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How Just Are Urban Sustainability Transition Plans? Benchmarking Spatial Justice

A Critical Examination across European Cities

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Agenda

Introduction
- What is Spatial Justice, Why it matters to sustainability transitions, Why evaluating it
- The Spatial Justice Package
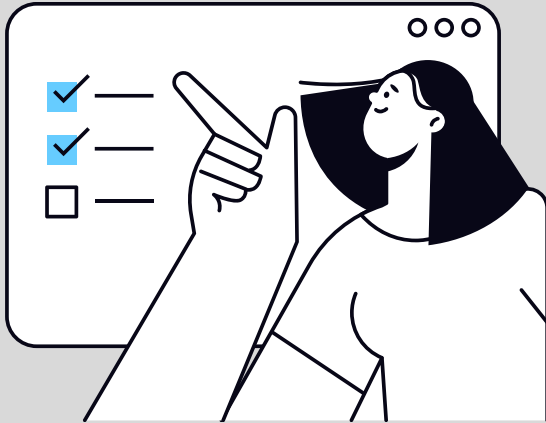
Methodology
- Urban sustainability transition plans
- Thematic analysis: VSOA method
- Qualitative analysis: Spatial Justice scoring

Results
- Analysis of plans from Belfast, Budapest, Granollers and Rotterdam
- Few highlights and comparisons

Conclusion & Limitations

Introduction

- What is justice?

- What is Spatial Justice?

- Why Spatial Justice matters?

- Spatial Justice X Sustainability Transitions

- Evaluating Spatial Justice

- Review on assessment frameworks for Spatial Justice

- **The Spatial Justice Package**

What is Justice?

Equality

The assumption is that **everyone benefits from the same supports**. This is equal treatment.
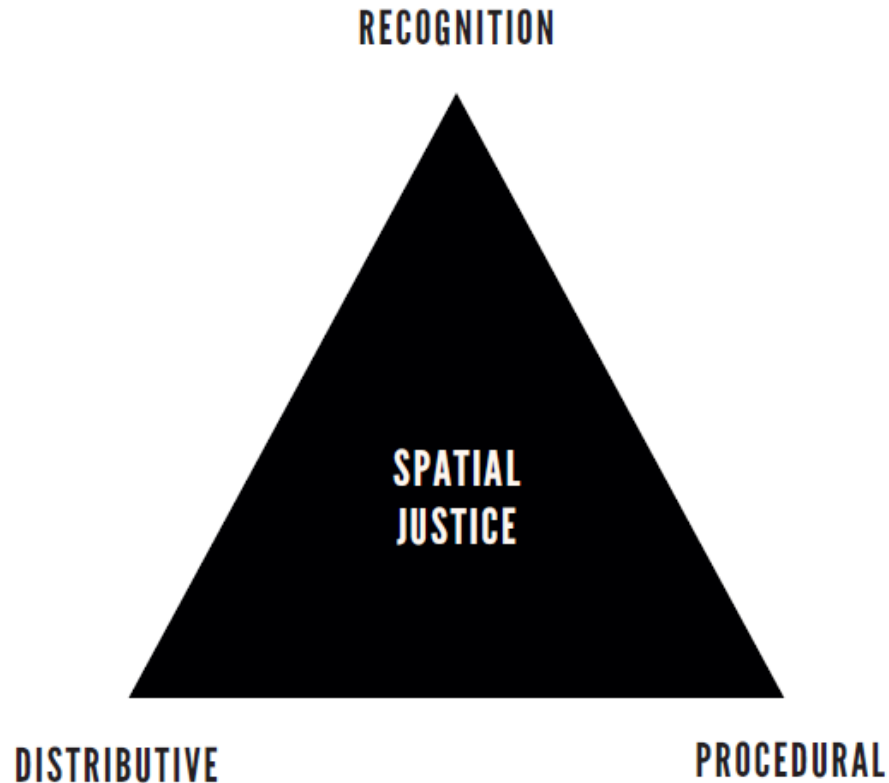
Equity

Everyone gets the supports they need (this is the concept of "affirmative action"), thus producing equity.

Justice

All 3 can see the game without supports or accommodations because **the cause(s) of the inequity was addressed**. The systemic barrier has been removed.

Source: https://www.linkedin.com/pulse/equality-equity-justice-dan-rey/

What is Spatial Justice

- Three fundamental, indissociable and mutually-supporting dimensions: areas, processes, and actors. (Rocco, 2024)

- "Justice for planning". Spatial Justice provides a <u>framework for understanding</u> the complex interactions between space, society, and the environment.

- A "meaning-giver" (assigning value) and a "sense-maker" (creating understanding) for regional / urban development policy and projects. Provides <u>critical lens through which the spatial dimensions of justice</u> and equity can be understood and addressed.

- Spatial Justice demands a re-evaluation of planning and policy decisions.

Why Spatial Justice matters?

Why is justice relevant to the built environment?

- Without a justice-oriented approach, urban planning and policy-making risk exacerbating social inequalities.

