka, 2020). Moreover, CBPR was chosen to enable emancipatory

knowledge-creation that represents the community's needs and understandings (Reason and Bradbury 2001).

The research follows an iterative process of action and reflection (Hill, 2014). A first article reflected on the development of the first Wellbeing Dashboard through a process of co-creation (van Beek et al., 2025). This produced a robust bottom-up method that since then has been applied in other neighbourhoods[15]. Further analysis shows how the method produces credible data that complements official indicators, enables targeted neighbourhood-level policy inputs, and supports more inclusive and context-sensitive development strategies (chapters 3 and 4). The current article reflects on a subsequent process towards structural policy use of three Wellbeing Dashboards in the neighbourhoods G-Buurt, Reigersbos and Venserpolder. The data used in the current article was collected throughout the development and experimental multi-stakeholder use of the Wellbeing Dashboards in the three neighbourhoods and includes the perspectives of both residents and urban professionals. The data collection spans over a period from 2021 to 2025 and comprises interview transcripts, reports, meeting notes and field notes (listed in table A4.1 in appendix A4). For privacy purposes all data is used anonymously, and reference to specific neighbourhoods is avoided.

3.2 Context

The three neighbourhoods are geographically and institutionally situated in the Southeast district of Amsterdam. The Southeast district is not only spatially detached from Amsterdam's city centre but also socioeconomically and politically. Contrary to the city centre and its neighbouring West, South and East districts, the Southeast district has a relatively low investment appeal and struggles with grasping benefits of the cities' development. In addition, low voting rates and systematic underrepresentation of groups concentrated in the Southeast district, makes that many of its residents' aspirations and needs are excluded from policymaking (O&S, 2024). This leads to unequal distribution of power and opportunity vis-à-vis other districts. While neighbourhoods differ in terms of contextual

[15] Image A4.1 in appendix A4 shows a summarized version of the bottom-up process for developing and use of the Wellbeing Dashboards.

policy priorities, there is consistent concern for safeguarding “basic safety” across the district (chapter 4).

Districts are governed by an executive committee that is responsible for day-to-day management and administration, with delegated decision-making power in domains such as public space, green spaces, parking and the local economy. The executive committee is supervised by a separate district committee who represents the interests of residents through advice, motions and participation (Gemeente Amsterdam, n.d.). As in all districts, neighbourhoods can apply for a budget that allows them to self-organize and take ownership over neighbourhood improvements. The Southeast opted for an allocation model in which community building is central and therefore only grants applicants organized as a “resident collective” with legal form (Gemeente Amsterdam, n.d.). Moreover, the collectives must show they are inclusive and work representatively. The neighbourhood actors discussed in this article are all involved in resident collectives and work, or are familiar, with neighbourhood budgets.

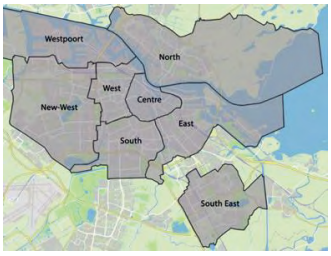


Image 1: Map of Amsterdam’s districts (VSPA, n.d.).

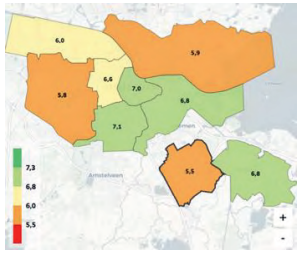


Image 2: Map showing the average social-economic scores per district with Southeast scoring lowest (5,5) (CBS, 2023).

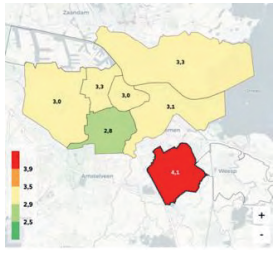


Image 3: Map showing % of residents (18 - 66 year) receiving unemployment benefits per district with Southeast scoring worst (4,1%). (UWV, 2021).

4. Results

The following section presents the analysis of the emerging collaborative structures around the Wellbeing Dashboards through the heuristic Wellbeing Regime framework. The outcome is discussed in section 5.

4.1 Agenda

Collaboration around the Wellbeing Dashboards emerges from concerns over the legitimacy and effectiveness of policy, shared between neighbourhood and policy actors (source B, J). This concern has given rise to governance reform objectives and interests in enhancing community-driven development approaches, which is formulated by city governance departments and exercised through district policy assignments and the long-term development program Masterplan Southeast (MPZO). Neighbourhood actors involved in community development activities repeatedly call for increased participation and community-ownership in policy processes (source J). Policy actors involved in the MPZO commit to a governance model in which "*choices are made based on the real world, not the system world*" (p. 49) and in which residents participate as experts and partners in integrated policy (source A). After two years, however, a critical evaluation of program signalled a problematic lack of community participation and the risk towards becoming a classic, top-down, gentrification program (source C and G). This gave rise to a "community[16] development plan" that formed the basis for a reorientated MPZO program, including the following new principles (source C, p. 6):

- The interests of affected residents have priority in decision-making
- The community has a say in how resources are distributed and deployment
- Sustainable integration of expertise from residents (groups) and grassroots organizations that inform and validate the "system-world"

Wellbeing Dashboards are put forward by neighbourhood and policy actors as local policy instruments that can represent residents' voices and address the gap between residents and

[16] In this context, "community" refers to residents and local grassroots organizations/entrepreneurs who (based on the needs of their own resident base) actively contribute to addressing local social challenges.

policy professionals (source D, H). They enable prioritization of neighbourhood-specific needs that cover material, subjective and relational aspects of wellbeing, providing new insights[17] for effective policy. In that capacity, the structural use of the Wellbeing Dashboards produces an agenda for collaboration between neighbourhood and policy actors. It is still being explored what this collaboration should entail and how the Wellbeing Dashboard becomes part of policy cycles to put community wellbeing needs on the policy agenda (source G, I, N). So far, policy priorities identified by each neighbourhood have entered policy conversations to various extents, however concrete policy formulation and community-led policy action has not happened yet.

4.2 Governing coalition

The neighbourhood actors participating in implementing the agenda consist of active residents organized in neighbourhood collectives and/or involved in local organizations. They have a crucial role in reaching residents and providing local knowledge to validate policy, which is recognized and sought after by policy actors and creates incentive to collaborate (E, F, J). The policy actors in the current governing coalition are involved in the MPZO and various district-level integrated policy approaches. They are responsible for community participation and/or -validation in policy domains related to liveability and safety, sustainable energy transition, financial stability, and housing (source F). The level of involvement various per actor and overtime.

Coalition dynamics are most strongly determined by the pace and investment of policy actors due to their dominant position in terms of decision-making power and resources. While they may aim for community collaboration, they work within their given assignments and need to meet objectives and high-level orders in accordance with top-down allocated budgets, *"I only implement policy and my superiors say they just do what the city council expects them to do"* (source I). Neighbourhood actors understand this, however, also expect policy actors to move towards them and put effort into creating more equal conditions, "*The Wellbeing Dashboard must form a shared agreement and ensure equal commitments*" (source B). Trust of neighbourhood actors is fragile due to past experiences, "*We [neighbourhood community] are done with putting effort into a pilot project for a year or two, and then you hear, "well,*

[17] Localized and resident-defined wellbeing indicators complement and validate existing policy indicators, with more than half providing unique policy insight (overview given in chapter 3).

there's no more money", but it takes time to get somewhere, it really just takes time and support" (source J).

In each collective meeting the importance of the right coalition is expressed, "*it is important to get the right people organised soon, structurally and based on the same vision*" (source E). It is also ongoingly discussed that the current coalition lacks actors who control the required resources and have the power to mobilize these for implementing the agenda. This mainly concerns policy actors that operate within the municipality as decision-makers and/or who have connections that are influential in this regard (I).

4.3 Resources

The Wellbeing Dashboard functions as central resource, giving rise to collaboration. It is described by policy actors as a valuable policy tool for informing and evaluating policy, *"developing a clear and widely supported vision for neighbourhood development and intervention*" (source F), and to facilitate multi-actor collaboration from a shared, and community-validated, starting point (source E). Content-wise, policy actors noticed direct complementarity between the community-chosen priorities and their policy assignments (F). And highlight the policy value of the Dashboard's integrated measurement: "*The need for a healthy lifestyle combined with the financial experiences of the residents offers an opportunity to explore how homes can be made more sustainable, enabling them to reduce their energy costs, live healthier lives and improve their financial position*" (F). Neighbourhood actors feel supported by the Wellbeing Dashboards in their activities and interaction with policy. They formulate a clear role for their Wellbeing Dashboard that fits their way of working and supports objectives (source D):

- Neighbourhood 1: Instrument to influence, inform and evaluate policy; strengthening the match between policy and neighbourhood needs.
- Neighbourhood 2: Instrument for identifying, communicating and putting pressure on addressing urgent neighbourhood matters.
- Neighbourhood 3: Strategic instrument in policy conversations and steering budget allocations based on community needs.

Committed and sufficient financial resources are lacking in the current coalition. To structurally and collaboratively use the Wellbeing Dashboards in policy processes, policy

actors need to commit paid working hours, and neighbourhood actors need to receive financial compensation for their hours (source D, I).

4.4 Scheme of cooperation

The collaboration between neighbourhood and policy actors thus far happens through various structures. It involves exchanging ideas during informal conversations as well as formal meetings that follow institutional ways of organizing and reporting. However, all forms of collaboration have remained sporadic. The lack of institutional arrangements and routines, in this case, diminishes the collaboration potential in terms of inclusion and continuity. Not all actors are equally included or aware when collaboration occurs. For example, a few neighbourhood and policy actors are connected via different projects and occasionally share thoughts on the Wellbeing Dashboard collaboration. This has led to confusion and feelings of exclusion, for example, when some neighbourhood actors were not up to date and couldn't equally participate in one of the collective meetings (source D, L, M). In addition, developments towards collaboration are scattered. Only one neighbourhood has frequent meetings and regular contact with policy actors. Although it provides a promising example, it also creates (felt) asymmetrical power relations between neighbourhood actors and causes discrepancies in objectives. Moreover, the lack of continuity and structural follow-up from policy actors challenges sustained interest and willpower. Several neighbourhood actors have expressed frustration in the process and are becoming less inclined to invest time in setting up collaboration, rather prioritizing "old" ways of doing this (source K and L).

Current bureaucratic arrangements that policy actors work with do not align with community ways of working. One of the neighbourhood collectives struggles with the municipality's organizational complexity and lack of clear and stable contact points (source L). Other neighbourhood actors are challenged by the municipality's requirements on community organization. One of the neighbourhoods has developed their own, informal, way of organization that proves effective and valuable to the community yet is not formally recognized by the municipality (source K). Neighbourhood actors flag that such misalignments require additional voluntary time investment, which seems to (re)produces reluctance and distrust towards collaboration with policy actors. Already in the early stages of Dashboard development, residents expressed the need for maintained community-ownership: "*If the Wellbeing Dashboard is not presented and explained by residents themselves, policymakers will interpret the numbers from their own perspective and use them*

to meet their own objectives" (source J). In addition, cooperation schemes should have mechanisms that support communities to take ownership and equal the level playing field, for example "*Residents must be given the opportunity and assistance to overcome their uncertainties and (sense of) lack of knowledge before entering into dialogue with professionals*" (source E).

Neighbourhood actors have formulated conditions for collaboration that should safeguard equal but community-led collaboration (source D):

- Ensured municipal recognition and support for neighbourhood collectives
- Transparency regarding local policy plans and finances
- Adherence to bottom-up approach in which the voice of residents remains leading
- Commitment to frequent feedback moments and evaluation to assess effectiveness of collaboration and collective interventions

There is a mutually shared need for setting up "*a governance model in which roles and responsibilities are clearly defined and assigned*", and that offers a structure for "*frequent communication and evaluation*" (source F, I). Policy actors also underline the need for structural financial support that can strengthen community organization and maintain local ownership "*financial and other resources are needed to enable residents to identify and achieve their goals*", "*collaboration requires a strong, financially compensated (!), community organization*" (source F). However, when neighbourhood actors asked to what extent they can guarantee those conditions, they explained that only their superiors have control over this. Some policy actors started to express scepticism on receiving commitment from higher-level policy layers, among others because of organizational complexity *"the amount of governance layers will pose a big challenge"* (source I), and the dominant "*I pay, so I decide*" mentality that may dismiss the bottom-up approach (source N).

5. Discussion

This article set out to examine whether and under what conditions resident-defined wellbeing priorities, articulated through community-owned Wellbeing Dashboards, can acquire sustained influence in neighbourhood-level governance. By integrating Wellbeing

Economics with Urban Regime theory, the analysis moved beyond assessing the quality or relevance of participatory indicators alone, towards understanding the coalitional, institutional, and resource conditions that shape their policy traction. The findings show that while the Wellbeing Dashboards generate substantive epistemic value and foster new arenas for dialogue, they currently operate within governance arrangements that significantly constrain their transformative potential.

5.1 Limited participatory wellbeing measurement without regime change

From a wellbeing economics perspective, the case strongly confirms the theoretical claim that multidimensional, participatory measurement captures neighbourhood needs that are invisible to standard policy metrics. Across the three neighbourhoods, the Dashboards made explicit how material insecurities (such as energy poverty or financial stress) are tightly interwoven with relational factors (trust, safety, institutional recognition) and subjective experiences (control, dignity). These findings align with arguments that wellbeing is produced at the intersection of lived experience and opportunity structures, rather than through sectoral-siloed interventions (Pouw, 2020; Costanza et al., 2007).

However, the analysis also underscores a core limitation in much of the wellbeing measurement literature: the assumption, which is often implicit, that better indicators will naturally lead to better policy. In the Amsterdam Southeast case, resident-defined priorities did enter policy conversations, but did not systematically translate into agenda-setting authority or resource allocation. Wellbeing economics thus needs to be more explicit about its political economy: measurement can illuminate needs, but cannot on its own reconfigure the power relations that determine what gets acted upon. The findings support Sollis' (2023) contention that impact hinges not on participatory wellbeing measurement per se, but on whether participatory outputs are institutionally embedded in decision-making arenas that control material and symbolic resources.

5.2 Epistemic resources and fragile coalitions

Urban Regime theory helps explain why this translation remains partial. The findings show that an emergent coalition has formed around shared concerns over policy legitimacy and effectiveness, bringing together resident collectives, district officials, and professionals involved in integrated policy programmes such as the Masterplan Zuidoost (later followed by the development Programme "Samen Nieuw West" in another area of Amsterdam). In

regime terms, the Wellbeing Dashboard functions as a new, boundary-spanning resource: it provides locally legitimate knowledge, aligns with ambitions for integrated planning, and helps actors coordinate around a shared narrative of "community-led development".

Yet, this epistemic resource remains weakly coupled to decisive power and therefore, as stipulated by regime theory, does not meaningfully shape policy agendas (Stone, 2005; van Ostaaijen, 2024). The governing coalition lacks actors positioned to mobilise substantial financial and bureaucratic resources, such as senior municipal decision-makers or departments controlling programme budgets, that give communities power over policy agendas (Kühn et al., 2016). As a result, agenda-setting remains dominated by pre-defined policy assignments and targets, especially in domains of safety, liveability, housing, and energy transition. This reproduces what Lukes (2005) describes as a second and third face of power: not overt exclusion, but structural constraint, where community priorities are acknowledged yet continually subordinated to institutional imperatives.

Importantly, the findings nuance regime theory by highlighting the precariousness of coalitions that rely heavily on goodwill and experimentation without formalised mandates. While policy actors expressed recognition of the Dashboards' value, their capacity to act was bounded by hierarchical accountability, fragmented governance layers, and performance regimes. This created asymmetries in pace, expectations, and risk exposure that were acutely felt by neighbourhood actors, for whom participation entailed unpaid labour and reputational stakes within their communities.

5.3 The participation paradox and the risk of extractive co-creation

A central tension emerging from the analysis is what can be understood as a participation paradox: community participation is stimulated and influential during phases of problem exploration and validation, but this diminishes as processes move towards prioritisation, budgeting, and implementation. This dynamic mirrors earlier findings in participatory governance research (Arnstein, 1969; Reinert and Sinnig, 1997; Karic, 2024) and is empirically evident in the observed sporadic, non-institutionalised collaboration structures in combination with the existing asymmetrical power structures.

From the perspective of neighbourhood actors, this dynamic poses a threat to community ownership. The fear repeatedly articulated, that the Dashboards might be appropriated, reinterpreted, or instrumentalised within "system-world" logics, echoes critical accounts of

co-creation becoming extractive rather than emancipatory (Dardot and Laval, 2015; Bianchi, 2024). Trust, which earlier research also identified as a precondition for engaged participation (van beek et al., 2025), appears here as an outcome that must be continually produced through transparency, reciprocity, and material commitment. Delays, ambiguity, and the absence of clear guarantees were interpreted not only as bureaucratic inertia but also, following Lukes (2005), as a subtle exercise of power that maintains the status quo.

5.4 Towards a Wellbeing Regime: institutional innovation beyond pilots

The concept of a Wellbeing Regime, proposed in this article, proves analytically useful precisely because it foregrounds these tensions. The findings suggest that Amsterdam Southeast currently exhibits regime *fragments* rather than a consolidated Wellbeing Regime. There is convergence at the level of discourse and diagnostics, i.e. what problems matter and why, but not yet at the level of institutionalised authority and resource mobilisation.

Three forms of institutional innovation emerge as necessary conditions for moving towards a Wellbeing Regime. First, innovation in agenda-setting: resident-defined wellbeing priorities need formalised entry points into policy cycles, such as mandated use of Dashboards in neighbourhood plans, budget deliberations, or programme evaluations. Without such anchoring, participatory insights remain advisory rather than authoritative, emphasizing much of the existing participation literature (among others, Arnstein, 1969; Fung, 2015; Sollis, 2023). Second, innovation in resource governance: sustained community-led influence requires structural funding for community organisation, compensation for resident labour, and dedicated municipal capacity to work across policy silos. This echoes broader findings in social innovation literature that empowerment is contingent on material support, not only recognition (Moulaert, 2010; Galego et al., 2021). Third, innovation in social relations and learning: both community actors and policy professionals are engaged in a process of mutual learning that involves unlearning technocratic reflexes and developing new competencies. For policy actors, this entails shifting from data-driven control to facilitative governance; for neighbourhood actors, gaining access to policy literacy without being forced into institutional conformity. Such learning processes are fragile and contextual, they require protection from short-term performance pressures and, as pointed out in other research, need to be inscribed within a broader, widely shared, vision to transform urban governance (Moulaert, 2010; Bianchi, 2022; Mizzau et al., 2025).

The case speaks to wider debates in European urban and regional studies. Single-city experiments like Amsterdam Southeast are often dismissed as context-specific, yet they reveal structural dilemmas that cut across high-income cities grappling with declining subjective wellbeing and concerns over policy legitimacy. The findings caution against overstating the democratizing potential of participatory tools without parallel reforms in governance regimes. Wellbeing Dashboards can act as catalysts for regime change, but only when embedded in coalitions that can redistribute not just voice, but also time, money, and decision-making authority. In this sense, the contribution of this article is twofold. Empirically, it demonstrates how community-owned wellbeing measurement reshapes problem definitions and relational dynamics in marginalised neighbourhoods. Theoretically, it advances the argument that measuring wellbeing is a necessary but insufficient condition for governing for wellbeing. What ultimately matters, is whether cities are willing to reconfigure their regimes so that community-defined needs are not merely heard but acted upon with sustained embedding.

6. Conclusion

This article introduced "Wellbeing Regime" as an analytical lens for understanding how community-defined wellbeing priorities might gain durable influence in urban governance. Applying this lens to emerging local collaborations around the Wellbeing Dashboards in Amsterdam Southeast reveals a mixed picture: while participatory wellbeing measurement generates substantial epistemic and relational value, these contributions remain only partially translated into agenda-setting, budgeting, and implementation. The conditions for a Wellbeing Regime are therefore present in embryonic form, but not yet institutionally consolidated.

Analytically, the findings demonstrate that epistemic innovation does not automatically produce governance innovation. The Wellbeing Dashboards provide granular, legitimate insights into lived wellbeing conditions and foster cross-actor dialogue. However, their influence is constrained by entrenched hierarchical routines, fragmented organizational mandates, and the absence of actors with sufficient authority over financial and bureaucratic resources. These structural constraints result in a familiar participation paradox: community-defined knowledge is welcomed during diagnostic phases but loses traction when decisions

about priorities, budgets, and interventions are made. This analysis underscores that urban wellbeing governance is ultimately shaped less by the availability of better indicators than by the institutional logics that determine whose knowledge is actionable.

In conclusion, the article provides three key, interrelated, insights: (i) participatory wellbeing measurement can function as a practical tool that fosters collaboration around resident-defined needs and can provide the basis for a Wellbeing Regime, (ii) sustained impact and community-led agenda setting requires a coalition in which community participation comes with decision-making power and (material and organisational) resources , (iii) regime change needs wider institutional innovation in which community-development and co-governance are inscribed.

The article also points to the broader applicability of the Wellbeing Regime lens across European urban contexts. Many high-income cities share similar tensions between experimental participatory practices and resilient managerial governance systems. The insights from Amsterdam Southeast therefore highlight not only local barriers but also systemic constraints on the democratization of wellbeing governance. Participatory measurement can indeed act as a catalyst for institutional change, but only when embedded in coalitions capable of mobilizing authority, accountability, and resources at multiple governance levels.

Future research should extend in two directions: First, a multi-sited, multi-level perspective is needed to understand how district-level initiatives are shaped by citywide regulatory frameworks, performance regimes, and political incentives. Such work would clarify when and how community-led wellbeing priorities succeed or fail to travel across governance layers. Second, methodological innovation is required to integrate multidimensional wellbeing indicators into municipal accounting, monitoring, and investment logics. This includes examining how wellbeing data can meaningfully inform budgeting, programme evaluation, and horizontal coordination across departments. Together, these research directions will deepen understanding of what it takes to move from participatory wellbeing measurement towards a genuinely community-led Wellbeing Regime.

Chapter 6

Conclusion

6.1 Answering the Main Question

This dissertation set out to address the overarching research question formulated in Chapter 1: *How can citizen-defined, multidimensional indicators of wellbeing be developed and measured at neighbourhood level in high-income urban contexts, and to what extent can such measurement meaningfully contribute to citizen empowerment and more inclusive urban governance?*

This question was deliberately addressed through an article-based design, in which each empirical chapter (Chapters 2–5) examined a specific sub-question derived from this central inquiry. Taken together, these chapters provide a cumulative and integrated answer to the main research question.

Chapter 2 addressed the first sub-question posed in the Introduction: *how can broader wellbeing indicators and a new measurement instrument be developed through co-creation with residents of a marginalised neighbourhood, and under what conditions can empowerment be achieved?* The chapter presents the first neighbourhood case study, Venserpolder, which served as a leading case throughout the research. It analysed the process of initiating local collaboration and setting-up co-creation for wellbeing measurement. This analysis led to a transferable bottom-up method for participatory wellbeing measurement ("Wellbeing Dashboards"). The chapter demonstrates that residents are able to articulate coherent, multidimensional conceptions of wellbeing spanning material, relational, and subjective when guided through interactive and creative tasks. Effectiveness depended strongly on collaboration with community organizations, who provided local expertise on appropriate participatory conditions (e.g. compensation and timing) and were able to reach and mobilize residents to participate. While existing literature recognizes the importance of building trust and good relationships during local collaboration, the process in Venserpolder learnt it is a precondition for starting collaboration and ensuring *meaningful* co-creation that builds on local knowledge. As shown empirically in the chapter, empowerment can emerge not only from the outcomes of participatory measurement, but also from the process of co-creation itself – particularly when its longitudinal, face-to-face, facilitates social learning and is embedded in self-organised community structures rather than one-off consultations. Experimental dialogues between residents and policy actors demonstrated how local measurement truly comes to live through policy interaction: residents' grew in their capacity

to translate personal stories into neighbourhood policy needs, whereas policy actors started to recognize local knowledge as a legitimate and relevant policy source.

Chapter 3 addressed the second sub-question: *what additional insights do bottom-up, citizen-defined wellbeing indicators provide compared to conventional top-down data sources?* The comparison presented in the chapter reveals that participatory, multidimensional wellbeing measurement fills critical blind-spots in policy knowledge. By drawing on experiential and situated knowledge, the citizen-defined wellbeing indicators show to illuminate previously unrecognized needs in Venserpolder and complement conventional indicators. Specifically, it found that more than half of the local wellbeing indicators, including stress frequency, emotional stability, perceived involvement in decision-making, and digital access, were not yet measured in Venserpolder while central to resident's wellbeing. Wellbeing indicators measured in the subjective and/or relational domain complemented municipal indicators most substantially by capturing lived experiences. For example, beyond measuring whether facilities and services are present, local wellbeing indicators measured their accessibility and sufficiency in meeting residents' needs. This validates the inclusion of localized relational-subjective wellbeing indicators for human-centered and more effective policy design. Wellbeing indicators, including safety and nuisance, captured existing municipal concerns. These findings underline the relevance and legitimacy of citizen knowledge to policy. Moreover, the chapter illustrated how integrated wellbeing measurement can signal important points for intervention. Correlation analysis revealed strong interdependencies across domains, and it suggested stress as central wellbeing mediator in Venserpolder – confirming what residents themselves had already pointed out during co-creation. Other significant correlations, such as between financial sufficiency and indicators on health and life satisfaction, and between feeling heard by policy officials and indicators on amenity and neighborhood satisfaction, further affirm the importance of looking beyond material indictors to understanding wellbeing outcomes.

Chapter 4 addressed the third sub-question: *what do bottom-up wellbeing indicators reveal about shared and diverging needs across marginalized neighbourhoods, and what does this imply for area-based policy and governance of marginalized neighbourhoods?* By comparing the bottom-up wellbeing indicators of Venserpolder, G-Buurt and Wegener Sleeswijkbuurt, the chapter reveals that residents articulate a layered understanding of wellbeing needs; one that is compromises foundational needs followed by divergent higher-

order needs. Residents across marginalized neighbourhoods consistently identified and share concerns over, what the chapter conceptualizes as, “basic safety” wellbeing needs (including social connection, financial sufficiency, housing stability, emotional balance, neighbourhood liveability and perceived safety). This shared foundation suggests that governance of marginalized neighbourhoods can happen within a unified area-based framework. However, beyond a shared foundation the comparison finds divergence in terms of higher-order wellbeing needs and the priorities set by residents. Drawing on “neighbourhood-effect” literature, the chapter discusses those divergences in relation to varying demographic composition and socio-relational conditions. For example, in Venserpolder residents focused on financial health for daily stability, and neighbourhood activities as levers for social connection and informal care networks, reflecting felt exclusion and scepticism towards formal institutions. While in Wegener Sleeswijkbuurt, priorities centred on physical health and financial resilience, reflecting the demographic profile of multi-generational and migrant households seeking stability and future prospect. As such, the chapter argues that area-based interventions must just as well leave space for localized priority-setting and contextualized formulation of policy action. Methodologically, the findings of both shared and divergent wellbeing needs demonstrate that the bottom-up method produces robust results with contextual validity.

Chapter 5 addressed the fourth and final sub-question: *Under what institutional and political conditions can participatory wellbeing measurement influence policy agendas, decision-making, and resource allocation at the neighbourhood level?* The chapter analysed an emerging collaborative coalition around the Wellbeing Dashboards in Amsterdam Southeast. Here shared concerns over policy legitimacy and effectiveness brought together various district-level policy actors and residents of the Venserpolder, G-Buurt and Reigersbos neighbourhood collectives. Policy actors recognized the complementarity between the local wellbeing indicators and their policy assignments, and they highlighted the policy value of the Dashboard’s integrated measurement. For example, policy actors working on housing identified the opportunity to explore how housing interventions can simultaneously address residents’ prioritized need for financial stability and better health outcomes, and with that also restore institutional trust and improve long-term policy effectiveness. These findings demonstrate how participatory wellbeing measurement can function as boundary-spanning resource, able to facilitate multi-actor collaboration from a shared, and community-validated,

starting point. However, in terms of achieving actual policy influence, analysis through an urban regime lens revealed critical coalitional, resource and institutional constraints. The current collaborating coalition lacks policy actors with sufficient decision-making authority, and control over financial and bureaucratic resources, to institutionalize community influence. In addition, wider institutional constraints, such as hierarchical accountability structures, predefined policy assignments, and fragmented governance responsibilities, hamper sustained community-led collaboration and the extent to which resident-defined wellbeing priorities can be structurally embedded in local policy practice.

Taken together, Chapters 2 through 5 provide a coherent answer to the main research question and highlight three key findings. They show that, through-meaningful co-creative processes, citizen-defined, multidimensional wellbeing indicators can be robustly developed and measured at neighbourhood level and generate analytically distinct and policy-relevant knowledge. The extent to which such local wellbeing measurement contributes to citizens' epistemic and procedural empowerment is twofold. First, policy actors start to legitimize citizens' experiential and situated knowledge when translated measurable indicators, which cause the indicators to shift epistemic power to citizens. Second, when local wellbeing measurement turns into policy action, formerly unrecognized needs become decisive in policy practice hence shifting both epistemic and procedural power to citizens. As such, measurement determines which needs are seen and are recognized, which highlights a first key finding:

i. Measurement is a site of power, not a neutral tool. The profoundness and sustenance of power is however contingent on policy uptake (*key finding iii*).

In addition, the pattern of shared basic safety and diverging higher-order needs found across marginalized neighbourhoods suggests that a credible wellbeing framework in affluent urban contexts must be able to hold both stability and plurality: a shared baseline of basic safety and a plural space of valued living. The measurement of multidimensional wellbeing in and across marginalized neighbourhoods highlights a second key finding that substantiates theoretical views and can guide urban wellbeing debates *(section 6.2.3*):

ii. Marginality in affluent cities is a matter of varying and interacting relational, personal, and institutional deficits that are contextually shaped and locally specific.

At the same time, the dissertation demonstrates that the governance impact of such measurement, and hence the empowering potential of participation, is conditional. Bottom-up, participatory wellbeing measurement is a *necessary* condition for revealing lived marginality and empowering citizens, but it is *not sufficient* for achieving inclusive urban governance in high-income contexts. Realising its full transformative potential requires complementary changes in institutional arrangements, coalition structures, and the valuation of local knowledge within policy systems. This leads to the final key finding, which strongly aligns with existing participation literature and supports arguments for integrating participatory measurement with governance analysis (*section 6.2.4*):

iii. Participatory measurement only becomes transformative when embedded in governance regimes.

6.2 Theoretical contribution and reflection, extrapolation

6.2.1 Reconnecting the Dissertation to the Theoretical Starting Point

This dissertation was motivated by the gaps discussed in the Introduction between, on the one hand, rich theoretical debates on wellbeing, human development, and inclusive urban governance, and on the other hand, the limited empirical and practical institutional uptake of these ideas in affluent cities. In this section, it is explained how the research responds specifically to three of the four knowledge gaps identified previously: *knowledge gap 1:* Operationalising the wellbeing economics framework in an affluent urban area empirically; *knowledge gap 3:* Addressing urban marginality beyond socioeconomic classifications; and *knowledge gap 4:* Understanding governance implications of participatory wellbeing measurement. The methodological *knowledge gap 2: Integrating experiential and situated knowledge in credible measurement* will be predominantly addressed in section 6.3 below. The research thus contributes to debates on the risk of reproducing blind spots regarding lived wellbeing of marginalized groups by growth-oriented policy paradigms, even when these are complemented by broad welfare monitors. The research also advances wellbeing economics, drawing on the capability approach, basic needs theory, and relational conceptions of wellbeing, as a promising but under-operationalised framework for addressing these blind spots (Sen, 1993, 1999, 2004; Nussbaum, 2000, 2011; Pouw and McGregor, 2014; McGregor and Pouw, 2017; Pouw, 2020).

6.2.2 Advancing Wellbeing Economics through Empirical Grounding

A central theoretical contribution of this dissertation lies in operationalizing wellbeing economics along the lines of an empirically grounded, bottom-up measurement and deliberative governance framework (*knowledge gap 1*). Wellbeing economics has developed a strong conceptual critique of growth-oriented policy paradigms and offers a promising framework for understanding broader, micro-level urban realities and complex trade-offs (Pouw and McGregor, 2014; Fioramonti et al., 2022; Sollis et al., 2022). However, it has remained rather abstract or empirically reliant on top-down indicator frameworks, typically anchored at national or aggregate levels and detached from every day lived experience (Pouw, 2020; Alkire, 2002; Dalziel et al., 2018; Cardoso et al., 2022).

The research demonstrates how the material–relational–subjective conceptualisation of wellbeing can be operationalized into context-specific and measurable indicators through participatory processes, without losing analytical coherence. At the same time, it shows that participatory operationalisation does not weaken conceptual clarity; on the contrary. The tripartite conceptualisation of the wellbeing framework proved to resonate strongly with how residents themselves articulated wellbeing in marginalised neighbourhoods (Pouw and McGregor, 2014; McGregor and Pouw, 2017). Importantly, residents did not merely list indicators corresponding neatly to each dimension; rather, they described wellbeing as an interdependent system in which material insecurity generates relational strain and subjective stress, and where relational deficits undermine both material opportunities and mental balance. This confirms the analytical value of treating wellbeing as an emergent property of interacting dimensions, rather than as an additive index of separate components.

By operationalizing a wellbeing economics approach in neighbourhood-level empirical contexts, the dissertation shows that multidimensionality is not only a theoretical construct but in fact experienced as such. As found, residents did not prioritise income or employment in isolation, nor did they reduce wellbeing to subjective happiness. Instead, they consistently framed wellbeing as a condition of basic safety, characterised by freedom from persistent stress, insecurity, and social anxiety and exclusion. This finding contributes to ongoing theoretical debates by highlighting basic safety as a foundational, cross-cutting condition that precedes higher-order aspirations (Nussbaum, 2000, 2011). In doing so, it bridges capability-based approaches with basic-needs perspectives, while avoiding prescriptive universalism by

allowing residents themselves to define what basic safety and sufficiency mean in their specific context.

Furthermore, the research extends wellbeing economics by demonstrating the analytical value of relational wellbeing in urban contexts. While relational aspects of marginality are acknowledged theoretically and conceptually (Wacquant, 2007; Fraser, 2009; Young, 2008), they are rarely operationalised empirically for targeted urban interventions. This dissertation shows that trust in institutions, perceived voice and institutional recognition, social cohesion, and safety are not peripheral concerns but central determinants of how residents experience and are (un)able to effectively access and benefit from urban opportunity structures. The fact that schools, medical centres, public services are omnipresent, doesn't mean these are used by all, and certainly not by the ones who need support the most. The systematic inclusion of relational indicators derived from residents' experiential accounts, challenges the dominance of individualised, market-oriented understandings of wellbeing in economically thriving urban settings and foregrounds the role of institutions, power relations, and social conditions.

6.2.3 Rethinking Urban Marginality in Affluent cities

A second theoretical contribution concerns the conceptualisation of urban marginality in high-income settings, drawn from measurement using experiential and situated knowledge (*knowledge gap 2 and 3*). Building on the Introduction's discussion of the urban wellbeing paradox (Lenzi and Perucca, 2023; Finnemann et al., 2024; OECD, 2024), this dissertation shows how aggregate prosperity systematically coexists with localised experiences of insecurity, stress, and exclusion. Rather than treating marginality as an anomaly within otherwise successful cities, the findings support the argument that marginality is structurally produced through the interaction of economic pressures, institutional design, and uneven access to voice.

Empirically, the research reveals that marginality in Amsterdam is not defined solely by low income or unemployment, but by a lack of basic safety across material, relational, and subjective domains. This aligns with and extends Wacquant's (2007) notion of advanced marginality by showing how insecurity persists even within strong welfare states, mediated by housing markets, bureaucratic complexity, and fragmented governance. It also resonates with Tilly's (2017) analysis of durable inequality illustrating how institutional categories and measurement practices contribute to the underrepresentation of certain groups' needs.