- Space is not a neutral backdrop to human activity but is actively produced, shaped, and contested by social processes, power dynamics, and institutional practices.

- The "spatial turn" in the social sciences represents a paradigm shift: recognising the significance of space in shaping social relations, processes, and outcomes. (Lefebvre, 1974 > Soja, 2010 > Young, Fraser, Fainstein, etc).

- Poor spatial planning and policymaking can deepen existing inequalities, concentrating disadvantage in certain areas while privileging others.

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Spatial Justice x Sustainability transitions

Why is justice relevant for transitions?

- The urgency of overlapping socio-ecological crises affecting cities and regions.

- UN's SDGs provide an agenda for sustainable development. Within this framework, SDG 11 emphasises the crucial role of urban planning and design in realising the other 16 SDGs.

- Main concepts have been developed and used by cities in response: sustainable urban development, smart city, 15-minute city, circular city, resilient city…

- Critique: lack of a justice perspective, when justice must underscore all actions taken to promote sustainability → any law or institution, no matter how efficient or well-organised, must be reformed or abolished if it is unjust (Rawls, 1971).

- Result: failure of these concepts to deliver on their promises, exacerbating inequalities and creating new forms of dispossession (Shelton, 2015; Wiig, 2016; Thatcher, 2016; Savini, 2019; Amorim, 2021).

Evaluating Spatial Justice

Why to evaluate spatial justice considerations?

- Processes are as important as outcomes.

- Compare & monitor: compare plans and documents for academic and knowledge transfer reasons. Monitor implementation.

- Inform just transition policies and plans: sparkle discussion with a justice-based approach.

- Tools for such assessment are missing: (1) There is a growing interest, (2) emphasis on distributive dimension, (3) need for a comprehensive method, (4) need for more qualitative methods.

- To address this limitation, the TU Delft, as part of the UP2030 project, developed the **Spatial Justice Package** to help support efforts to include Spatial Justice in planning and design processes

The Spatial Justice Package

1. *Spatial Justice Conceptual Model (model)*
2. *Spatial Justice Matrix (matrix)*
3. *Spatial Justice Benchmarking Tool (tool)*
4. *Justice Readiness Level (JRL) (model)*
5. *Citizen Voice (tool)*
6. *Spatial Justice Handbook (resource)*
7. *Strategic Planning Cycle (model)*
8. *Catalogue of UP2030 tools (resource)*
9. *Catalogue of Spatial Justice Tools (resource)*
10. *Special number (PPR) (publication)*

- A package of concepts, models, tools and resources to provide policymakers and citizens with a language and tools to discuss justice in urban development and planning.

- For this examination of four distinct cities, tools 1-4 were used.

Name	Description	Type	Audience	Output
1. Spatial Justice Conceptual Model (SJCM)	Unpacks Spatial Justice into applicable components for broader use.	Visual + Text	Academic / Practitioners	Conceptual model
2. Spatial Justice Matrix (SJM)	Provides criteria, recommendations, and references for Spatial Justice.	Table	Practitioners	Reference table
3. Spatial Justice Benchmarking Tool (SJBT)	Evaluates, discusses, and reflects on Spatial Justice considerations.	Tool	Practitioners/ Citizens	Evaluation dashboard
4. Justice Readiness Level (JRL)	Visual tool for comparing and monitoring justice-readiness levels.	Visual	Practitioners/ Citizens	Benchmarking model
5. Citizen Voice	Digital survey for collecting spatial data from stakeholders, emphasizing participatory processes.	Digital Tool	Citizens / Practitioners	Survey data
6. Spatial Justice Handbook	Comprehensive guide for applying Spatial Justice in urban research and practice.	Text	Academic / Practitioners/ Citizens	Practical handbook
7. Strategic Planning Cycle	Outlines the strategic planning phases to integrate Spatial Justice and tools in UP2030.	Model	Practitioners	Strategic planning model
8. Catalogue of UP2030 Tools	Compilation of tools developed for the UP2030 project.	Resource	Academic / Practitioners	Catalogue
9. Catalogue of SJ Tools	Listing of tools related to Spatial Justice.	Resource	Academic / Practitioners	Catalogue
10. Special Number (PPR)	A publication that consolidates research and findings on Spatial Justice within UP2030.	Academic Publication	Academic / Practitioners	Published articles and studies

Spatial Justice Conceptual Model (SJCM)
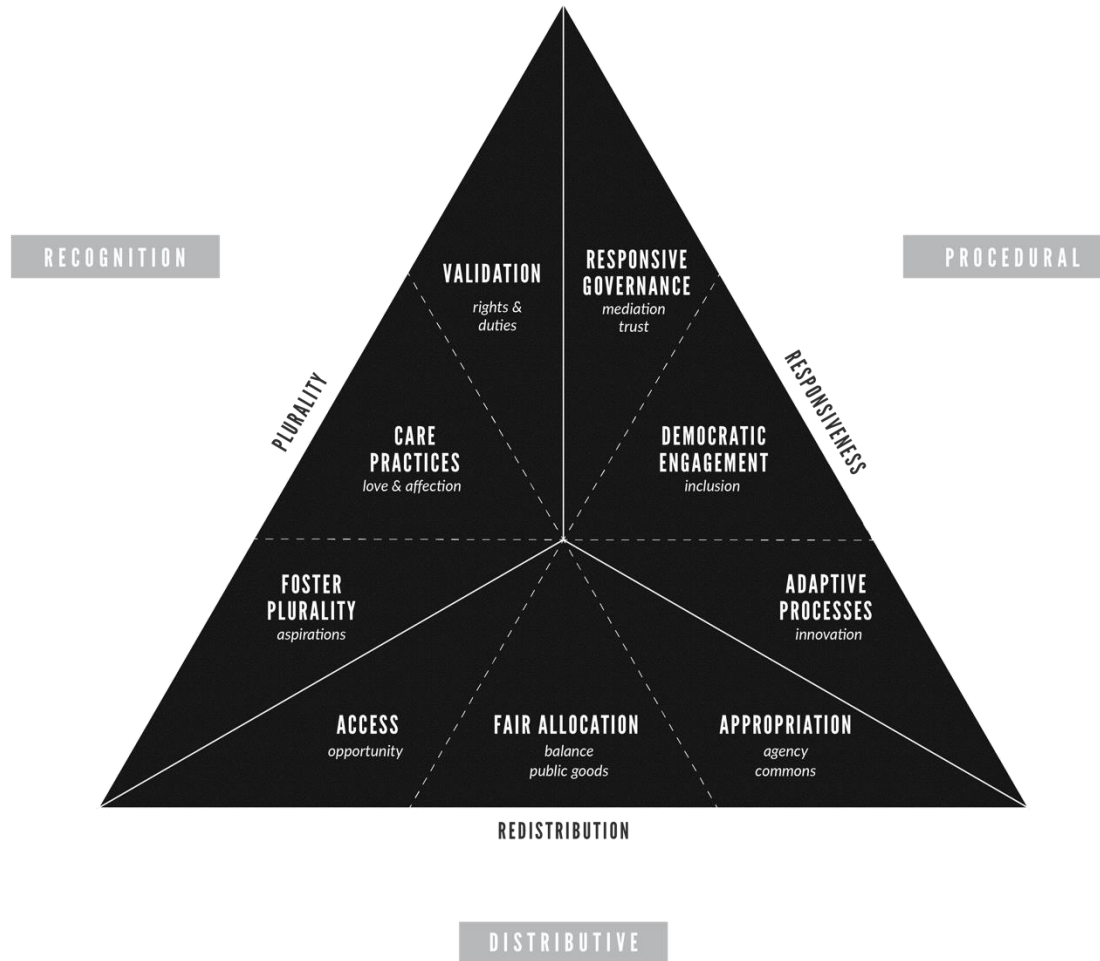
- Spatial Justice concept broken down into more applicable <u>components</u> of each dimension.

- As an analytical tool, the framework allows a structured way of <u>assessing the levels of justice,</u> while drawing attention to the underlying components that build each dimension.

- Aim: exposing sustainability transition discourses to the clarity/values of spatial justice, validating its potential <u>not only as a normative perspective but also as an analytical tool</u> for examining and evaluating urban sustainability transitions.

- In the next phase, this framework is used to develop recommendations to support the design, implementation, and evaluation of just sustainability transitions.