The comparative analysis across the neighbourhoods further challenges policy and theoretical assumptions of homogeneity among areas classified as socioeconomically deprived (*knowledge gap 3*). While all neighbourhoods shared a foundational need for basic safety, they diverged substantially in higher-order priorities, social dynamics, and perceived opportunity structures. This finding contributes to neighbourhood-effects literature (Sampson et al., 2002; Galster, 2012; Musterd, 2022) by demonstrating that wellbeing outcomes cannot be inferred from socioeconomic status alone. Instead, they are shaped by locally specific configurations of social relations, institutional trust, and historical trajectories.

The findings also contribute to theoretical understandings of urban marginality. Rather than conceptualising marginality solely as a function of income poverty or spatial deprivation, the dissertation demonstrates that marginality in high-income cities is multidimensional and relational. Residents may formally participate in labour markets and welfare systems, yet still experience chronic insecurity, stress, and lack of recognition. This reconceptualization aligns with and deepens analyses of the urban wellbeing paradox by showing how aggregate prosperity coexists with lived experiences of exclusion at micro-spatial scales (Burger et al., 2020; Carlsen and Leknes, 2022; Lenzi and Perucca, 2024; Fachelli et al., 2025).

Importantly, the comparative analysis across neighbourhoods challenges policy assumptions of homogeneity among "deprived" areas. While a shared foundation of basic safety emerged across cases, neighbourhoods diverged markedly in their higher-order priorities and relational dynamics. This finding has theoretical implications for neighbourhood-effects research, suggesting that place-based wellbeing is shaped not only by structural conditions but also by locally specific social relations, histories, and institutional interfaces.

6.2.4 Integrating Measurement and Governance: Towards a Wellbeing Regime

A third and more integrative theoretical contribution lies in linking participatory wellbeing measurement to theories of urban governance and power (*knowledge gap 4*). As argued in the Introduction, measurement systems are not neutral descriptors of reality but institutional devices that shape agendas, legitimise certain forms of knowledge, and structure resource allocation (Espeland and Stevens, 2008; Merry, 2016). By combining wellbeing economics with insights from urban regime theory (Stone, 2005; van Ostaaijen, 2024), the dissertation

advances a relational understanding of why alternative indicators struggle to gain policy traction.

The empirical findings show that the Wellbeing Dashboards function as epistemic innovations: they produce credible, context-sensitive knowledge and create new spaces for dialogue between residents and institutions. However, they operate within governance arrangements characterised by path dependency, sectoral fragmentation, and performance-oriented accountability. As a result, resident-defined indicators often remain advisory rather than directive.

The concept of an emerging but constrained wellbeing regime, introduced in chapter 5, captures this tension. It denotes a governance configuration in which wellbeing-oriented knowledge is recognised and partially institutionalised yet not sufficiently empowered to restructure agendas or redistribute resources. This contribution extends regime theory by foregrounding measurement and knowledge production as central regime resources, and it extends wellbeing economics by situating measurement within concrete power relations. It underscores that participatory measurement can enable empowerment but cannot substitute for political coalition-building and institutional reform.

A further theoretical contribution lies in the integration of wellbeing economics with governance theory - as similarly suggested in earlier studies (Sollis, 2023; Crisp et al., 2023). By combining participatory measurement with an analysis of urban regimes, the dissertation moves beyond evaluating the quality of indicators to interrogating the conditions under which they gain policy traction. The concept of an emerging but constrained wellbeing regime captures this tension: while new forms of knowledge and collaboration are being produced, they remain embedded within governance arrangements that privilege economic growth, efficiency, and managerial control.

This integration makes a first step in engaging with broader debates on public governance and democratic innovation, detailing why measurement reform alone is insufficient for transformative change. That is, wellbeing-oriented governance requires shifts in agenda-setting power, resource valuation, and institutional routines. On a larger level, this involves assessing what counts as “public value” and how this shapes governance arrangements, policy prioritization and resource allocation. Here it is also particularly valuable to

understand what role citizens (can) have in defining those values and the potential for governance transformation based on collective values (Mazzucato, 2021; Mazzucato and Ryan-Collins, 2022).

6.2.5 Extrapolation to Other High-Income Urban Contexts

Finally, the theoretical insights of this dissertation partially extend beyond Amsterdam to other high-income urban contexts characterised by strong welfare institutions, rising inequality, and participatory ambitions. Cities such as London, Paris, Berlin, Oslo, and Copenhagen exhibit similar manifestations of the urban wellbeing paradox, where economic success masks relational and subjective deficits at neighbourhood level (Carlsen and Leknes, 2022; Finnemann, 2024; Jurčišinová et al., 2025; Lenzi and Perucca, 2023).

Rising cost-of-living and housing insecurity, common to economically successful cities, knowingly deprive socioeconomically vulnerable residents from livelihood stability. Economic pressure often comes at the expense of residents' social and subjective wellbeing and may limit their capacity to make use of opportunities (Finnemann et al., 2024). However, such vulnerabilities are generally not captured by administrative data and top-down measurement frameworks.

In fact, the research in Amsterdam showed how such frameworks reproduce marginality by disregarding lived experience and local epistemologies. Residents don't automatically benefit from the opportunities and resources in affluent cities, such as the presence of amenities, specialized services or diverse economic activity. Rather they might be constrained due to a lack of, for example, time, mental clarity, stable financial resources, or social and institutional access. This dissertation hence suggests that social and personal factors determine whether urban resources are accessible and convertible into real opportunities for wellbeing.

It is however important to underscore that while in the Amsterdam neighbourhoods a shared foundation of basic safety needs was identified, divergence was observed above the stability threshold. Therefore, the dissertation does not propose a universal set of wellbeing indicators but does recommend the approach to be transferable to different contexts. Along with the approach, the bottom-up designed Wellbeing Dashboards, can also function as boundary objects between citizens and public and private sector stakeholders across diverse settings to co-develop local policy and interventions.

Naturally, these extrapolations call for some caution. The effectiveness of participatory wellbeing measurement depends on local civic capacity, institutional trust and openness to bottom-up methods and level of resource and governance support. That is, producing relevant and reliable results from participatory measurement requires active and wide citizen engagement and mutual trust. In addition, as shown in the case of Amsterdam, the influence and uptake of local knowledge in policy processes is not guaranteed after participatory measurement. Rather, it is conditional on structural community-led collaboration that in turn relies on institutional willingness and governance support that is structural rather than ad-hoc.

6.3 Methodological Contributions and Reflection

6.3.1 Developing a Robust Bottom-Up Measurement Method

Methodologically, this dissertation contributes a systematically documented approach to bottom-up, participatory wellbeing measurement that combines co-creation, face-to-face surveys, and experimental policy dialogues. Unlike many participatory initiatives that remain qualitative or consultative, the method developed in this dissertation translates lived experiences and contextual accounts into measurable indicators that allow for quantitative analysis and integration with official data. In doing so, it responds to *knowledge gap 2*: Integrating experiential and situated knowledge in credible measurement.

The research demonstrates that participatory indicator development does not need to sacrifice rigour, but it remains an important challenge. Through iterative validation, collective prioritisation, and careful operationalisation, citizen-defined indicators proved reliable, interpretable, and policy-relevant. This challenges the assumption that local knowledge is too subjective or fragmented for systematic measurement. Equally, it demonstrates how quantitative measurement can be empirically rich and contextual.

6.3.2 Participation as Process and Outcome

A key methodological insight concerns the dual role of participation as both a means and an outcome. Participation was not only instrumental to data collection and co-created outputs, but also generated social learning, capacity building, and collective organisation. Residents developed a shared language around wellbeing and translate individual experiences to

neighbourhood-level needs, learned to navigate institutional interfaces, and strengthened networks across organisations and neighbourhood groups.

At the same time, the research highlights methodological tensions. Participation requires time, trust, and sustained engagement, which can exclude people and result in a participant group of those facing the least constraints. Moreover, it is evident that participation in itself does not equal co-created outcomes. Even when methods are designed to be inclusive, factors such as group dynamics and power relations can still create limitations. The role of the researcher was therefore not neutral, but involved continuous reflexivity regarding power, inclusion and representation, and the feasibility of participating. This underscores that community-based participatory research is inherently political and must be approached with humility, reflexivity and transparency.

To safeguard epistemic justice and policy legitimacy, it was important that participation ensured representation. Achieving representativeness was not only a matter of research design but contingent on existing community infrastructures. There is an inherent tension between building trustworthy relationships through co-creation, which requires time, flexibility and small-scale interaction, and aspiring representativeness of the data, which requires a larger-scale, more standardized approach. The rigour of the methodology is to warrant both at each step. In the dissertation research the limitations of small sample sizes in the qualitative data collection (interviews, workshops, dialogues) were to some extend mitigated through the surveys that reached representative samples through stratified and quota sampling. Prior to the co-creation workshop, interviews were held with representatives of local care and wellbeing organizations to gain a first, general understanding of neighborhood wellbeing, and of residents' attitudes and needs regarding participation. This informed the co-creation workshops in which wellbeing topics and indicators were self-identified by a relatively diverse, though small and not yet representative, group of residents. Subsequently, the identified indictors were translated into the survey instrument. The surveys included open spaces for suggesting additional topics and indicators (as an extension of the co-creation workshops). In later surveys, a question was added that asked residents which 3 topics they prioritize for policy action (as an extension of the priority-setting workshops). In addition, the efforts of community organisations and presence of strong community networks were indispensable in reaching diverse resident groups and mobilizing participation. It must, however, be acknowledged that limitations in terms of inclusion and representation persisted.

This particularly concerns the limited participation of youth and the exclusion of other, perhaps generally invisible, citizens (e.g. those who are undocumented or isolate themselves). The research's participatory approach proved unfit to their worlds and needs (Zweegman et al., 2023).

6.3.3 Considerations in Action-Oriented Research

While the action-oriented approach enabled meaningful engagement and immediate relevance, it also faced limitations. Embedding research within ongoing governance processes exposed it to institutional inertia, shifting political priorities, and resource constraints. The researcher's dual role as facilitator and analyst required careful boundary management to avoid instrumentalization of participation or overstated expectations.

This involves transparency and open communication about research goals and policy interests, and what these imply for participants. While the research's aims for community wellbeing and empowerment motivated participation, it was important to convey the changing and unpredictable nature of action-oriented research and set realistic expectations regarding impact potential. This is a continuous process, requiring transparency about developments, including setbacks, that impact outcomes. Because of residents' willingness to share (deeply) personal stories and their overall participation commitment, it felt particularly important to considerately manage expectations and maintain transparency about impact potential.

The dissertation demonstrated how the quality of action-oriented research and its potential for impact depends on wider institutional engagement and collaboration with various actors. All involved actors (residents, researchers and policy professionals) brought in crucial expertise, resources and support that facilitate the uptake of research outputs such as the Wellbeing Dashboards. At the same time, such collaboration can create challenges. Among others, the varying, unaligned timelines of involved actors made it often difficult to consistently move forward, maintain participation energy, and to capitalize on erratic windows of opportunity and optimally deploy a combined set of resources. At certain moments involved residents had to wait long before receiving results or going into next steps, which led to some disappointment and sometimes participation withdrawal. A further concern were different levels of (formal) power among involved actors, which risks diminished results for residents. During the Dialogue sessions corrective measures were

taken to maintain procedural justice over the entire process. This involved preparatory and capacity-building sessions that enhanced residents' confidence and presentation skill, put them in charge of the agenda, and gave prior data insight privilege. These measures may slow down the process as well, but are crucial for community empowerment and epistemic justice.

These reflections contribute to methodological debates by demonstrating both the potential and the constraints of participatory, action-oriented research in complex urban governance environments.

6.4 Policy Recommendations

The empirical findings presented in this dissertation suggest several recommendations for policy. First, institutionalise bottom-up wellbeing measurement to complement, not replace, existing policy tools. Municipalities should recognise tools such as the Wellbeing Dashboards as credible and legitimate policy tools, particularly for diagnosing relational and subjective dimensions of wellbeing that are otherwise invisible (Verrest and Pouw, 2026; Sollis, 2023). Moreover, the Wellbeing Dashboards as neighbourhood-diagnostic tools can guide resource allocation in line with redistributive policy strategies, such as unequal investment for equal opportunity.

This relates to the second recommendation: shift from uniform area-based interventions to differentiated neighbourhood strategies. While shared foundations of basic safety (*chapter 3 and section 6.1*) should be safeguarded city-wide, higher-order investments should respond to neighbourhood-specific priorities identified through participatory measurement. This aligns with long-standing arguments that wellbeing levels can vary greatly between neighbourhoods depending on demographic composition and contextual factors (Galster, 2011; Sharkey and Faber, 2014).

Third, revalue local knowledge as a policy resource. This involves assessing when and to what extent local knowledge is currently used in policy processes. Although the use of local knowledge is valuable across the entire policy process, it becomes truly influential when meaningfully used in decision-making and during implementation phases (Arnstein, 1969; Reinert and Sinnig, 1997; Karic, 2024). In addition, valuing local knowledge as policy

resource requires adjusting accountability frameworks to reward learning, dialogue, and contextual responsiveness, rather than only quantifiable outputs. It also involves "unlearning", which asks policy actors to make space for alternative ideas and policy models, and to maintain a shared claim on authoritative knowledge (Dunlop, 2017).

Finally, embed participatory measurement within sustained governance partnerships. One-off consultations are insufficient and significantly increase the risk of misinterpreting or misusing the local wellbeing data, hence defeating the purpose. Instead, it is recommended that policy actors invest in long-term collaboration with residents and community organisations for translating wellbeing insights into effective action (Sollis, 2023). To avoid institutional hijacking, policy actors should learn together with residents and explore ways to collaborate on mutually agreed conditions and through shared ownership and equal decision-making power (Trein and Vagionaki, 2024; Bianchi, 2024; Dardot and Laval, 2015; Landemore, 2020).

6.5 Research Recommendations

This dissertation opens several avenues for future research. Longitudinal studies are needed to examine how neighbourhood wellbeing evolves over time and how participatory indicators respond to policy interventions. In addition, the descriptive analysis provided in the dissertation calls for quantitative testing to advance insight on ill- and wellbeing drivers. Future research could use multivariate techniques to test relationships between indicators and explore differences in wellbeing outcomes between social groups and across neighbourhoods. This also calls for questioning how participation approaches can be enhanced in terms of inclusion and representation within neighbourhoods. Participation of youth deserves special attention in terms methods, spaces and power relations in interactions.

Comparative research across cities and countries could test the transferability of the method and explore how different governance contexts shape outcomes. Subsequent learnings can be studied to advance the method, and its potential empower citizens in governance structures. Further work is also needed to integrate participatory wellbeing data into formal statistical systems without diluting its contextual richness. This can start by analysing the

structure of formal statistical databases to understand and assess data modifications required for integrating the bottom-up data on local wellbeing.

Finally, research should continue to explore the political economy of wellbeing governance, examining how power, resources, and institutional logics condition the uptake of alternative measures. This can involve further research on the empirically emerged "Wellbeing Regime" concept and its governance potential. In addition, to deepen the understanding of transforming governance, it is suggested to explore what counts as "public value", who defines this, and how this shapes governance and resource allocation.

6.6 Concluding Reflection

This dissertation argued that measuring what matters is inseparable from transforming how we govern cities. In affluent cities marked by persistent inequality, rethinking wellbeing measurement is not solely a technical refinement but a democratic imperative. By foregrounding resident-defined priorities, this research demonstrates both the possibilities and the limits of participatory reform. The challenge ahead lies not in producing better indicators alone, but in transforming the governance arrangements that determine whose knowledge counts, whose needs matter, and whose wellbeing is prioritised.

Bibliography

Adelman, C. (1993). Kurt Lewin and the origins of action research. *Educational action research, 1*(1), 7–24.

Ala-Mantila, S., Heinonen, J., Junnila, S. and Saarsalmi, P. (2018). Spatial nature of urban well-being, *Regional Studies, 52*(7), 959-973, DOI:10.1080/00343404.2017.1360485

Alford, J. and O'Flynn, J. (2009) Making sense of public value: Concepts, critiques and emergent meanings. *International Journal of Public Administration*, *32*(3–4), 171–191.

Alkire, S. (2002). *Valuing Freedoms: Sen's Capability Approach and Poverty Reduction*. Oxford, GB: Oxford University Press.

Alkire S., Foster, J.E., Seth, S., Santos, M.E., Roche, J.M., and Ballon, P. (2015). Multidimensional Poverty Measurement and Analysis: Chapter 3 - Overview of Methods for Multidimensional Poverty Assessment, OPHI Working Papers 84, Queen Elizabeth House, University of Oxford.

Alliantie Samen Nieuw-West (2023). *Convenant Wij zijn Samen Nieuw-West: Ongelijk investeren in geljke kansen voor en met bewoners* (NPSNW).

Alliantie Zuidoost (2021). *Masterplan Zuidoost programma 2021-2024* (MPZO).

Amin, A. (2004). Regions unbound: towards a new politics of place. *Geografiska Annaler: Series B, Human Geography, 86*(1), 33–44. https://doi.org/10.1111/j.0435-3684.2004.00152.x

Arnstein, S. (1969). A Ladder of Citizen Participation. *Journal of the American Institute of Planners*, *35*(4), 217.

Atkinson, R. (2000). Combating Social Exclusion in Europe: The new urban policy challenge. *Urban Studies, 37*(5-6), 1037-1055.

Austin, A. (2015). Practical Reason in Hard Times: The Effects of Economic Crisis on the Kinds of Lives People in the UK Have Reason to Value. *Journal of Human Development and Capabilities, 17*(2), 225–44. doi:10.1080/19452829.2015.1076776.

Baker, S. C. and Mehmood, A. (2015). Social innovation and the governance of sustainable places. *Local Environment: The International Journal of Justice and Sustainability 20*(3), 321-334. 10.1080/13549839.2013.842964.

Bakker, J., Denters, B., Oude Vrielink, M., and Klok, P.J., (2012). Citizens' initiatives: how local governments fill their facilitative role. *Local government studies, 38*(4), 395-414.

Barrington-Leigh, C., and Escande, A. (2018). Measuring progress and well-being: A comparative review of indicators. *Social Indicators Research*, *135*(3), 893-925.

Belausteguigoitia, J. (2019). Inclusive urbanism, sustainable design and community engagement: a holistic approach. *WIT Transactions on Ecology and the Environment, 238*, 131-141.