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Recognition dimension
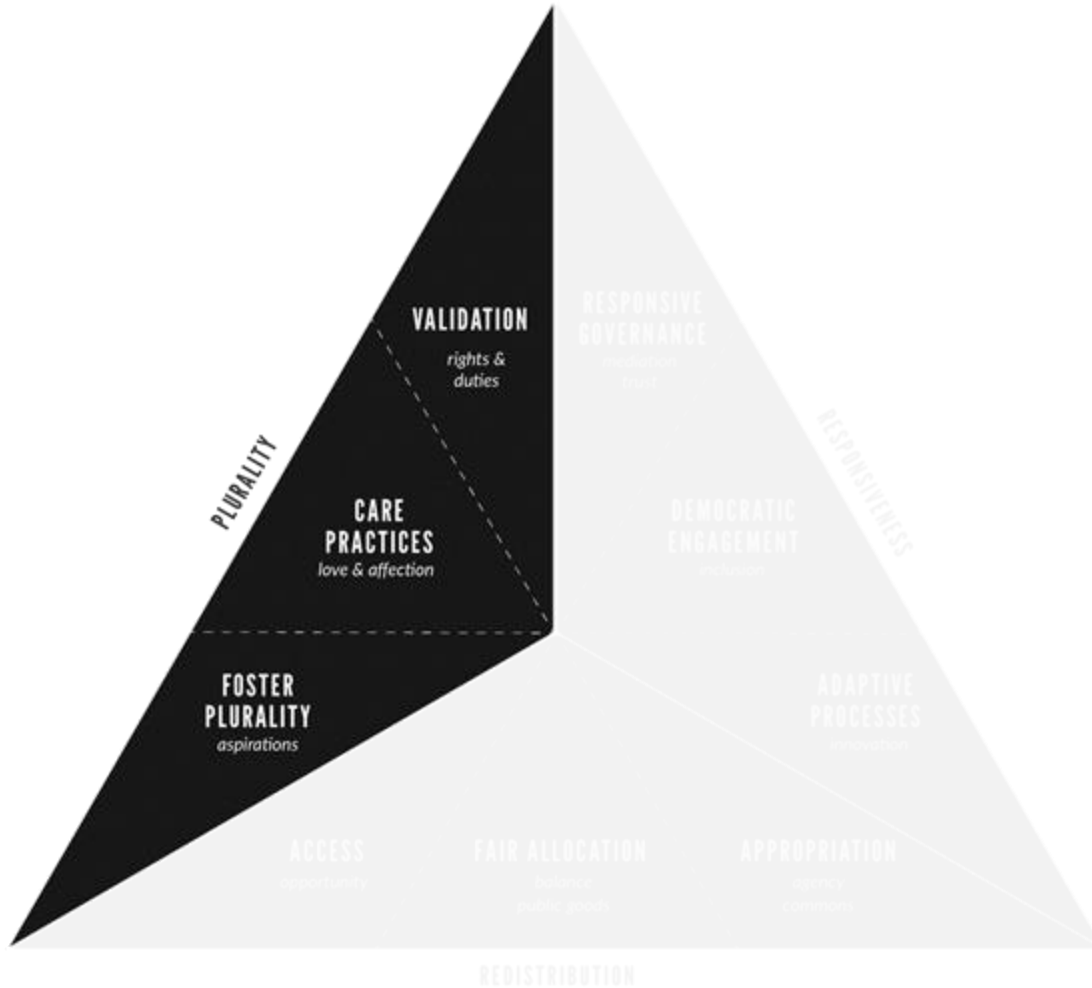
- The acknowledgement, validation, respect, fostering of individual and collective identities, experiences, and cultural expressions. The argument for recognition justice is akin to a 'social differentiation without exclusion' (Young, 1990, p. 238)

- **Validation:** Importance of legal frameworks in recognising and protecting the intrinsic value and dignity of individuals and groups as moral agents.

- **Care practices:** The need to learn from and support/collaborate with alternative collective practices that uplift disadvantaged communities, such as engagement in everyday practices and the management of communal resources.

- **Foster pluriverse**: Calls for a profound transformation of values to enable novel socioeconomic and institutional arrangements, advocating for considering the values, qualities, and unique socio-spatial dynamics of non-hegemonic cultures and communities.

Procedural dimension
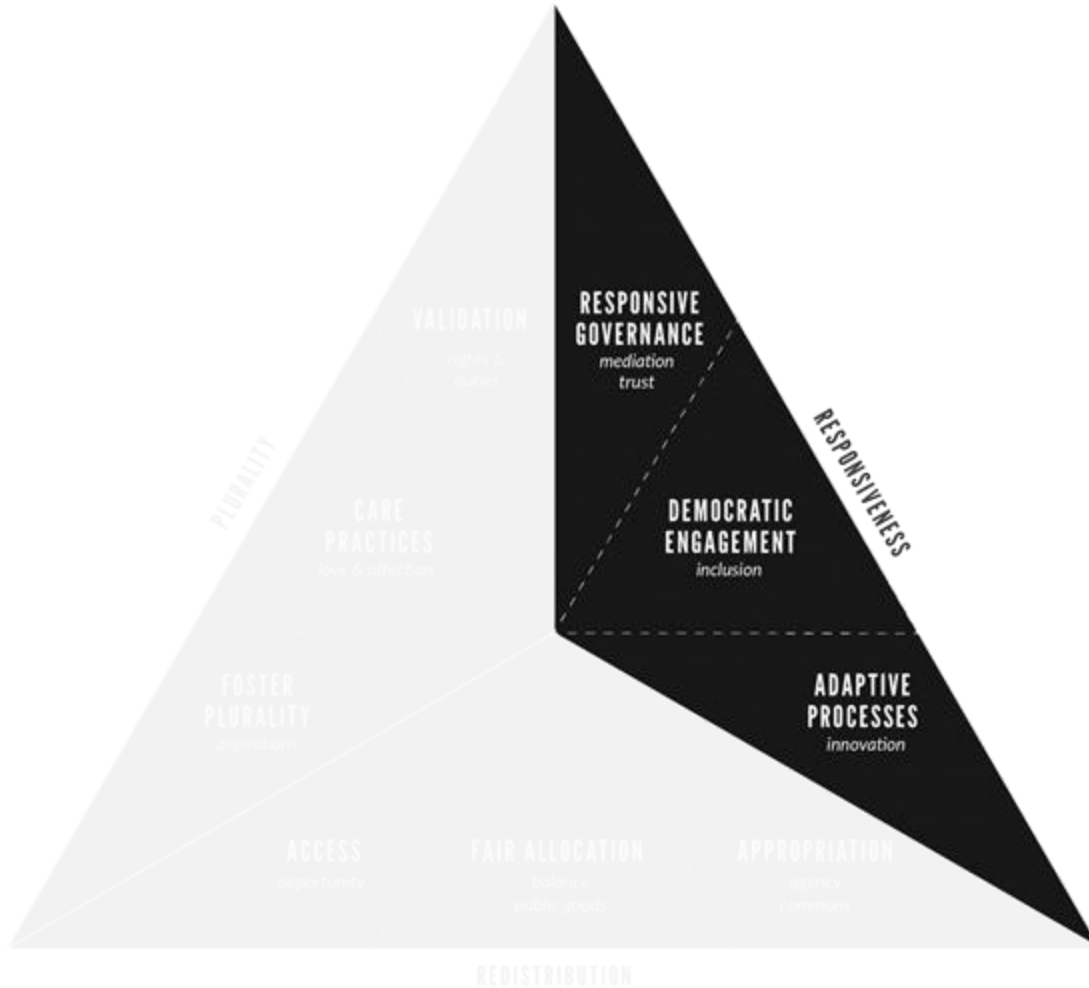
- Procedures and governance of the built environment should be ensured so that it does not reproduce, maintain, or create new inequalities.

- **Democratic engagement:** Empowering people through continuous, meaningful interactions between individuals and government~~, ensuring that urban policies reflect the community's needs and knowledge~~

- **Adaptive processes:** It evaluates the institution's flexibility and adaptability to evolving circumstances, incorporating feedback, and adjusting policies, practices, and programs to better align with justice considerations.

- **Responsive governance:** the ability to build trust through negotiation, ensuring that processes are fair, transparent, and sustainable, in views to uphold justice and that it legitimatises social sustainability. It concerns planning and monitoring.

Distributive dimension
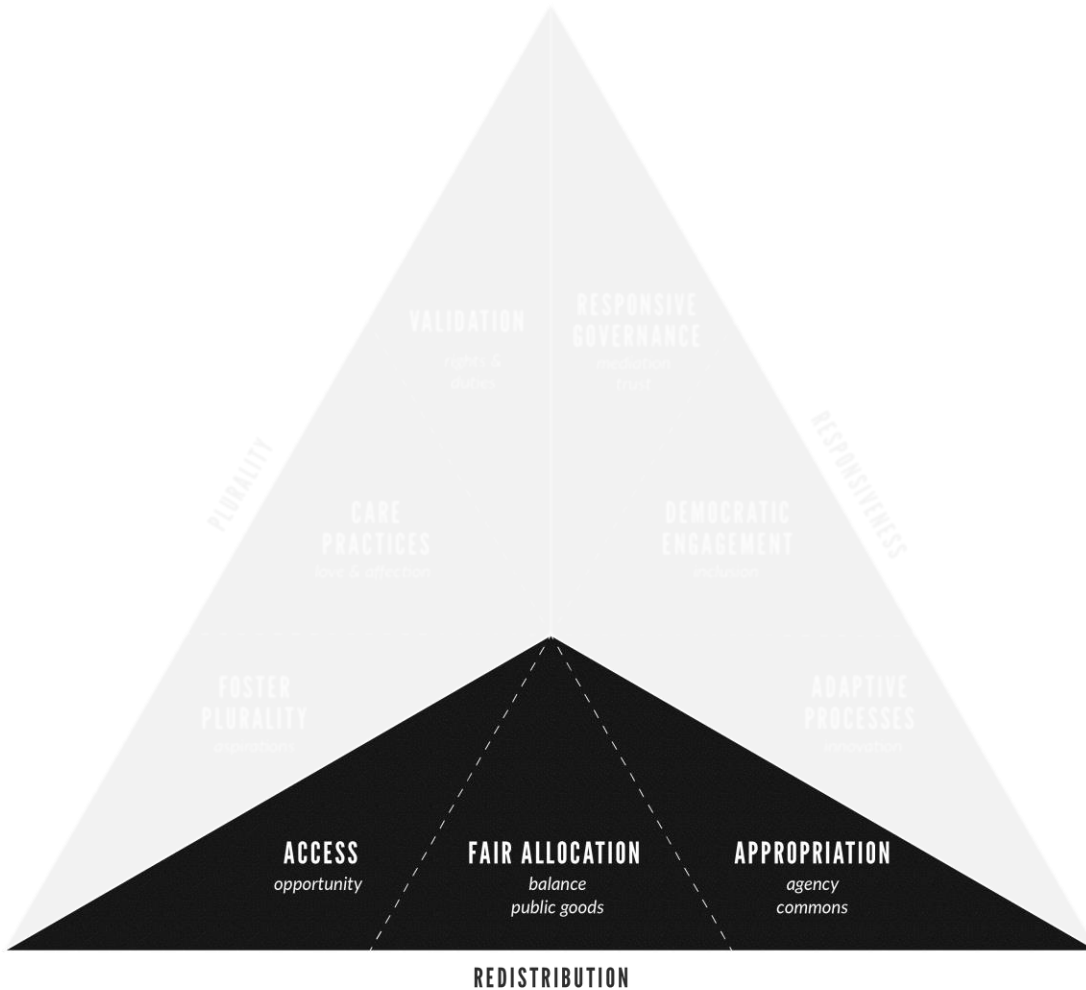
- The spatial distribution of the burdens and benefits of human association in cities and communities (Rocco, 2023).