Bertolin, M. and Salone, C. (2025). Fixing new municipalism *discretely* and *discreetly*. Power, participation, and the possibilities of progressive regimes, *Urban Geography 46*(2): 416–436. doi: 10.1080/02723638.2024.2355064.

Bianchi, I. (2022). Empowering policies for grassroots welfare initiatives: Blending social innovation and commons theory. *European Urban and Regional Studies*, *30*(2): 107-120. https://doi.org/10.1177/09697764221129532

Bianchi, I. (2024). The democratising capacity of new municipalism: beyond direct democracy in public–common partnerships. *Policy and Politics* (published online ahead of print 2024).

Brandsen, T., Steen, T., and Verschuere, B. (2018). *Co-production and co-creation: engaging citizens in public services*. New York, United States: Routledge.

Bonvin, J. and Laruffa, F. (2024). Transforming Social Policies and Institutions in a Capability Perspective: Agency, Voice and the Capability to Aspire. *Journal of Human Development and Capabilities, 25*(4), 575–94. doi:10.1080/19452829.2024.2405096.

Booi, H. (2024). Spillover of urban gentrification and changing suburban poverty in the Amsterdam metropolis. *Urban Studies*, *61*(3), 495-512.

Boonstra, B., and Boelens, L. (2011). Self-organization in urban development: Towards a new perspective on spatial planning. *Urban Research and Practice 4*(2), 99-122.

Bourdieu, P. (1985). The Social Space and the Genesis of Groups. *Theory and Society*, *14*(6), 723–744. http://www.jstor.org/stable/657373

Bourdieu, P. (1989). Social Space and Symbolic Power. *Sociological Theory*, *7*(1), 14–25. https://doi.org/10.2307/202060

Bourdieu, P. *(*1994). Rethinking the State: On the Genesis and Structure of the Bureaucratic Field. *Sociological Theory, 12* (1), 1–19.

Bouteche, B. and Bougdah, H. (2024). Urban Marginalities Throughout History. *Proceedings of the international conference of contemporary affairs in architecture and urbanism-ICCAUA, 7*(1). doi: 10.38027/ICCAUA2024EN0203.

Bowker, G.C., and Star, S.L. (1999). *Sorting things out: classification and its consequences.* Cambridge: MIT Press.

Burger, M. J., Morrison, P. S., Hendriks, M., and Hoogerbrugge, M. M. (2020). Urban-rural happiness differentials across the world. In J. F. Helliwell, R. Layard, J. Sachs, and J. De

Neve (Eds.), *World Happiness Report 2020* (pp. 66–93). Sustainable Development Solutions Network.

Caprotti, F. (2018). Future cities: Moving from technical to human needs. *Palgrave Communications, 4*(35).

Caprotti, F., Cowley, R., Datta, A., Castán Broto, V, Gao, E., Georgeson, L., Herrick, C., Odendaal, N., and Joss, S. (2017). The new urban agenda: Key opportunities and challenges for policy and practice. *Urban Research and Practice, 10*(3), 367–378.

Cardoso, R., Meijers, E., Van Ham, M., et al. (2019). Why bright city lights dazzle and illuminate: A cognitive science approach to urban promises. *Urban Studies*, *56*(2), 452–470

Cardoso, R., Sobhani, A., and Meijers, E. (2022). The cities we need: Towards an urbanism guided by human needs satisfaction. *Urban studies, 59*(13), 2638–2659.

Carlsen, F. and Leknes, S. (2022). The paradox of the unhappy, growing city: Reconciling evidence. *Cities, 126,* 103-648, https://doi.org/10.1016/j.cities.2022.103648.

CBS (2024). *Monitor Brede Welvaart & de Sustainable Development Goals 2024*. Centraal Bureau voor de Statistiek.

Chaffee, W.A. (1980). 'Marginality' by Gino Germani (New Brunswick, N.J.: Transaction Books, 1980). *American Political Science Review, 74(*4),1113–1114.

Cès, S., Hlebec, V. and Yghemonos, S. (2019) *Valuing informal care in Europe: An analytical review of existing valuation methods*. Vienna: European Centre for Social Welfare Policy and Research.

Chowdhury, R. (2021). Self-representation of marginalized groups: a new way of thinking through W.E.B. Du Bois. *Business Ethics Quarterly, 31*(4), 524–548.

Corburn, J. (2003). Bringing Local Knowledge into Environmental Decision Making: Improving Urban Planning for Communities at Risk. *Journal of Planning Education and Research, 22*(4), 420-433.

Costanza, R., Fisher, B., Ali, S., Beer, C., Bond, L., Boumans, R., Danigelis, N.L., Dickinson, J., Elliott, C., Farley, J., Gayer, D.E., MacDonald Glenn, L., Hudspeth, T., Mahoney, D., McCahill, L., McIntosh, B., Reed, B., Rizvi, S.A.T., Rizzo, D.M., Simpatico, T., and Snapp, R. (2007). Quality of life: An approach integrating opportunities, human needs, and subjective well-being. *Ecological Economics, 61*(2-3), 267-276.

Costanza, R., Hart, M., Posner, S., and Talberth, J. (2009). *Beyond GDP: The need for new measures of progress.* Pardee Paper 4. Boston: Pardee Centre.

Cottam, H., and Leadbeater, C. (2004). *RED Paper 01: Health: Co-Creating Services*. London: Design Council.

Crisp, R., Waite, D., Green, A., Hughes, C., Lupton, R., MacKinnon, D., and Pike, A. (2023). 'Beyond GDP' in cities: Assessing alternative approaches to urban economic development. *Urban Studies*, *61*(7), 1209-1229. https://doi.org/10.1177/00420980231187884

Dalziel, P., Saunders, C., and Saunders, J. (2018). *Well-being Economics: The Capabilities Approach to Prosperity*. Wellbeing in Politics and Policy, edited by Bache, I., Scott, K., Allin, P. Cham, Switzerland: Palgrave Macmillan. https://doi.org/10.1007/978-3-319-93194-4

Dardot, P. and Laval, C. (2015) *Común. Ensayo Sobre La Revolución Del Siglo XXI*, Barcelona: Gedisa.

Day, D. (1997). Citizen Participation in the Planning Process: An Essentially Contested Concept? *Journal of planning literature, 11*(3).

De Koning, A. (2015). "This neighbourhood deserves an espresso bar too": neoliberalism, racialization, and urban policy. *Antipode, 47*(5), 1203-1223.

De la Rocha, M.G., Perlman, J., Safa, H., Jelin, E., Roberts, B.R., and Ward, P.M. (2004). From the Marginality of the 1960s to the "New Poverty" of Today: A LARR Research Forum. *Latin American Research Review, 39*(1), 183–203.

Deneulin, S., and Shahani, L. (Eds.). (2009). *An Introduction to the Human Development and Capability Approach*. Routledge. Retrieved from https://hd-ca.org/publication-and-resources/introductory-recommended-readings/hdca-textbook

Diener, E., Suh, E. M., Lucas, R. E., and Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*(2), 276–302. https://doi.org/10.1037/0033-2909.125.2.276

Duarte S.P., de Sousa, J.P., and de Sousa, J.F. (2024). Co-designing urban mobility solutions in a socio-technical transition context: Guidelines for participative service design. *Journal of Urban Mobility, 6.*

Dunlop, C.A. (2017). The irony of epistemic learning: epistemic communities, policy learning and the case of Europe's hormones saga, *Policy and Society, 36*(2), 215–232, https://doi.org/10.1080/14494035.2017.1322260

Durand, M. and Exton, C. (2019). Adopting a well-being approach in central government: Policy mechanisms and practical tools. in *Global Happiness Policy Report 2019*, Sustainable Development Solutions Network, New York, http://ghwbpr-2019.s3.amazonaws.com/UAE/GH19_Ch8.pdf.

Espeland, W.N. and Stevens, M.L. (2008). A Sociology of Quantification. *European Journal of Sociology, 49*(03), 401-436. 10.1017/S0003975609000150

Exton, C. and Shinwell, M. (2018). Policy use of well-being metrics: Describing countries' experiences. *OECD Statistics Working Papers*, No. 2018/07, OECD Publishing, Paris, https://doi.org/10.1787/d98eb8ed-en.

Fachelli, S., Suter, C. and Son, J. (2025). Measuring Socioeconomic Inequalities in a Comparative Perspective. *Social Indicator Research 178*, 613–623. https://doi.org/10.1007/s11205-025-03629-3

Fainstein, S. S. (2010). *The Just City*. Cornell University Press. http://www.jstor.org/stable/10.7591/j.ctt7zhwt

Fauth, R. C., Roth, J. L., and Brooks-Gunn, J. (2007). Does the neighborhood context alter the link between youth's after-school time activities and developmental outcomes? A multilevel analysis. *Developmental Psychology, 43*(3), 760–777. https://doi.org/10.1037/0012-1649.43.3.760

Finio, N. (2022). Measurement and definition of gentrification in urban studies and planning. *Journal of Planning Literature*, *37*(2), 249-264

Fioramonti, L. (2016). A Post-GDP World? Rethinking International Politics in the 21st Century. *Global Policy, London School of Economics and Political Science,* 7(1),15-24.

Fioramonti, L., Coscieme, L., Costanza, R., Kubiszewski, I., Trebeck, K., Wallis, S., Roberts, D., Mortensen, L.F., Pickett, K.E., Wilkinson, R., Kristín Vala Ragnarsdottír, McGlade, J., Lovins, H. and De Vogli, R. (2022). Wellbeing economy: An effective paradigm to mainstream post-growth policies?, *Ecological Economics, 192.*

Finnemann A, Huth K, Borsboom D, Epskamp S and van der Maas, H. (2024) The urban desirability paradox: U.K. urban-rural differences in well-being, social satisfaction, and economic satisfaction. *Science Advances, 10*(29),16-36 10.1126/sciadv.adn1636.

Fischer, F. (2012). Participatory governance: from theory to practice. In: Levi-Faur D (ed), *The Oxford Handbook of Governance*. Oxford: Oxford University Press, 457–471.

Flicker, S., Travers, R., Guta, A., Mconald, S., and Meagher, A. (2007). Ethical dilemmas in community-based participatory research: recommendations for institutional review boards. *Journal of Urban Health: Bulletin of the New York Academy of Medicine, 84*(4).

Fricker, M (2007) *Epistemic Injustice: Power and the Ethics of Knowing*. Oxford: Oxford academic. https://doi.org/10.1093/acprof:oso/9780198237907.001.0001

Forgeard, M.J.C., Jayawickreme, E., Kern, M., and Seligman, M.E.P. (2011). Doing the right thing: Measuring wellbeing for public policy. *International Journal of Wellbeing*, *1*(1), 79-106.

Fraser, N. (2009). *Scales of Justice: Reimagining Political Space in a Globalizing World*. Columbia University Press. http://www.jstor.org/stable/10.7312/fras14680

Friedrichs, J. R., Galster, G., & Musterd, S. (2003). Neighbourhood effects on social opportunities: the European and American research and policy context. *Housing studies*, *18*(6), 797-806.

Fung, A. (2015). Putting the Public Back into Governance: The Challenges of Citizen Participation and Its Future. *Public Administration Review, 75*(4), 513-522.

Gaber, J. (2019). Building "A Ladder of Citizen Participation". *Journal of the American Planning Association*, *85*(3), 188-201.

Galego D., Moulaert F., Brans, M. and Santinha, G. (2021). Social Innovation & Governance: A Scoping Review. *Innovation: The European Journal of Social Science Research, 35*(2), 265–90. doi:10.1080/13511610.2021.1879630.

Galster, G.C. (2012). The Mechanism(s) of Neighbourhood Effects: Theory, Evidence, and Policy Implications. In: van Ham, M., Manley, D., Bailey, N., Simpson, L., Maclennan, D. (eds) *Neighbourhood Effects Research: New Perspectives*. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-2309-2_2

Gearin, E., and Hurt, C.S. (2024). Making Space: a new way for community engagement in the urban planning process. *Sustainability, 16*(5), 20-39.

Gemeente Amsterdam (n.d.) Buurtbudget Zuidoost. Available at:

https://www.amsterdam.nl/stadsdelen/zuidoost/buurtbudget-zuidoost/#h25477d51-8635-450c-9afa-75ac042025ef (accessed 4 December 2025).

Gemeente Amsterdam (2025). *Memo: Ongelijk investeren voor gelijke kansen*. Gemeente Amsterdam.

Geva,Y. and Rosen, G. (2023). In search of social equity in entrepreneurialism: The case of Israel's municipal regeneration agencies. *European Urban and Regional Studies, 30*(1), 36–49.

Glaeser, E. L. (2011) *Triumph of the City: How Our Greatest Invention Makes us Richer, Smarter, Greener, Healthier and Happier*. New York: Penguin.

Goodlad, R., Burton, P., and Croft, J. (2005). Effectiveness at what? The processes and impact of community involvement in area-based initiatives. *Environment and Planning C: Government and Policy, 23*(6), 923–938.

Griffin, J. (1986). *Well-Being: Its Meaning, Measurement, and Moral Importance*. Oxford [Oxfordshire]: Clarendon Press

Grander, M., Roelofs, K., and Salonen, T. (2021). Area-based development initiatives: a means to an end or an end in itself? – a literature overview on the case of Sweden. *Nordic Social Work Research, 12*(2), 243-255. https://doi.org/10.1080/2156857X.2021.1997792

Gupta, J., Liverman, D., Prodani, K., Aldunce, P., Bai, X., Broadgate, W., Ciobanu, D., Gifford, L., Gordon, C., Hurlbert, M., Inoue, C.Y.A., Jacobson, L., Kanie, N., Lade, S.J., Lenton, T.M., Obura, D., Okereke, C., Otto, I.M., Pereira, L.M., ... Verburg, P.H. (2023). Earth system justice needed to identify and live within Earth system boundaries. *Nature Sustainability*, *6*(6), 630-638.

Gupta, J., Pouw, N.R.M., and Ros-Tonen, M.A.F. (2015). Towards an Elaborated Theory of Inclusive Development. *European Journal of Development Research, 27*(4), 541-559.

Guta, A., and Voronka, J. (2020). Ethical issues in community-based, participatory, and action-oriented forms of research. In: Iphofen R (eds) *Handbook of Research Ethics and Scientific* Integrity. Springer Cham, 561-576.

Helbing, D., and Kirman, A. (2013). Rethinking economics using complexity theory. *Real-world economics review, 64*, 23-52.

Hill, G. (2014). Cycles of Action and Reflection. In: Coghlan D and Brydon-Miller M (eds). *The SAGE Encyclopaedia of Action Research.* London: Sage, pp. 233-236

Hochstenbach, C., Musterd, S., and Teernstra, A. (2015). Gentrification in Amsterdam: Assessing the importance of context. *Population, Space and Place*, *21*(8), 754-770.

Hoogerbrugge, M. M., and Burger, M. J. (2018). Neighborhood-Based social capital and life satisfaction: the case of Rotterdam, The Netherlands. *Urban Geography*, *39*(10), 1484–1509. https://doi.org/10.1080/02723638.2018.1474609

Hubbard P. (2016). Hipsters on our high streets: Consuming the gentrification frontier. *Sociological Research Online 21*(3), 1–6.

iGGW (2021). Ontwikkelbuurten: Situatie en ontwikkeling. Gemeente Amsterdam: Amsterdam. https://openresearch.amsterdam/image/2021/12/22/factsheet_situatie_en_ontwikkeling_ontwikkelbuurten_2021.pdf

Israel, B.A., Eng E., Schulz, A.J., and Parker, E.A. (2005). Introduction to methods in community-based participatory research for health. *Methods Community Participant Research Health*, *3*:26.

Jokela M. (2015). Does neighbourhood deprivation cause poor health? Within-individual analysis of movers in a prospective cohort study. *Journal of epidemiology and community health*, *69*(9), 899–904. https://doi.org/10.1136/jech-2014-204513

Jull, J., Giles, A., and Graham, I.D. (2017). Community-based participatory research and integrated knowledge translation: Advancing the co-creation of knowledge. *Implementation Science*, *12*(1), 150.

Jurčišinová, V., Želinský, T. and Hudec, O. (2025). The Urban Paradox and Rural Appeal: Subjective Well-Being Across Diverse European Living Environments. *Applied Research Quality Life*, https://doi.org/10.1007/s11482-025-10437-x

Kalimeris, P., Bithas, K., Richardson, C., and Nijkamp, P. (2020). Hidden linkages between resources and economy: A "Beyond-GDP" approach using alternative welfare indicators. *Ecological Economics, 169.*

Karic, S (2024). Citizen participation and acceptance in the context of urban events. An investigation on regional garden shows in Germany. *Planning Practice & Research*, *39*(3), 479–497. doi: 10.1080/02697459.2024.2315392.

Keestra, M. and Verloo, N. (2020). Too many cities in the city? Interdisciplinary and transdisciplinary city research methods and the challenge of integration. In N. Verloo & L. Bertolini (Ed.), *Seeing the City: Interdisciplinary Perspectives on the Study of the Urban* (pp. 226-242). Amsterdam: Amsterdam University Press. https://doi.org/10.1515/9789048553099-016

Kim E.,Strecher V. and Ryff C. (2014). Purpose in life and use of preventive health care services. *Proceedings of the National Academy of Sciences of the United States of America 11*(46), 16331-16336, https://doi.org/10.1073/PNAS.1414826111.

Kirsten, F., and Bonga-Bonga, L. (2025).The Ties that Bind Us: How Social Cohesion and Institutional Quality Shape Subjective Well-Being in Africa. *Applied Research Quality Life* https://doi.org/10.1007/s11482-025-10514-1

Koster, H.R.A. and van Ommeren, J. (2023), Neighbourhood stigma and place-based policies. *Economic Policy, 8*(114), 289–339, https://doi.org/10.1093/epolic/eiac039

Kühn M, Bernt M. and Colini L. (2016). Power, politics and peripheralization: Two Eastern German cities. *European Urban and Regional Studies*, *24*(3): 258-273. https://doi.org/10.1177/0969776416637207

Kvartborg Vestergaard L and Schmid B. (2026) Institutional activism within the local state: exploring ambitions for deep transformation in Amsterdam. *Environmental Innovation and Societal Transitions 59,* https://doi.org/10.1016/j.eist.2025.101092.

Landemore, H. (2020) *Open Democracy: Reinventing Popular Rule for the Twenty-First Century*, Princeton, NJ: Princeton University Press.