- **Allocation:** Fair allocation of burdens and benefits, aiming to correct socio-spatial disparities and address the root causes of inequality. Material or service provision of public goods, basic services, cultural goods, economic opportunities, and healthy environments.

- **Access:** The ease of reach to the material or service via the enhancement of opportunities. It concerns affordability, availability, connectivity, etc.

- **Appropriation:** Empowering people to transform and utilise accessible resources, challenging inequalities and emphasising the importance of redistribution for enabling individuals to enhance their capabilities and life outcomes. It concerns for usage, programming, the design, etc.

Spatial Justice Matrix (SJM)

- It is <u>a set of criteria and indicators</u> that represent qualitative benchmarks to promote the consistent application of justice values and just standards in urban planning and in broader aspects of governance (policy, programmes, projects, reports, etc.). It also provides <u>explanations and examples connect to each criterion</u>.
- Based on an extensive literature review at the intersection of justice, spatial justice, and planning. It also draws from the references gathered by the participating cities in the UP2030 project.

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Spatial Justice Benchmarking Tool (SJBT)

- It is a qualitative evaluation tool designed to <u>measure the application of justice considerations</u> in the urban governance and planning of a city or region, assisting evaluation and reflection.
- It defines "levels of justice", from <u>"Low"</u> to <u>"Embedded"</u>, by assigning a score to the case being assessed against the highlighted components of the Spatial Justice Conceptual Model.
- It also provides <u>visualisations in a dashboard</u> that assist in the reflection about and the improvement of processes and outcomes towards spatial justice.

Spatial Justice Benchmarking Tool (SJBT)
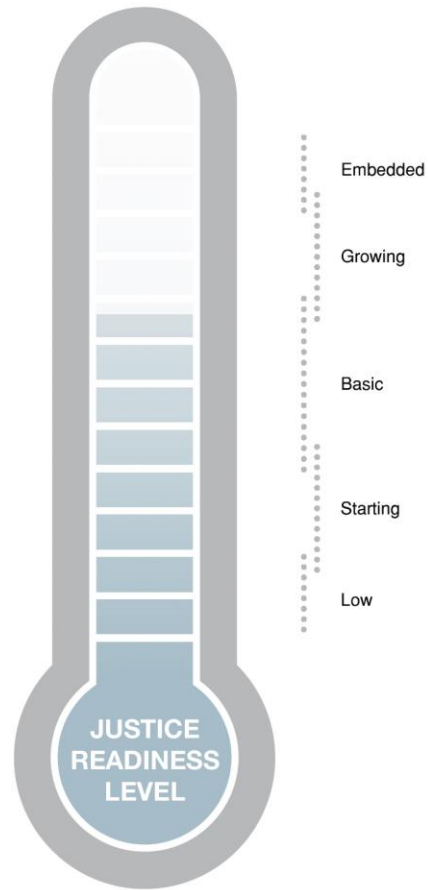
- It is a <u>complementary visual tool to monitor</u> how justice is considered in urban planning and design.
- It aims to provide a shared understanding of justice considerations across many aspects of urban planning and design processes. Inspired by the Technology Readiness Level (TRL) method, the JRL provides a standard language that can be used across disciplines and organisations to better communicate and assess justice.

- This bundle is organised as the **Spatial Justice Evaluation Dashboard**. This dashboard facilitates the categorisation and scoring of different highlights of the plan. It then provides the visuals and scores for this report.

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Main research question

How do different cities consider spatial justice in their urban sustainability transition plans? And how to measure it?

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Methodology

- Data-gathering and case study selection strategy: Differences in urban sustainability transition plans
- Thematic analysis: filtering highlights with the VSOA method
- Qualitative analysis: Scoring Spatial Justice considerations

Urban Sustainability Transition Plans

Different types of plans, sizes and demographics, political context, and planning traditions.

City	Main features	Governance level	Km2	Population (closest to plan year)	Plan
Belfast	Capital	City	132,50	(2021) 345 418	Resilience Ambitions Document - A Climate Plan for Belfast
Budapest	Capital Most population	City	525,20	(2017) 1 752 286	Sustainable Energy and Climate Action Plan
Granollers	Regional capital and most dense	City	14,90	(2014) 59 930	Sustainable Energy and Climate Action Plan
Rotterdam	Second largest city Part of polycentric metropolis (Randstad)	City	324,14	(2023) 664 311	Climate Action plan of the Rotterdams Weerwoord 2023-2026

Thematic analysis: VSOA method

- The Values, Strategies, Objectives, and Actions (VSOA) methodology is employed to extract core information from the documents, since most urban sustainability transition plans are strategic planning documents.