Lees, L., Slater, T., and Wyly, E. (2013). *Gentrification*. Routledge.

Leino, H., and Puumala, E. (2020). What can co-creation do for the citizens? Applying co-creation for the promotion of participation in cities. *Environment and Planning C: Politics and Space*, *39*(4), 781–799.

Lenzi, C., and Perucca, G. (2023) Economic inequalities and discontent in European cities. *npj Urban Sustain, 3*(26).

Lukes S. (2005). *Power: A Radical View*, Basingstoke, Palgrave Macmillan.

Lund, D.H. (2017). Co-creation in urban governance: from inclusion to innovation. *Scandinavian Journal of Public Administration, 22*(2), 27-41.

Manley, D., Van Ham, M., Bailey, N., Simpson, L., and Maclennan, D. (2013). Neighbourhood effects or neighbourhood based problems? A policy context. In *Neighbourhood effects or neighbourhood based problems? A policy context* (pp. 1-23). Dordrecht: Springer Netherlands.

Manzo, L.C., and Perkins, D.D. (2006). Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning. *Journal of Planning Literature, 20*, 335–350.

Márquez, M.A., Lasarte, E., and Lufin, M. (2019). The Role of Neighborhood in the Analysis of Spatial Economic Inequality. *Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement*, *141*(1), 245-273.

Mazzucato, M. (2021). *Mission economy: a moonshot guide to changing capitalism.* Harper Business.

Mazzucato, M and Ryan-Collins, J (2022). Putting Value Creation Back into 'Public Value': From Market-Fixing to Market-Shaping. *Journal of Economic Policy Reform, 25*(4), 345–60. doi:10.1080/17487870.2022.2053537.

McGregor, J.A., and Pouw, N.R.M. (2017). Towards an economics of well-being. *Cambridge journal of economics, 41*, 1123-1142.

Merry, S. (2016). *The Seductions of Quantification: Measuring Human Rights, Gender Violence, and Sex Trafficking*. Chicago: University of Chicago Press. https://doi.org/10.7208/9780226261317

Metzger J., Allmendinger, P. and Oosterlynck S. (2014). Planning against the Political: Democratic Deficits in European Territorial Governance. London: Routledge

Michels, A. (2011). Innovations in democratic governance: how does citizen participation contribute to a better democracy? *International review of administrative sciences, 77*(2), 275-293.

Minkler, M., and Wallerstein, N. (2008). *Community based participatory research for health: Process to outcomes*. Second Edition, Jossey Bass, San Francisco.

Mizzau L, Montanari F, Rodighiero S and Rinaldini M (2025). Urban regeneration projects and the role of municipal officials: A strategy-as-practice perspective. *European Urban and Regional Studies*, 32(3):329-349. https://doi.org/10.1177/09697764241306013

Moulaert, F. (2010). Social innovation and community development: concepts, theories and challanges. In: Moulaert F, Martinelli F, Swyngedouw E, Gonzalez S (eds) *Can Neighbourhood Save the City?* London: Routledge, pp. 4–16.

Mouratidis, K. (2020). Neighborhood characteristics, neighborhood satisfaction, and well-being: The links with neighborhood deprivation. *Land Use Policy, 99* https://doi.org/10.1016/j.landusepol.2020.104886

Municipality of Amsterdam. (n.d.). *Data Amsterdam*. https://data.amsterdam.nl/

Municipality of Amsterdam, Onderzoek en Statistiek. (n.d.). *About O&S*. https://onderzoek.amsterdam.nl/artikel/about-os

Municipality of Amsterdam. (n.d.). *Dashboard kerncijfers*. https://openresearch.amsterdam/nl/page/107043/dashboard-kerncijfers

Musterd, S. (2005). Social and Ethnic Segregation in Europe: Levels, Causes, and Effects. *Journal of Urban Affairs, 27*(3), 331–348. https://doi.org/10.1111/j.0735-2166.2005.00239.x

Musterd, S. (2022). Segregation, neighbourhood effects and social mix policies. In *Handbook on Urban Social Policies*, 204-218. Edward Elgar Publishing.

Nayyar, D. (2023). Economic Policies for Human Development: A Neglected Domain. *Journal of Human Development and Capabilities, 24*(4), 430–438. doi:10.1080/19452829.2023.2252646.

Nayyar, D. and Malhotra, R. (2023). Economic and Social Policies for Human Development. *Journal of Human Development and Capabilities, 24*(4), 439-467, DOI:10.1080/19452829.2023.2252645

Nussbaum, M.C. (2000) Women and Human Development: The Capabilities Approach. Cambridge University Press, Cambridge. https://doi.org/10.1017/CBO9780511841286

Nussbaum, M. C. (2011). *Creating Capabilities: The Human Development Approach*. Harvard University Press. https://doi.org/10.2307/j.ctt2jbt31

Nussbaum, M and Sen, A. (eds) (1993). *The Quality of Life*. Oxford: Oxford Academic. https://doi.org/10.1093/0198287976.001.0001

OECD (2011). *How's Life?: Measuring well*-being. OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264121164-en

OECD (2013). *OECD Guidelines on Measuring Subjective Well-being*. OECD Publishing, Paris.

OECD (2023). *Economic Policy Making to Pursue Economic Welfare: Report Prepared for the 2023 Japan Presidency of the G7*, OECD Publishing, Paris, https://www.oecd.org/economy/G7_Beyond_GDP_Economic_policy_making_to_pursue_economic_welfare_2023.pdf.

O&S (2021). *Dashboard Kerncijfers*. Gemeente Amsterdam: Onderzoek & Statistiek. https://onderzoek.amsterdam.nl/interactief/dashboard-kerncijfers?tab=indicator&thema=socialekracht&indicator=SK2765_KWETS34_P&indeling=wijken&jaar=2021&gebied=TB&taal=nl

O&S (2021). *Dashboard Kerncijfers*. Gemeente Amsterdam: Onderzoek & Statistiek. https://onderzoek.amsterdam.nl/interactief/dashboard-kerncijfers?tab=indicator&thema=inkomen&indicator=IHHINK_GEM&indeling=wijken&jaar=2021&gebied=TB&taal=nl

O&S (2023). *Basis Bestand Gemeente Amsterdam*. Gemeente Amsterdam: Onderzoek & Statistiek. 2023. https://onderzoek.amsterdam.nl/dataset/basisbestand-gebieden-amsterdam-bbga

O&S (2024) Samenvatting Ondervertegenwoordigd Amsterdam. Report, Gemeente Amterdam: Amsterdam.

Pinkster, F.M., Ferier, M.S. and Hoekstra, M.S. (2020). On the Stickiness of Territorial Stigma: Diverging Experiences in Amsterdam's Most Notorious Neighbourhood. *Antipode, 52*, 522-541. https://doi.org/10.1111/anti.12608

Pinkster, F. M., and Loomans, D. (2024). Urban belonging as place-based affect. *Social & Cultural Geography, 26*(4), 421–438. https://doi.org/10.1080/14649365.2024.2407159

Poortinga, W., Dunstan, F. D., and Fone, D. L. (2008). Neighbourhood deprivation and self-rated health: the role of perceptions of the neighbourhood and of housing problems. *Health & place*, *14*(3), 562–575. https://doi.org/10.1016/j.healthplace.2007.10.003

Pouw, N.R.M., and McGregor, A. (2014). An Economics of Wellbeing: What would Economics look like if it were focused on human wellbeing? *IDS Working Paper, 2014*(436).

Pouw, N.R.M. (2020). *Wellbeing Economics: How and why economics needs to change*. Amsterdam: Amsterdam University Press.

Pouw, N.R.M. and Perotti, E. A Framework for Broad Wellbeing Measurement [unpublished manuscript]

Raworth, K. (2017). *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. Vermont: Chelsea Green Publishing.

Reason, P., and Bradbury, H. (2001). *Handbook of Action Research: Participative Inquiry and Practice*. Sage Publications, Thousand Oaks.

Reinert A. and Sinnig H. (1997). *Mobilisierung der Kompetenz der Bürgerinnen und Bürger. Das Bürgergutachten ÜSTRA zum öffentlichen Nahverkehr in Hannover*, in: T. Bühler (Ed) Bürgerbeteiligung und Demokratie vor Ort, 143–152 (Bonn: Stiftung MITARBEIT).

Riley, D. (2017). Bourdieu's class theory: the academic as revolutionary. *Catalyst Journal, 1*(2).

Robeyns, I. (2005). The Capability Approach: a theoretical survey. *Journal of Human Development, 6*(1), 93–117. https://doi.org/10.1080/146498805200034266

Robeyns, I. (2025). Why Economic Inequality Should Be Central to Strategies for the Future. *Journal of Human Development and Capabilities, 26*(2), 161–76. doi:10.1080/19452829.2025.2479028.

Rodríguez-Pose, A. (2018). The revenge of the places that don't matter (and what to do about it). *Cambridge Journal of Regions, Economy and Society*, *11*(1), 189–209.

Rossi, P., and Tuurnas, S. (2021). Conflicts fostering understanding of value co-creation and service systems transformation in complex public service systems. *Public Management Review, 23*(2), 254–75.

Sampson, R.J., Morenoff, J.D., and Gannon-Rowley, T. (2002). Assessing "neighborhood effects": social processes and new directions in research. *Annual Review Sociology, 28*, 443–78.

Sauri D, Yoon H, and Romero-Gomez G. (2025). Lived experiences of water poverty in Barcelona. *European Urban and Regional Studies*, *0*(0).

Sen, A.K. 1967. The nature and classes of prescriptive judgements. *Philosophical Quarterly, 17*(66),46-62

Sen, A. K. (1979). "Equality of What?" in McMurrin (ed.), *Tanner Lectures on Human Values*, Cambridge: Cambridge University Press, pp. 197–220.

Sen, A. K. (1985). *Commodities and Capabilities*, Amsterdam: North-Holland.

Sen, A. K. (1993). "Capability and Well-being", in Nussbaum and Sen (eds.), *The Quality of Life*, Oxford: Clarendon Press. 30–53

Sen, A.K. 1999. *Development As Freedom*. Knopf.

Senabre Hidalgo, E., Perelló, J., Becker, F., Bonhoure, I., Legris, M., and Cigarini, A. (2021). Participation and Co-creation in Citizen Science. In: Vohland, K., *et al.* The Science of Citizen Science. Springer, Cham.

Sevelius, J.M., Gutierrez-Mock, L., Zamudio-Haas, S., …, Operario, D., Gamarel, K. (2020). Research with Marginalized Communities: Challenges to Continuity During the Covid-19 Pandemic. *Nature Public Health Emergency Collection, 24*, 2009-2012.

Sharkey P. (2013). *Stuck in Place: Urban Neighborhoods and the End of Progress Toward Racial Equality* Chicago: Univ. Chicago Press.

Sharkey, P. & Faber, J.W. (2014). Where When, Why, and for Whom Do Residential Contexts Matter? Moving Away from the Dichotomous Understanding of Neighborhood Effects. *Annual Review of Sociology 40*, 559-579.

Simon-Kumar, S. (2018). Inclusionary policy and marginalized groups in Aoteaora/New Zealand process, impacts and politics. *Kotuitui: New Zealand Journal of Social Sciences, 13*(2), 246-260.

Small, M.L. and Feldman, J. (2012). Ethnographic Evidence, Heterogeneity, and Neighbourhood Effects After Moving to Opportunity. In: van Ham, M., Manley, D., Bailey, N., Simpson, L., Maclennan, D. (eds) *Neighbourhood Effects Research: New Perspectives.* Springer, Dordrecht. https://doi.org/10.1007/978-94-007-2309-2_3

Sollis, K., Yap, M., Campbell, P., and Biddle, N. (2022). Conceptualizations of wellbeing and quality of life: as systematic review of participatory studies. *World Development, 160.*

Sollis, K. (2023). Participatory Wellbeing Frameworks and the Secret to Impact. *Journal of Human Development and Capabilities*, *24*(2), 163-193.

Spierings, B. (2012). Economic flows, spatial folds and intra-urban borders: Reflections on city centre redevelopment plans from a European border studies perspective. *Tijdschrift voor Economische en Sociale Geografie, 103*(1), 110–117.

Star, S. L., and Griesemer, J. R. (1989). Institutional Ecology, `Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, *19*(3), 387-420. https://doi.org/10.1177/030631289019003001

Stiglitz, J., Sen, A., and Fitoussi, J.P. (2009). *Report by the commission on the measurement of economic performance and social progress*. Report, Eurostat, Paris.

Stiglitz, J., Fitoussi, J., and Durand, M. (2018). *Beyond GDP: Measuring What Counts for Economic and Social Performance*. Report, OECD Publishing, Paris.

Stone, C. N. (2005). Looking Back to Look Forward: Re ections on Urban Regime Analysis. *Urban Affairs Review 40*(3), 309–41.

Suter, C., and Iglesias, K. (2005*). Relative Deprivation and Well-being: Switzerland in a Comparative Perspective.* In: Kriesi, H., Farago, P., Kohli, M., Zarin-Nejadan, M. (eds) Contemporary Switzerland. Palgrave Macmillan, London. https://doi.org/10.1057/9780230523586_2

Swyngedouw, E. (2005). Governance innovation and the citizen: the Janus face of governance-beyond-the-state. Urban Studies, *42*(11): 1991–2006.

te Lintelo, D.J.H., Gupte, J., McGregor, J.A., Lakshman, R. and Jahan, F. (2018). Wellbeing and urban governance: Who fails, survives or thrives in informal settlements in Bangladeshi cities? *Cities*, *72*(B), 391-402, https://doi.org/10.1016/j.cities.2017.10.002.

Termeer, C.J.A.M., Dewulf, A., and Biesbroek, R. (2019). A critical assessment of the wicked problem concept: relevance and usefulness for policy science and practice. *Policy and Society, 38*(2), 167-179.

Thompson, M (2020). What's so new about New Municipalism? *Progress in Human Geography*, *45*(2), 317-342. https://doi.org/10.1177/0309132520909480

Tilly, C. (2017). Poverty and the politics of exclusion. In: Castaneda E and Schneider C (eds) *Collective Violence, Contentious Politics and Social Change.* New York: Routledge.

Torfing, J., Peters, B.G., Pierre, J., and Sørensen, E. (2012). *Interactive governance: advancing the paradigm*. Oxford: Oxford University Press.

Trein, P., and Vagionaki, T. (2024). Why policy failure is a prerequisite for innovation in the public sector. *Policy and Politics*, *52*(4), 586-605. https://doi.org/10.1332/03055736Y2023D000000012

Tulumello, S and Allegretti, G. (2020). Articulating urban change in Southern Europe: Gentrification, touristification and financialisation in Mouraria, Lisbon. *European Urban and Regional Studies*, *28*(2), 111-132. https://doi.org/10.1177/0969776420963381

Uitermark, J. (2009). An *in memoriam* for the just city of Amsterdam. *City, 13*(2), 347 -361.

Ul Haq, M. 1995. *Reflections on Human Development*, New York: Oxford University

Press.

UNDP and OPHI. (2019). *How to Build a National Multidimensional Poverty Index (MPI): Using the MPI to Inform the SDGs.* United Nations Development Programme (UNDP), and Oxford Poverty and Human Development Initiative (OPHI), University of Oxford.

van Beek, J. E. M., Pouw, N. R. M., and Verrest, H. J. L. M. (2025). Co-creation to measure what matters: The case of Venserpolder, Amsterdam. *Journal of Urban Affairs*, *1*(20). https://doi.org/10.1080/07352166.2025.2480806

Van Gent, W.P.C., Musterd, S., and Ostendorf, W. (2009). Disentangling neighbourhood problems: area-based interventions in Western European cities. *Urban Research and Practice, 2*(1), 53-67.

van Gent, W. P. C. (2013). Neoliberalization, housing institutions and variegated gentrification: How the 'third wave' broke in Amsterdam. *International Journal of Urban and Regional Research*, 37(2), 503–522.

Van Kempen, R., and Murie, A. (2009). The new divided city: changing patterns in European cities. *Journal of Economic and Human Geopgraphy, 100*(4), 377-398.

van Ostaaijen, J. (2024). Using the urban regime framework to study processes of urban governance: Agendas, coalitions, resources, and schemes of cooperation. *Urban Affairs Review 60*(2): 515-544. https://doi.org/10.1177/10780874231180812

Varghese, C., and Kumar, S.S. (2022). Marginality: A Critical Review of the Concept. *Review of Development and Change, 27*(1), 23-41.

Veenhoven, R. (2007). *Subjective measures of well-being*. In: McGillivray, M. (Ed.): Human Well-Being – Concept and Measurement. Houndsmills, 214-239.

Veneri, P., and Edzes, A. (Eds.). 2017. Well-being in cities and regions: measurement, analysis and policy practices. *REGION: the Journal of ERSA*, *4*(2): E1E5. https://doi.org/10.18335/region.v4i2.188

Veneri, P. and F. Murtin (2016), "Where is inclusive growth happening? Mapping multi-dimensional living standards in OECD regions", *OECD Statistics Working Papers*, No. 2016/01, OECD Publishing, Paris, https://doi.org/10.1787/5jm3nptzwsxq-en.

Veneri, P., and Pontarollo, N. (2025). Cities for living. Identifying the local conditions driving life satisfaction in European cities. Regional Studies, Regional Science, 12(1), 617–633. https://doi.org/10.1080/21681376.2025.2524435

Verloo, N. (2020). Urban ethnography and participant observations: Studying the city from within. In: Verloo N and Bertolini L *(Eds)Seeing the City: Interdisciplinary Perspectives on the Study of the Urban.* Amsterdam: Amsterdam University Press, 37.

Verloo, N. (2023). Ignoring people: The micro-politics of misrecognition in participatory governance. *Environment and planning C: Politics and Space, 41*(7), 1474-149.

Verrest, H.J.L.M., Pouw, N.R.M., and van Beek, J. (2021). Welzijnsindex voor de stad Amsterdam: Verkennende studie. Report, Municipality of Amsterdam, NL, January.

Verrest, H.J.L.M. and N.R.M. Pouw (2026). Verrest, H., & Pouw, N. (2026). Just Inclusion Through Bottom-up Wellbeing Measurement: Case Study in Venserpolder, Amsterdam. *Progress in Development Studies*, 14649934251411118.