- Urban Strategic Planning is distinct from the conventional urban planning approaches such as master plans or comprehensive development plans, they focus on the processes for implementation (UN Habitat).

- This methodology provides a structure for analysing the key elements of urban plans and understanding how values are articulated and translated into actionable items. It helps identify the overarching vision, the strategies devised to achieve it, the specific objectives outlined, and the concrete actions proposed.

- Importantly, it helps to later highlight what is not present regarding justice in the propositions of the documents.

- Coding is done by sentence. This is the first layer of analysis, with 4 options (VSOA).

Qualitative analysis: Spatial Justice scoring

- Spatial Justice Benchmarking Tool: each coded sentence as a VSOA is also coded with a <u>component</u> of Spatial Justice that is the focus of the sentence.

Scoring:
- **Low (-3)** indicates a lack of attention to Spatial Justice, with no engagement with its ethical, moral, or political aspects.
- **Starting (-1)** reflects initial concerns about disparities, with early efforts to recognise issues but no prioritisation of Spatial Justice or its criteria and aspects.
- **Basic (0)** shows explicit but limited consideration of Spatial Justice, often focusing on one dimension with vague specifics on the what, how, or who is being addressed
- **Growing (+1)** reveals a more profound concern, connecting at least two dimensions of Spatial Justice and specifying details about what, how, or who is involved action.
- **Embedded (+3)** represents a comprehensive integration of Spatial Justice aspects, where all dimensions are interlinked with clear specifications of the involved locations, processes, and groups.

- From these coded sentences, median scores are calculated for each dimension and component.

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Workflow
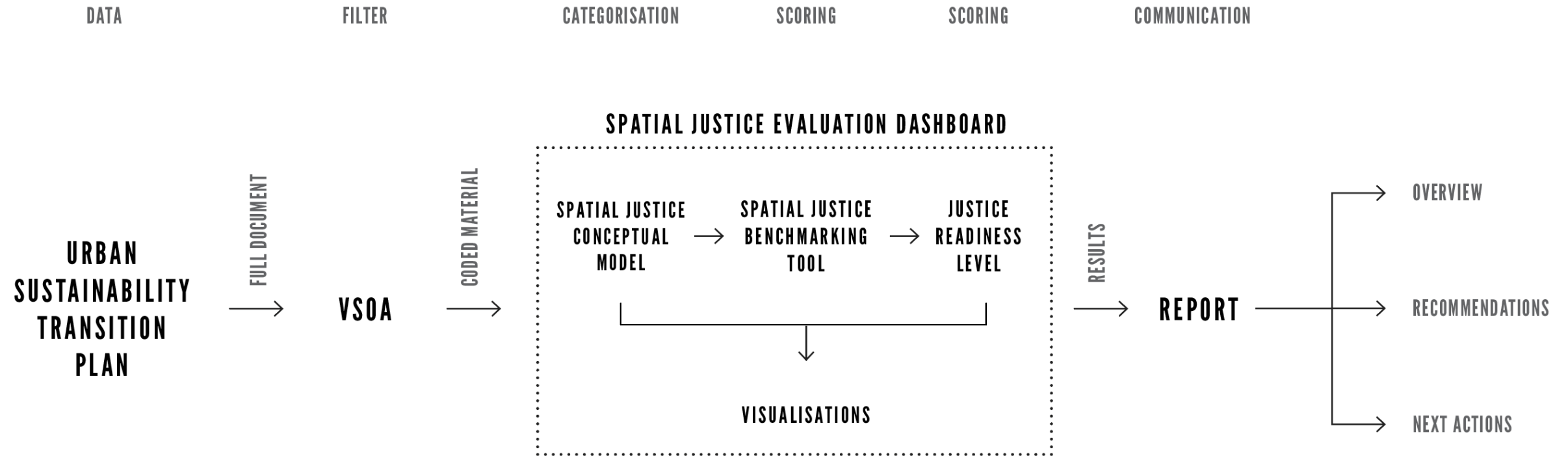
Results
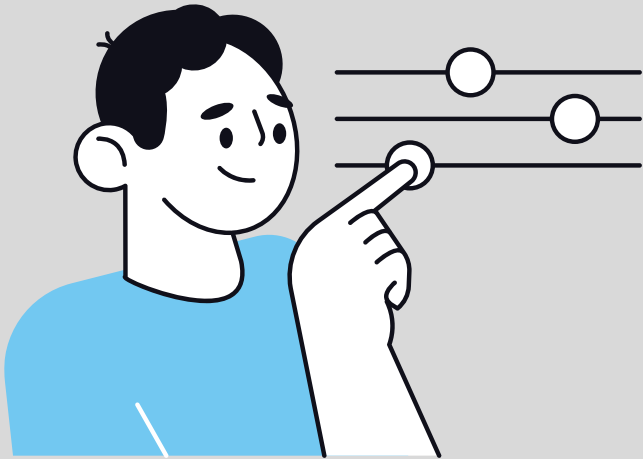
Analysis of plans from Belfast, Budapest, Granolleers and Rotterdam