Vethaak, H. and Jongen, E. (2024). *Stille wateren diepe gronden: Een analyse van de inkomensverdeling en haar determinanten over de afgelopen veertig jaar.* Leiden: Leiden University, commissioned by FNV.

von Wirth T, Grêt-Regamey, A. and Stauffacher, M. (2014). Mediating Effects Between Objective and Subjective Indicators of Urban Quality of Life: Testing Specific Models for Safety and Access. *Social Indicators Research*,1-22. 10.1007/s11205-014-0682-y.

Vrooman, C., Boelhouwer, J., Iedema, J. and van der Torre, A. (2023*). Eigentijdse ongelijkheid: de postindustriële klassenstructuur op basis van vier typen kapitaal*. Sociaal Cultureel Plan Bureau, NL: The Hague.

Wacquant, L. (2007). Territorial stigmatization in the age of advanced marginality. *Thesis Eleven, 91*(1).

Welzijnsdashboard team (2023) Welzijnsdashboard and Monitor Brede Welvaart Vergeleken. Welzijnsdashboard. Available at: https://usercontent.one/wp/www.welzijnsdashboard.nl/wp-content/uploads/2023/07/One-pager-Edited-Brede-Welvaart-vs-Welzijn-Final.doc.pdf?media=1699545077

Wesz, J., Miron, L., Delsante, I. and Tzortzopoulos, P. (2023). Urban Quality of Life: A Systematic Literature Review. *Urban Science, 7*(56). 10.3390/urbansci7020056.

Wilson, W.J. (1987). *The Truly Disadvantaged*. Chicago, Illinois: University Chicago Press.

Yardımcı, Ö. (2022). Drawing the boundaries of 'good citizenship' through state-led urban redevelopment in Dikmen Valley. *European Urban and Regional Studies*, *30*(3), 235-247. https://doi.org/10.1177/09697764221119919 (Original work published 2023).

Young, I. M. (2008). Structural injustice and the politics of difference. In G. Craig, T. Burchardt, & D. Gordon (Eds.), *Social justice and public policy: Seeking fairness in diverse societies* (pp. 77–104). Policy Press.

Zweegman, S., Rosalina, Z., Redan, S., Vermeulen, F., and Kaulingfreks, F. (2023). Ongemakkelijke ontmoetingen: Politieke participatie van jongeren in Amsterdam. *Journal of Social Intervention, 32* (4), 23–43. https://doi.org/10.18352/jsi.783

Summary

Measuring what matters: A Wellbeing Economics Approach to Urban Marginality in High-Income contexts

The dissertation aims to advance a multidimensional and participatory framework for understanding and addressing urban marginality in high-income contexts through the analytical lens of economic wellbeing. It departs from the paradox that persistent economic growth and institutional strength coexist with widening social and spatial inequalities. The research draws on wellbeing economics, conceptualizing wellbeing as the interaction between material, relational, and subjective dimensions of life, and integrates this with participatory governance theory and urban regime theory.

The overarching research question is formulated as: *How can citizen-defined, multidimensional indicators of wellbeing be developed and measured at neighbourhood level in high-income urban contexts, and to what extent can such measurement meaningfully contribute to citizen empowerment and more inclusive urban governance?*

The dissertation deliberately addresses this question through an article-based design, in which each empirical chapter (Chapters 2–5) examines a specific sub-question. Taken together, these chapters provide a cumulative and integrated answer to the main research question (chapter 6).

The dissertation is structured around a sequential yet flexible methodological architecture. It addresses the main research question through analysing multiple marginalized, yet distinct, neighbourhoods in Amsterdam. It takes an action-oriented and community-based participatory research approach that combines qualitative and quantitative methods, experiential and statistical data, and multiple forms of expertise.

Chapter 2 addresses the first sub-question: *how can broader wellbeing indicators and a new measurement instrument be developed through co-creation with residents of a marginalised neighbourhood, and under what conditions can empowerment be achieved?* Based on the first neighbourhood case study, Venserpolder, it analyses a process of initiating local collaboration and setting-up co-creation for wellbeing measurement. This leads to a transferable bottom-up method for participatory wellbeing measurement (“Wellbeing

Dashboards"). The chapter demonstrates how residents are able to articulate coherent, multidimensional conceptions of wellbeing spanning material, relational, and subjective when guided through interactive and creative tasks. In addition, the chapter illustrates how empowerment can emerge not only from the outcomes of participatory measurement, but also from the process of co-creation itself – particularly when its longitudinal, face-to-face, facilitates social learning and is embedded in self-organised community structures rather than one-off consultations.

Chapter 3 addresses the second sub-question: *what additional insights do bottom-up, citizen-defined wellbeing indicators provide compared to conventional top-down data sources?* The chapter reveals how participatory, multidimensional wellbeing measurement fill critical blind-spots in policy knowledge based on which it underlines the relevance and legitimacy of citizen knowledge to policy. It presents a comparison which empirically shows that citizen-defined wellbeing indicators illuminate previously unrecognized needs and complement conventional indicators. Wellbeing indicators measured in the subjective and/or relational domain prove to complement municipal indicators most substantially by capturing lived experiences. As such, the chapter empirically validates the inclusion of localized relational-subjective wellbeing indicators for human-centered and more effective policy design. Moreover, the chapter illustrates how integrated wellbeing measurement can signal important points for intervention. The results of a correlation analysis signal important interdependencies across domain and reaffirm the importance of looking beyond material indictors to understanding human wellbeing outcomes.

Chapter 4 addresses the third sub-question: *what do bottom-up wellbeing indicators reveal about shared and diverging needs across marginalized neighbourhoods, and what does this imply for area-based policy and governance of marginalized neighbourhoods?* It compares local wellbeing indicators of three neighbourhoods and discusses how residents articulate a layered understanding of wellbeing needs; one that is compromises foundational needs followed by divergent higher-order needs. Residents across marginalized neighbourhoods consistently identified and share concerns over, what the chapter conceptualizes as, "basic safety" wellbeing needs (including social connection, financial sufficiency, housing stability, emotional balance, neighbourhood liveability and perceived safety). This shared foundation suggests that governance of marginalized neighbourhoods can happen within a unified area-based framework. Beyond a shared foundation, divergence is found in terms of higher-order

wellbeing needs and the priorities set by residents. Subsequently, the chapter argues that area-based interventions must just as well leave space for localized priority-setting and contextualized formulation of policy action. Methodologically, the findings of both shared and divergent wellbeing needs demonstrate that the bottom-up method produces robust results with contextual validity.

Chapter 5 addresses the fourth and final sub-question: *Under what institutional and political conditions can participatory wellbeing measurement influence policy agendas, decision-making, and resource allocation at the neighbourhood level?* The chapter analyses an emerging collaborative coalition around the Wellbeing Dashboards in Amsterdam Southeast. Here shared concerns over policy legitimacy and effectiveness are bringing various district-level policy actors and residents together. The findings demonstrate how participatory wellbeing measurement can function as boundary-spanning resource, able to facilitate multi-actor collaboration from a shared, and community-validated, starting point. However, in terms of achieving actual policy influence, analysis through an urban regime lens revealed critical coalitional, resource and institutional constraints. The current collaborating coalition lacks policy actors with sufficient decision-making authority, and control over financial and bureaucratic resources, to institutionalize community influence. In addition, wider institutional constraints, such as hierarchical accountability structures, predefined policy assignments, and fragmented governance responsibilities, hamper sustained community-led collaboration and the extent to which resident-defined wellbeing priorities can be structurally embedded in local policy practice.

Chapter 6 provides a coherent answer to the main research question and highlight three key findings. The empirical chapters show that, through–meaningful co-creative processes, citizen-defined, multidimensional wellbeing indicators can be robustly developed and measured at neighbourhood level and generate analytically distinct and policy-relevant knowledge. The extent to which such local wellbeing measurement contributes to citizens' epistemic and procedural empowerment is twofold. First, policy actors start to legitimize citizens' experiential and situated knowledge when translated measurable indicators, which cause the indicators to shift epistemic power to citizens. Second, when local wellbeing measurement turns into policy action, formerly unrecognized needs become decisive in policy practice hence shifting both epistemic and procedural power to citizens. As such,

measurement determines which needs are seen and are recognized; highlighting a first key finding: i*)* Measurement is a site of power, not a neutral tool.

In addition, based on the empirical findings it suggests that a credible wellbeing framework in affluent urban contexts must be able to hold both stability and plurality: a shared baseline of basic safety and a plural space of valued living. The measurement of multidimensional wellbeing in and across marginalized neighbourhoods highlights a second key finding: *ii)* Marginality in affluent cities is a matter of varying and interacting relational, personal, and institutional deficits that are contextually shaped and locally specific.

At the same time, the dissertation demonstrates that the governance impact of such measurement, and hence the empowering potential of participation, is conditional. It empirically shows that bottom-up, participatory wellbeing measurement is a *necessary* condition for revealing lived marginality and empowering citizens, but it is *not sufficient* for achieving inclusive urban governance in high-income contexts. Realising its full transformative potential requires complementary changes in institutional arrangements, coalition structures, and the valuation of local knowledge within policy systems. This leads to the final key finding: *iii)* Participatory measurement only becomes transformative when embedded in governance regimes.

Theoretically, the dissertation advances wellbeing economics by embedding citizen knowledge in the production of economic data, linking epistemic with distributive justice. Conceptually, it reframes urban marginality as multidimensional illbeing in affluent societies. Methodologically, it contributes a transferable framework for participatory wellbeing measurement and validation. At the policy level, it demonstrates how localized indicators can inform differentiated investment strategies and support a systemic transition toward inclusive, wellbeing-oriented urban governance. Moreover, the dissertation contributes a reflexive account of conducting action-oriented and participatory research as both scientific inquiry and epistemic justice intervention. Finally, policy recommendations and future research directions are suggested.

Samenvatting

Meten wat belangrijk is: Een Welzijnseconomie perspectief op marginaliteit in welvarende steden

Het proefschrift heeft tot doel een multidimensionaal en participatief kader te ontwikkelen voor het begrijpen en aanpakken van marginaliteit in welvarende steden, vanuit het analytische perspectief van Welzijnseconomie. Het vertrekt vanuit de paradox, zichtbaar in verschillende Westerse steden, dat aanhoudende economische groei samengaat met toenemende sociale en ruimtelijke ongelijkheden. Het onderzoek is gebaseerd op Welzijnseconomie, waarbij welzijn wordt gedefinieerd als de interactie tussen materiële, relationele en subjectieve dimensies van dagelijks welzijn, en integreert dit met participatieve bestuurs- en stedelijke regimetheorie.

De overkoepelende onderzoeksvraag luidt: Hoe kunnen door burgers gedefinieerde, multidimensionale indicatoren van welzijn worden ontwikkeld en gemeten op buurtniveau in stedelijke contexten met een hoog inkomen, en in hoeverre kan een dergelijke meting een zinvolle bijdrage leveren aan burgerempowerment en een meer inclusief stedelijk bestuur?

Het proefschrift behandelt deze vraag aan de hand van vier empirische artikelen, waarin elk artikel in een hoofdstuk (hoofdstukken 2-5) een specifieke deelvraag onderzoekt. Samen bieden deze hoofdstukken een cumulatief en geïntegreerd antwoord op de hoofdonderzoeksvraag (hoofdstuk 6).

Het proefschrift is opgebouwd rond een sequentiële maar flexibele methodologische architectuur. Het behandelt de hoofdonderzoeksvraag door middel van een analyse van meerdere gemarginaliseerde, maar toch verschillende buurten in Amsterdam. Het hanteert een actiegerichte en participatieve onderzoeksaanpak waarin kwalitatieve en kwantitatieve methoden, ervarings- en statistische gegevens, en verschillende vormen van expertise gecombineerd worden.

Hoofdstuk 2 behandelt de eerste deelvraag: *hoe kunnen bredere welzijnsindicatoren en een nieuw meetinstrument worden ontwikkeld door middel van co-creatie met bewoners van een gemarginaliseerde buurt, en onder welke voorwaarden kan empowerment worden bereikt?* Op basis van de eerste buurtcasestudy, Venserpolder, analyseert het een proces van het

initiëren van lokale samenwerking en het opzetten van co-creatie voor welzijnsmeting. Dit leidt tot een overdraagbare bottom-up methode voor participatieve welzijnsmeting ("Welzijnsdashboards"). Het hoofdstuk laat zien hoe bewoners in staat zijn om coherente, multidimensionale concepten van welzijn te verwoorden die zowel materieel, relationeel als subjectief zijn, wanneer ze worden begeleid door interactieve en creatieve taken. Bovendien illustreert het hoofdstuk hoe empowerment niet alleen kan voortkomen uit de resultaten van participatieve metingen, maar ook uit het proces van co-creatie zelf – met name wanneer dit longitudinaal en face-to-face plaatsvindt, sociaal leren bevordert en is ingebed in zelforganiserende gemeenschapsstructuren in plaats van eenmalige raadplegingen.

Hoofdstuk 3 behandelt de tweede deelvraag: *welke aanvullende inzichten bieden bottom-up, door burgers gedefinieerde welzijnsindicatoren ten opzichte van conventionele top-down beleidsdata?* Het hoofdstuk laat zien hoe participatieve, multidimensionale welzijnsmetingen kritieke blinde vlekken in de beleidsmatige kennis opvullen, op basis waarvan het de relevantie en legitimiteit van burgerkennis voor het beleid benadrukt. Het presenteert een vergelijking die empirisch aantoont dat door burgers gedefinieerde welzijnsindicatoren voorheen onbekende behoeften aan het licht brengen en een aanvulling vormen op conventionele indicatoren. Welzijnsindicatoren die worden gemeten in het subjectieve en/of relationele domein blijken een zeer substantiële aanvulling te vormen op gemeentelijke indicatoren door het vastleggen van geleefde ervaringen. Als zodanig valideert het hoofdstuk empirisch de opname van gelokaliseerde relationeel-subjectieve welzijnsindicatoren voor een mensgericht en effectiever beleidsontwerp. Bovendien illustreert het hoofdstuk hoe geïntegreerde welzijnsmetingen belangrijke punten voor interventie kunnen signaleren. De resultaten van een correlatieanalyse wijzen op belangrijke onderlinge afhankelijkheden tussen domeinen en bevestigen opnieuw het belang van verder kijken dan materiële indicatoren om inzicht te krijgen in de resultaten op het gebied van menselijk welzijn.

Hoofdstuk 4 behandelt de derde deelvraag: *wat zeggen bottom-up welzijnsindicatoren over gedeelde en uiteenlopende behoeften in gemarginaliseerde buurten, en wat betekent dit voor gebiedsgericht beleid en bestuur van gemarginaliseerde buurten?* Het vergelijkt lokale welzijnsindicatoren van drie buurten en bespreekt hoe bewoners een gelaagd begrip van welzijnsbehoeften verwoorden; een begrip dat bestaat uit compromissen tussen basisbehoeften gevolgd door uiteenlopende behoeften van hogere orde. Bewoners van

gemarginaliseerde buurten hebben consequent hun bezorgdheid geuit over wat in dit hoofdstuk wordt omschreven als “basisveiligheid” welzijnsbehoeften (waaronder sociale verbondenheid, financiële zekerheid, huisvestingsstabiliteit, emotioneel evenwicht, leefbaarheid van de buurt en waargenomen veiligheid). Deze gedeelde basis suggereert dat het bestuur van gemarginaliseerde buurten kan plaatsvinden binnen een uniform gebiedsgericht kader. Naast een gedeelde basis zijn er ook verschillen te zien in termen van hogere welzijnsbehoeften.

Hoofdstuk 5 behandelt de vierde en laatste deelvraag: *onder welke institutionele en politieke omstandigheden kan participatieve welzijnsmeting invloed uitoefenen op beleidsagenda's, besluitvorming en middelenallocatie op buurtniveau?* Het hoofdstuk analyseert een opkomende samenwerkingscoalitie rond de Welzijnsdashboards in Amsterdam Zuidoost. Hier brengen gedeelde zorgen over de legitimiteit en effectiviteit van het beleid verschillende beleidsactoren en bewoners op buurtniveau samen. De bevindingen laten zien hoe participatieve welzijnsmetingen kunnen fungeren als grensoverschrijdende hulpbron, die samenwerking tussen meerdere actoren kan faciliteren vanuit een gedeeld en door de gemeenschap gevalideerd uitgangspunt. Wat betreft het bereiken van daadwerkelijke beleidsinvloed, bracht analyse vanuit het perspectief van het stedelijk regime echter kritieke beperkingen op het gebied van coalities, middelen en instellingen aan het licht. De huidige samenwerkingscoalitie mist beleidsactoren met voldoende beslissingsbevoegdheid en controle over financiële en bureaucratische middelen om de invloed van de gemeenschap te institutionaliseren. Bovendien belemmeren bredere institutionele beperkingen, zoals hiërarchische verantwoordingsstructuren, vooraf vastgestelde beleidsopdrachten en gefragmenteerde bestuursverantwoordelijkheden, duurzame samenwerking onder leiding van de gemeenschap en de mate waarin door bewoners gedefinieerde welzijnsprioriteiten structureel kunnen worden verankerd in de lokale beleidspraktijk.

Hoofdstuk 6 geeft een samenhangend antwoord op de belangrijkste onderzoeksvraag en belicht drie belangrijke bevindingen. De empirische hoofdstukken tonen aan dat door middel van zinvolle co-creatieve processen door burgers gedefinieerde, multidimensionale welzijnsindicatoren op buurtniveau robuust kunnen worden ontwikkeld en gemeten en analytisch onderscheidende en beleidsrelevante kennis kunnen genereren. De mate waarin dergelijke lokale welzijnsmetingen bijdragen aan de epistemische en procedurele empowerment van burgers is tweeledig. Ten eerste beginnen beleidsmakers de

ervaringsgerichte en situationele kennis van burgers te legitimeren wanneer deze wordt vertaald in meetbare indicatoren, waardoor de indicatoren epistemische macht naar burgers verschuiven. Ten tweede, wanneer lokale welzijnsmetingen worden omgezet in beleidsmaatregelen, worden voorheen niet-erkende behoeften doorslaggevend in de beleidspraktijk, waardoor zowel epistemische als procedurele macht naar burgers verschuift. Als zodanig bepaalt meting welke behoeften worden gezien en erkend, wat een eerste belangrijke bevinding benadrukt: i) Meting is een plaats van macht, geen neutraal instrument.

Bovendien suggereert het op basis van de empirische bevindingen dat een geloofwaardig welzijnskader in welvarende stedelijke contexten zowel stabiliteit als pluraliteit moet kunnen bieden: een gedeelde basis van fundamentele veiligheid en een pluriforme ruimte van waardevol leven. De meting van multidimensionaal welzijn in en tussen gemarginaliseerde buurten benadrukt een tweede belangrijke bevinding: ii) Marginaliteit in welvarende steden is een kwestie van variërende en op elkaar inwerkende relationele, persoonlijke en institutionele tekortkomingen die contextueel gevormd en lokaal specifiek zijn.

Tegelijkertijd toont het proefschrift aan dat de impact van een dergelijke meting op het bestuur, en daarmee het empowermentpotentieel van participatie, voorwaardelijk is. Het toont empirisch aan dat bottom-up, participatieve welzijnsmeting een noodzakelijke voorwaarde is om geleefde marginaliteit aan het licht te brengen en burgers mondiger te maken, maar dat dit niet voldoende is om inclusief stedelijk bestuur te realiseren. Om het volledige transformatieve potentieel te realiseren, zijn aanvullende veranderingen nodig in institutionele regelingen, coalitiestructuren en de waardering van lokale kennis binnen beleidssystemen. Dit leidt tot de laatste belangrijke bevinding: iii) Participatieve metingen worden pas transformatief wanneer ze worden ingebed in bestuur regimes.

Theoretisch gezien draagt het proefschrift bij aan de welzijnseconomie door de kennis van burgers te integreren in de productie van economische gegevens, waardoor epistemische rechtvaardigheid wordt gekoppeld aan distributieve rechtvaardigheid. Conceptueel gezien herdefinieert het stedelijke marginaliteit als multidimensionaal onwelzijn in welvarende samenlevingen. Methodologisch draagt het bij aan een overdraagbaar kader voor participatieve welzijnsmeting en -validatie. Op beleidsniveau laat het zien hoe lokale indicatoren kunnen bijdragen aan gedifferentieerde investeringsstrategieën en een systemische transitie naar inclusief, welzijnsgericht stedelijk bestuur kunnen ondersteunen.

Bovendien levert het proefschrift een reflexieve beschrijving van het uitvoeren van actiegericht en participatief onderzoek als zowel wetenschappelijk onderzoek als epistemische rechtvaardigheidsinterventie. Ten slotte worden beleidsaanbevelingen en toekomstige onderzoeksrichtingen voorgesteld.

Appendix

Chapter 2 - Appendix A1.

Table A1.1. Data sources (source by authors).

	Type	**Title**	**Date**
A	Vision statement	Concept Vison note 'Samenwerkende Organisaties Venserpolder'	October 2021
B	Policy study	Research report – Wellbeing index Amsterdam	12 January 2021
C	Interview transcripts	Interviews with representatives of care and wellbeing organisation in Venserpolder	12 May to 23 September 2021
D	Field notes	Notes and observations on preparatory process and creating group of participating local experts	27 August to 6 November 2021
E	Field notes	Notes and observations from co-creation workshops Venserpolder	6 November to 24 December 2021
F	Report	Workshop: Wellbeing in Venserpolder by Dorien Zandbergen and Roos Gerritsen	6 November 2021
G	Report	Results Workshop 1 Wellbeing Dashboard Venserpolder by Dorien Zandbergen and Roos Gerritsen	15 November 2021
H	Report	Indicators for wellbeing dashboard Venserpolder	28 November 2021
I	Report	Proposal program workshop 2 Wellbeing Dashboard Venserpolder and concept of two dashboard prototypes by Dorien Zandbergen and Roos Gerritsen	3 December 2021
J	Report	Amsterdam – Wellbeing Dashboard Venserpolder: Prototype 24 december 2021 by Dorien Zandbergen and Roos Gerritsen	24 December 2021
K	Report	Workshop 2 Wellbeing Dashboard Venserpolder: a report by Dorien Zandbergen and Roos Gerritsen	28 December 2021
L	Field notes	Notes and observations from validation session with citizens	22 November 2022
M	Field notes	Notes and observations from validation session with citizens and policy officials	24 November 2022
N	Report	Dashboard dialogues Amsterdam Venserpolder by Dorien Zandbergen and Roos Gerritsen	4 May 2023
O	Report	Report Teamsessie	22 May 2023
P	Field notes	Preparation session with citizens	13 September 2023
Q	Report	Structure workshop 13 october by Dorien Zandbergen and Roos Gerritsen	13 October 2023
R	Field notes	Notes and observations from Experimental dialogues Venserpolder	29 September to 13 October 2023
S	Report	Evaluation Dashboard dialogues	15 December 2023
T	Report	End report Venserpolder dialogues by Dorien Zandbergen and Roos Gerritsen	20 December 2023

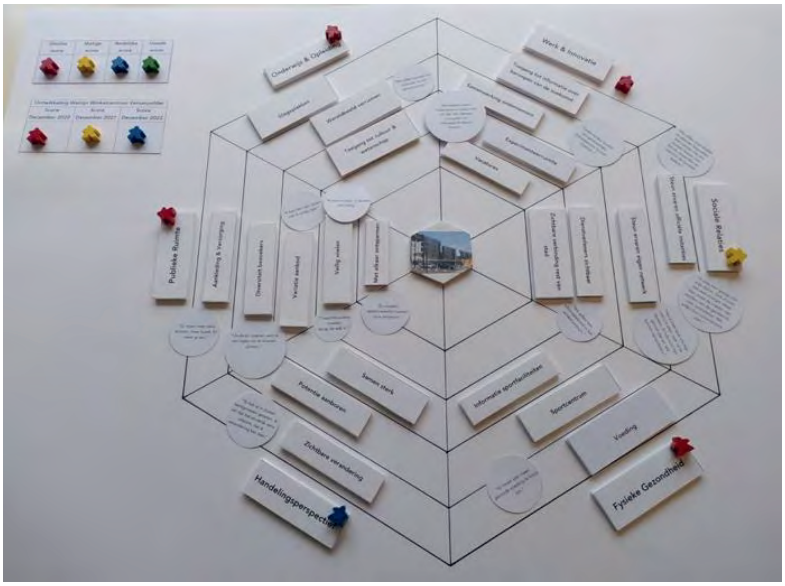


Figure A1.1: Physically visualised Dashboard (design by Dorien Zandbergen en Roos Gerritsen).

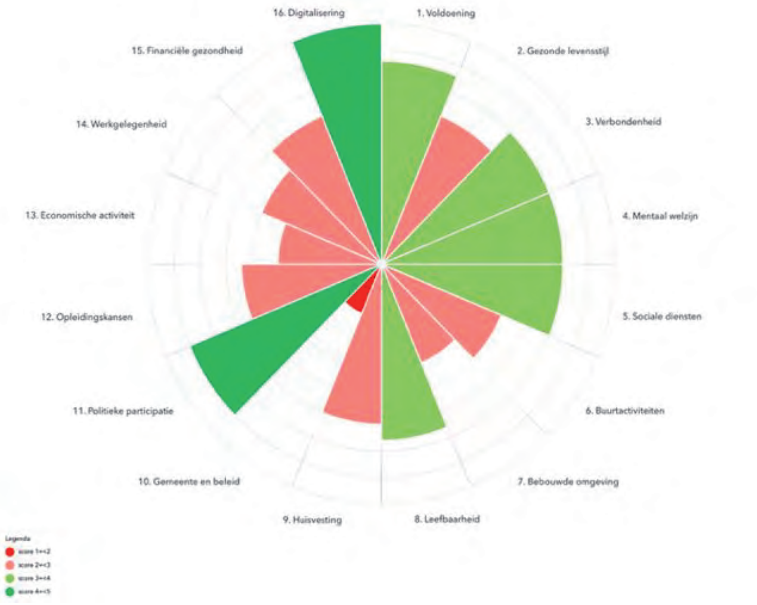


Figure A1.2: First prototype (source by authors).

Wellbeing Dashboard Venserpolder

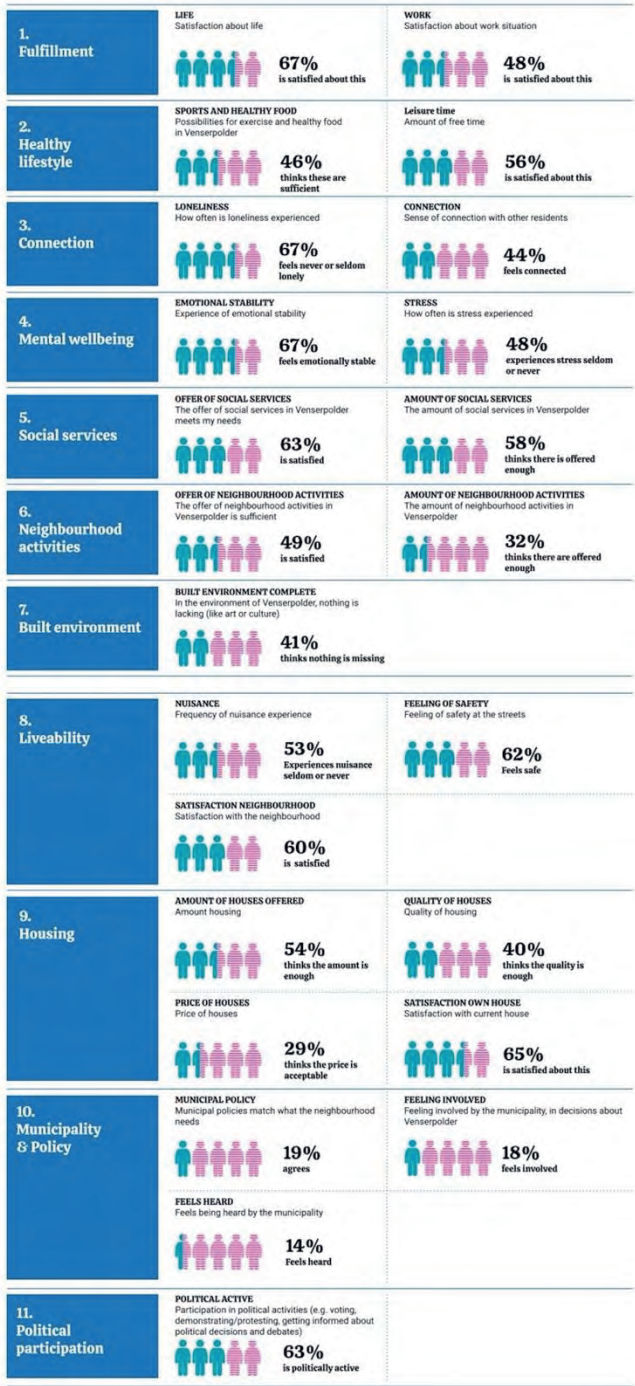




Figure A1.3: Wellbeing Dashboard Venserpolder (design by Rob Maijers and Nico Druif).

Chapter 3 - Appendix A2.

Table A2.1. Statistically significant Spearman correlations between local wellbeing indicators from Venserpolder. Indicators 'unique' to municipal data are underlined (source by authors).

Indicator 1	**Indicator 2**	**Spearman's *r***	***p*-value**	***N***
Stress (S)	Making ends meet (M)	-0.221	.000	247
Stress (S)	Feeling connected to other residents (R ∩ S)	-0.221	.000	247
Stress (S)	Loneliness (S)	0.289	.000	247
Feeling heard by policy officials (R ∩ S)	Satisfaction with shops (S ∩ M)	0.323	.000	243
Feeling heard by policy officials (R ∩ S)	Satisfaction with public facilities (S ∩ M)	0.264	.000	242
Feeling heard by policy officials (R ∩ S)	Completeness of built environment (M)	0.184	.004	241
Feeling heard by policy officials (R ∩ S)	Feeling involved in decision-making (R ∩ S)	0.526	.000	243
Feeling heard by policy officials (R ∩ S)	Policy meets neighbourhood needs (R)	0.538	.000	243
Access to computer/internet at home (M)	Perceived educational opportunity (R ∩ S)	0.385	.000	92
Self-evaluated digital skills (S)	Perceived educational opportunity (R ∩ S)	0.236	.023	92
Access to computer/internet at home (M)	Having a paid job (M)	0.232	.000	250
Self-evaluated digital skills (S)	Having a paid job (M)	0.234	.000	244
Self-evaluated digital skills (S)	Financial problems (M)	0.259	.000	193
Access to computer/internet at home (M)	Financial problems (M)	0.271	.000	198
Satisfaction with life (S)	Making ends meet (M)	0.502	.000	245
Opportunities for healthy lifestyle (R)	Making ends meet (M)	0.233	.000	245
Emotional stability (S)	Making ends meet (M)	0.362	.000	245
Emotional stability (S)	Financial problems (M)	0.154	0.031	196
Perceived educational opportunity (R ∩ S)	Financial problems (M)	0.350	.004	67

Opportunities for healthy lifestyle (R)	Financial problems (M)	0.211	.003	196
Satisfaction with life (S)	Financial problems (M)	0.349	.000	196

** Letters indicate wellbeing dimension: M = material, S = subjective, R = relational*

Table A2.2. Comparison of the Wellbeing Dashboard data to municipal data (source by authors).

Local Wellbeing indicator			**Comparison to municipal indicators**
Unique to municipal data (18)	1a	Satisfaction with life **S**	No similarity Municipal indicator does measure whether someone feels (very) happy (on district level). However, this is different from what the wellbeing indicator measures, namely to what extent someone is satisfied about their current state of life which is regarded a more rational assessment (Diener et al. 1999)
	1b	Satisfaction employment situation **S ∩ M**	No similarity
	2a	Opportunities for healthy lifestyle **R**	No similarity Municipal indicator does measure opinion about sport facilities on district level. However, wellbeing indicator measures opinion about the availability of sport facilities *and* of healthy foods in the neighbourhood.
	2b	Satisfaction leisure time **S**	No similarity
	4a	Emotional stability **S**	No similarity Municipal indicator does measure severe psychological issues through a specialized assessment (and on district level). However, this doesn't (directly) inform about emotional stability, which residents identified as a specifically important aspect of psychological wellbeing and daily life in the neighbourhood.
	4b	Frequency of stress **S**	No similarity Municipal indicator does measure severe psychological issues however this doesn't inform about stress specifically. While 'stress' as a single indicator was identified by residents as a particularly important aspect of psychological wellbeing and daily life in their neighbourhood.
	5a	Social services meeting needs **M ∩ R**	No similarity Municipal indicator does register number of facilities per household and within an area. However, this does not account for experienced accessibility and does not measure whether these social services serve residents and meet their needs.
	7	Completeness of built environment **M**	No similarity Municipal indicator does measure opinion on how the build environment looks. However, residents identified the completeness of the build environment, in terms of facilities and psychical spaces, more important than how it looks.

	9a	Perceived housing stock **S ∩ M**	No similarity
	9b	Perceived housing quality **S ∩ M**	No similarity Municipal indicator does measure opinion on maintenance of housing. However, not the quality of housing in the first place, which is a specific concern of residents in the neighbourhood.
	10a	Municipal policy meeting neighbourhood needs **R**	No similarity
	10b	Feeling involved in local decision-making **R ∩ S**	No similarity Municipal indicator does measure felt connection to city district, but this does not measure whether residents feel involved in local decision-making which is of specific concern in the neighbourhood due to (felt) political exclusion.
	10c	Feeling heard by local policy officials **R ∩ S**	No similarity Municipal indicator does measure felt influence on city-wide policy decisions. However the Wellbeing indicator measures, at neighbourhood level, if residents 'feel heard' whenever they have a complaint, issue or something else they want to bring under the attention of policy officials. Which is more fitting to the realities of residents in that neighbourhood than 'influence on city-wide policy.
	12b	Educational opportunities meeting needs **R**	No similarity
	12c	Perceived educational opportunities for self **R ∩ S**	No similarity
	14b	Jobs offered meeting needs **M ∩ R**	No similarity
	16a	Self-evaluated digital skills **S**	No similarity
	16b	Computer and internet at home **M**	No similarity
Partly similar to municipal data (8)	3b	Feeling connected to neighbourhood residents **R ∩ S**	Municipal indicator measures Social Cohesion in the neighbourhood which is more comprehensive and next to felt connection assesses multiple factors. (Wellbeing indicator scores worse)
	5b	Perceived number of social services **S ∩ M**	Municipal indicator registers number of social facilities per household and within an area. Whereas wellbeing indicator measures opinion regarding this amount and hence adds subjective dimension.
	6a	Neighbourhood activities meeting needs **R**	Municipal indicator measures opinion about community centres in the neighbourhood. Whereas wellbeing indicator measures the opinion about activities organised by community centres, which adds neighbourhood specific data.
	6b	Perceived number of neighbourhood activities **R ∩ S**	Municipal indicator registers amount of neighbourhood activities. Whereas wellbeing indicator measures opinions regarding this amount and hence adds subjective dimension.
	12a	Perceived number of educational institutes **R ∩ S**	Municipal indicator registers amount of different types of schools in the neighbourhood. Whereas wellbeing indicator measures

			opinion regarding the sufficiency of this amount, which hence adds subjective dimension.
	13a	Satisfaction with shops **S ∩ M**	Municipal indicator measures opinion about shopping areas, which doesn't include the shops in Venserpolder. Whereas wellbeing indicator specifically asks about shops in the neighbourhood, as that was identified as key concern.
	13b	Satisfaction with facilities and commercial services **S ∩ M**	Municipal indicator measures opinion about care facilities Whereas wellbeing indicator measures opinion about care *and* commercial facilities. In fact, commercial facilities were most often what respondents thought of and answered to.
	15a	Financial problems due to fixed expenses **M**	Municipal indicator measures how many residents are registered by institutions to have payment arrears. Whereas wellbeing indicator measures whether residents experience any type of financial difficulty.
Similar to municipal data (9)	3a	Feeling lonely **S**	Municipal indicator measures the same thing and comparison of scores is possible. Local wellbeing indicator scores better.
	8a	Experiencing nuisance in neighbourhood **R∩S**	Municipal indicator measures the same thing and comparison of scores is possible. Local wellbeing indicator scores worse.
	8b	Feeling safe outside **S**	Municipal indicator measures the same thing and comparison of scores is possible. Local wellbeing indicator better.
	8c	Satisfaction with neighbourhood **S ∩ M**	Municipal indicator measures the same thing and comparison of scores is possible. Local wellbeing indicator scores similar.
	9c	Perceived price of housing **S ∩ M**	Municipal indicator measures the same thing but on district level. However comparison of scores is possible. Local wellbeing indicator scores worse.
	9d	Satisfaction with own house **S ∩ M**	Municipal indicator measures the same thing and comparison of scores is possible. Local wellbeing indicator scores similar.
	11	Political participation **R**	Municipal indicator measures the same thing but on district level. However comparison of scores is possible. Local wellbeing indicator scores better.
	14a	Having a paid job **M**	Municipal indicator measures the same thing but on district level. However comparison of scores is possible. Local wellbeing indicator scores worse than district level.
	15b	Making ends meet **M**	Municipal indicator measures the same thing but on district level. However comparison of scores is possible. Local wellbeing indicator scores better than district level.

***** *Letters indicate wellbeing dimension: M = material, S = subjective, R = relational*

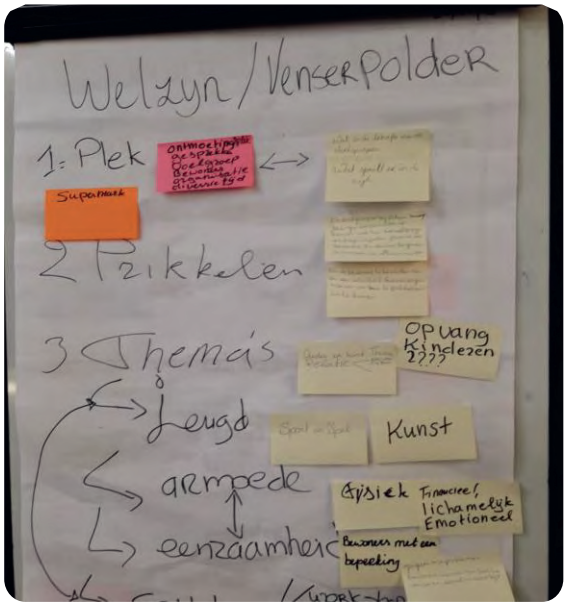


Image A3.1: Picture made by authors in one of the co-creation workshops showing a mind-map created by residents during a group brainstorm session on what wellbeing concerns in their neighbourhood.

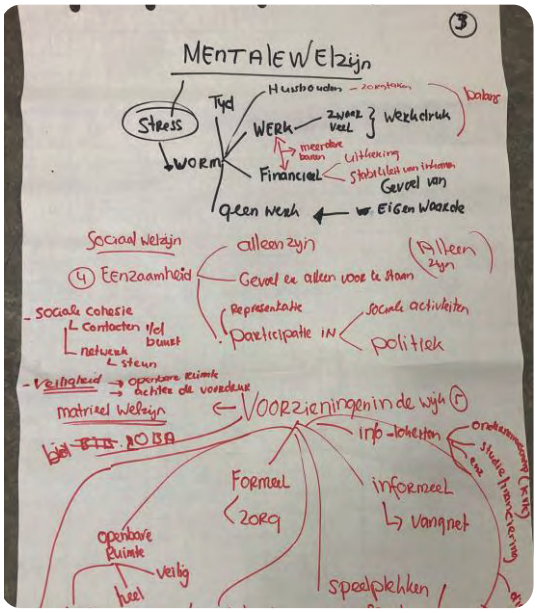


Image A3.2: Picture made by authors in one of the co-creation workshops showing a mind-map created by residents during a group brainstorm session on the associations between several wellbeing topics.



Image A3.3: Pictures of outputs from co-creation workshops that show mind-maps and creative visualisations made by participating residents in which they define what wellbeing means in their neighbourhood and identify key topics.

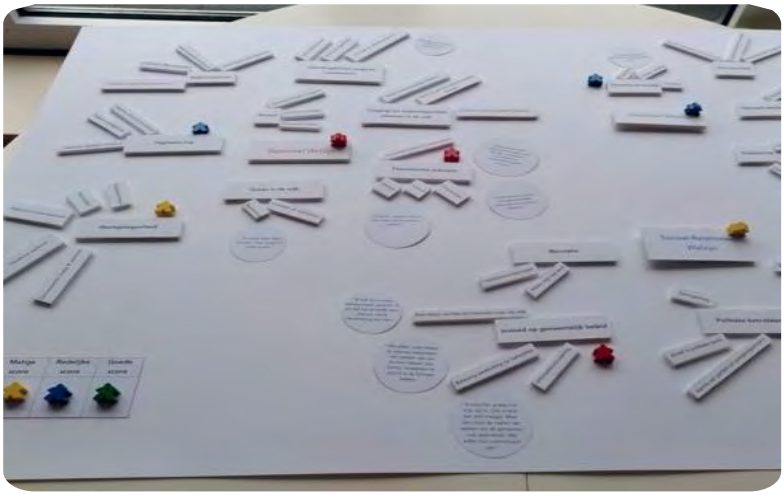


Image A3.4: Picture made by authors in one of the co-creation workshops showing wellbeing topics identified in previous sessions by residents and visualized in a physical dashboard

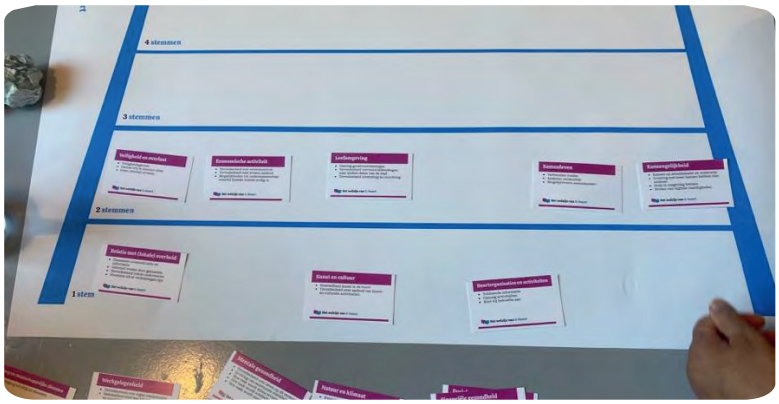


Image A3.5: Picture made by authors of the ladder and wellbeing topics for priority-setting round 1.

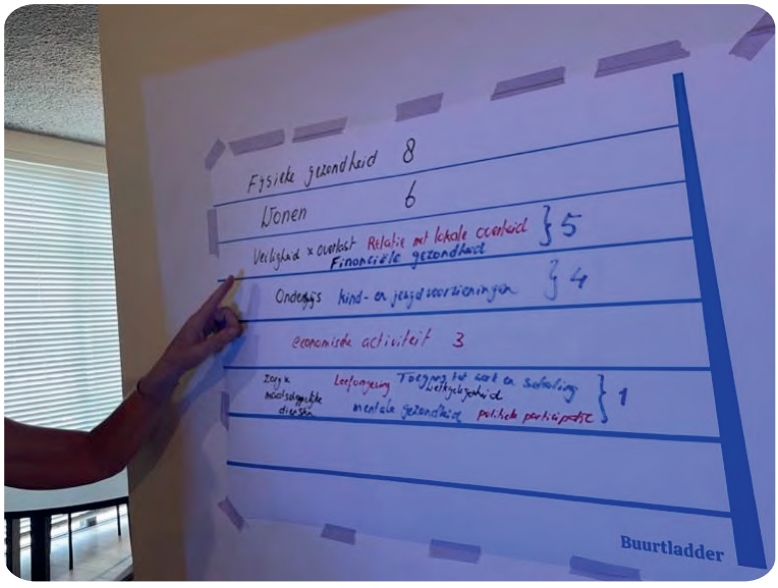


Image A3.6: Picture made by authors of collective ranking of wellbeing topics for priority-setting based on round 1.

Table A3.1: Description of the datasets resulting from surveys* (source by authors).

	G-Buurt	Wegener Sleeswijkbuurt	Venserpolder
N	299	273	254
Number of topics and wellbeing indicators	16 key topics measured through 45 indicators	17 key topics measured through 59 indicators	16 key topics measured through 35 indicators
Man	52%	35%	48%
Age distribution	18-40: 28% 41-64: 33% 65+: 39%	18-40: 39% 41-64: 35% 65+: 26%	18-40: 50% 41-64: 33% 65+: 17%

Employment rate	48%	47%	56%
Educational composition	No or primary: 7% Secondary: 46% Higher: 47%	No or primary: 12% Secondary: 51% Higher: 37%	No or primary: 21% Secondary: 39% Higher: 40%
House ownership	46%	25%	30%

*Representativeness: Most of the samples' socioeconomic and demographic characteristics do not differ much from the population (less than 8% difference), but there are some deviations: the G-Buurt shows an underrepresentation of residents in the youngest age category and overrepresentation of residents who are 65+ and higher educated; in Wegener Sleeswijkbuurt young people are slightly underrepresented and woman are highly overrepresented.

Table A3.2: Overview of thematical overlap and the 25 indicators measured in each neighbourhood including their scores (source by authors).

Themes	Indicators	G-Buurt	Wegener Sleeswijkbuurt	Venserpolder
Social connectedness	Feeling connected with other neighbourhood residents	62%	50%	44%
	Low frequency of feeling lonely	58%	62%	67%
Neighbourhood activities	Satisfied with number of neighbourhood activities organised	52%	42%	32%
	Satisfied with type of neighbourhood activities organised	32%	28%	49%
Financial sufficiency	Getting by well from income	79%	65%	53%
	Not experiencing financial issues	71%	70%	42%
Mental stability	Satisfied with life	80%	80%	67%
	Feeling emotionally stable	75%	72%	67%
	Low frequency of stress	34%	23%	48%
Employment	Satisfied with personal employment situation	83%	78%	48%
	Skills and interests align with proximate job offers	16%	29%	29%
Neighbourhood liveability and facilities	Satisfied with shops in neighbourhood	39%	51%	26%
	Satisfied with availability of sports and exercise in neighbourhood	55%	53%	46%
	Access to healthy food in neighbourhood	53%	78%	46%
	Access to proximate care and social services	71%	68%	63%
	Feeling safe in the neighbourhood	79%	61%	62%
	Low experience of nuisance in the neighbourhood	51%	44%	53%
Educational access	Satisfied with number of proximate educational institutions	70%	73%	52%
	Well experienced educational opportunities	65%	64%	49%
Housing quality	Satisfied with own house	77%	64%	65%
	Satisfied with availability of adequate housing in neighbourhood	41%	36%	54%
	Satisfied with maintenance/ quality of housing	53%	34%	40%

Local government and policy	Feeling heard by the municipality	23%	22%	14%
	Feeling informed / involved by the municipality	40%	42%	18%
	Voting for local, regional and national elections	75%	73%	63%

Chapter 5 - Appendix A4.

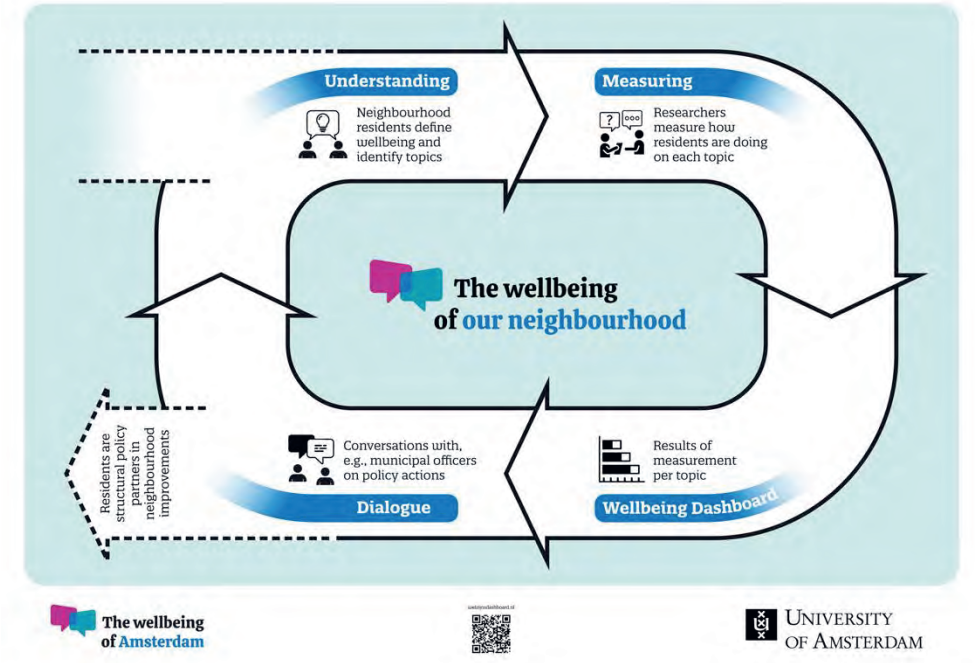


Image A4.1: The bottom-up process for developing and use of the Wellbeing Dashboards (source by authors).

Table A4.1: Data sources (source by authors).

Code	Type	Title/ description	Date
A	Policy document	Masterplan Southeast program 2021 – 2040	4 February 2021
B	Workshop reports	Reports on a series of co-creation workshops in each neighbourhood in which varying groups of residents defined wellbeing, identified measurable indicators and co-designed their Wellbeing Dashboard	November 2021 to July 2024
C	Policy document	Community development plan: concept version, written by community actors	15 July 2024
D	Workshop reports	Meeting on Wellbeing Dashboard use and collaboration conditions with 9 neighbourhood representatives	14 and 21 May 2025
E	Report	Meeting with various local policy actors on Wellbeing Dashboard use	3 September 2025

F	Survey	'Working together with the Wellbeing Dashboard: your role in the neighbourhood' n = 16 local policy actors	October 2025
G	Meeting notes	Conversation with an independent urban strategist and advisor to the Municipality	20 October 2025
H	Report	'The Wellbeing Dashboard as bottom-up method' written by project researchers	May 2025
I	Report	Knowledge exchange between 9 neighbourhood representatives and 17 policy actors	8 October 2025
J	Interviews	Interviews on neighbourhood issues and way of working with 21 neighbourhood representatives	12 May 2021 to May 2024
K	Field notes	Observations and conversations regarding Wellbeing Dashboard use in neighbourhood 1	September 2023 to October 2025
L	Field notes	Observations and conversations regarding Wellbeing Dashboard use in neighbourhood 2	May to October 2025
M	Field notes	Observations and conversations regarding Wellbeing Dashboard use in neighbourhood 3	February to October 2025
N	Meeting notes	Meeting regarding policy embedding and use of Wellbeing Dashboards with 3 district level policy actors and 1 district level policymaker	1 July 2025

Acknowledgements

I am so grateful for every encounter and conversation I had during the course of this PhD project. Sadly, it is impossible to acknowledge each separately and so, by lack of better, I hereby say to all: thank you! Talking to, learning from, and engaging with so many different people and organisations enabled me to write this dissertation, which I now awkwardly receive most credit for.

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Although the dissertation highlights the value of residents' knowledge and engagement, here I can finally acknowledge them on a more personal level. I want to thank the invaluable contributions of all residents who participated and in particular of Gilma, Lydia, Elisabeth, Anna, Milan, Ogor, Delano, Gijs, Mahmoud, Sam and Cherida. You brought theoretical and abstract policy ideas – e.g. on social cohesion, neighbourhood resilience, community wellbeing and so forth - to life and showed their reality. Beyond being the backbone of this

dissertation, you are the cornerstone of our society. I got to observe your relentless efforts to take care of your neighbourhood as a community. Week in week out, and on your own initiative, you provide whatever is missing, organise educational and social activities, set-up foodbanks, guide and inform residents, make them go forward, advocate for residents' needs in policy and development plans, push for participation and, when needed, contest decisions to safeguard community wellbeing - all while having to justify your activities in terms of 'impact' and receiving limited governance support. Which also brings me to thanking Najah and Dominique, who are so devoted to changing these constraining structures. You, and many colleagues, have been and still are vital to the project!

Mom, dad, you are the foundation of my life. I wouldn't be where I am today without you. Literally, I wouldn't have been anywhere at any time if it wasn't for you. But, as you and everybody knows, this world "ain't all Sunshine and Rainbows". Despite how beautiful my life is, I often struggle to make sense of it and at times found it difficult to deal with. You have always been so understanding, and you kept reassuring me with "het komt wel goed", "alles wordt steeds duidelijker". Well, as with everything, I had to see for myself – in other words to 'empirically investigate'. And guess what: most of my evidence so far substantiate your claims. I'm still trying to make sense of life, but it more and more starts to feel like a worthwhile endeavour. That is because of everything you did for me. This dissertation and more importantly my wellbeing are a legacy of your support – materially, relationally, psychologically. Max, this also includes you. You will always be a part of who I am and what I do. We connect uniquely yet strongly. I am so proud of you all.

Paul, my love, you make feel alive and you expand my world. You bring light in and keep me sane (and, at the right moments, insane) – *je t'aime!* My girls – not to be confused with my darling cats known as '*the girls*'[18] - provide me with love and connection that I wish for everyone. Already for 24 years I am learning so much from you and you bring out the best in me. I cherish each extra day with all of you in my life.

Much love, Jennifer

[18] Shout-out to Juicy Rosella & Felicia Isabella

This dissertation explores marginality from a wellbeing economics perspective in Amsterdam, where economic growth coexists with wellbeing decline and deep social and spatial inequalities (a wider phenomenon described as the "wellbeing-paradox"). Through a mixed-methods, participatory and action-oriented approach, it develops a bottom-up method for measuring citizen-defined material, relational and subjective wellbeing needs at neighbourhood level, discusses how this can empower marginalized residents, and assesses the policy credibility of such measurement. It reframes urban marginality as multidimensional illbeing that is structurally produced through the interaction of economic pressures, institutional design, and constrained access to opportunity and participation. Finally, the dissertation details why this can't be addressed by better measurement alone but requires transforming the governance arrangements that determine whose knowledge counts, whose needs matter, and whose wellbeing is prioritised.