- Vision, Strategy, Objective, Action insights

- Spatial Justice Overview

- Spatial Justice Scores

- Justice Readiness Level (JRL)

- Potential areas for improvement

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Urban sustainability transition plans

Belfast
(2020)
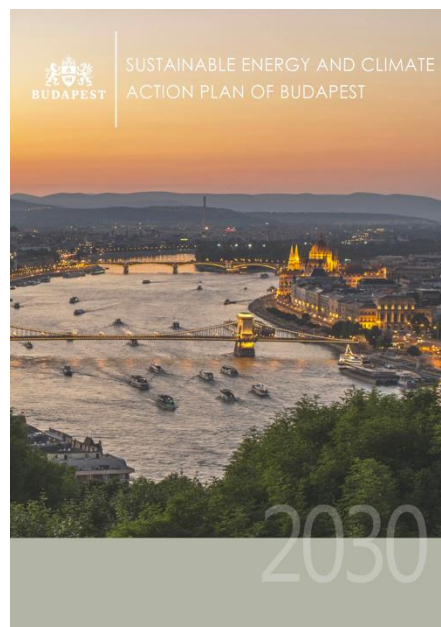
Budapest

Granollers

Rotterdam

Vision Strategy Objective Action (VSOA)

■ Vision ■ Strategy ■ Objective ■ Action
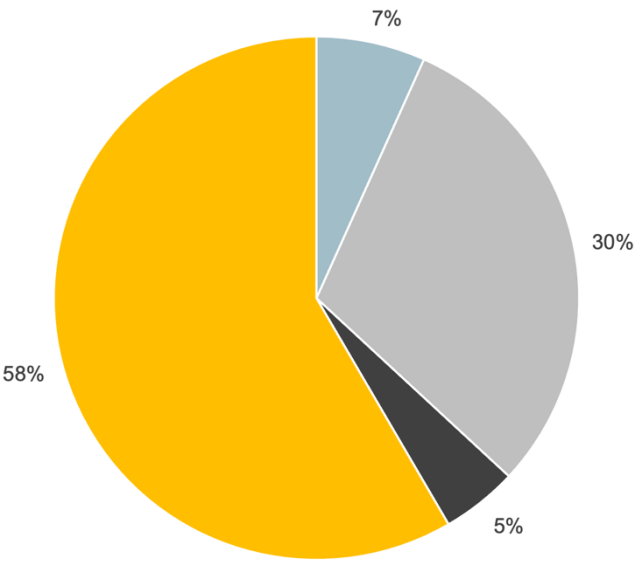
Belfast
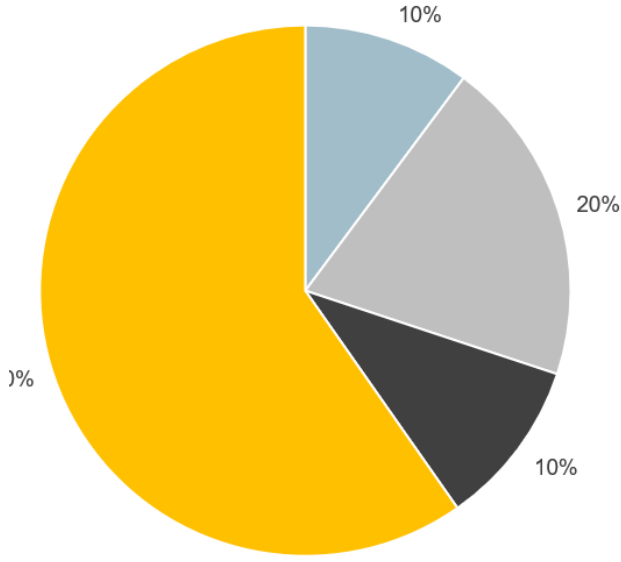
Budapest
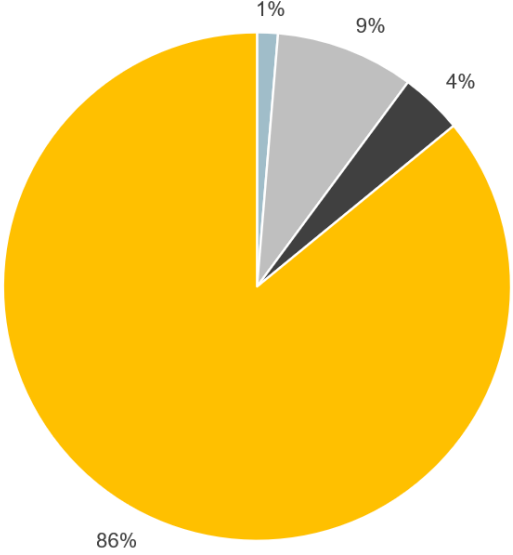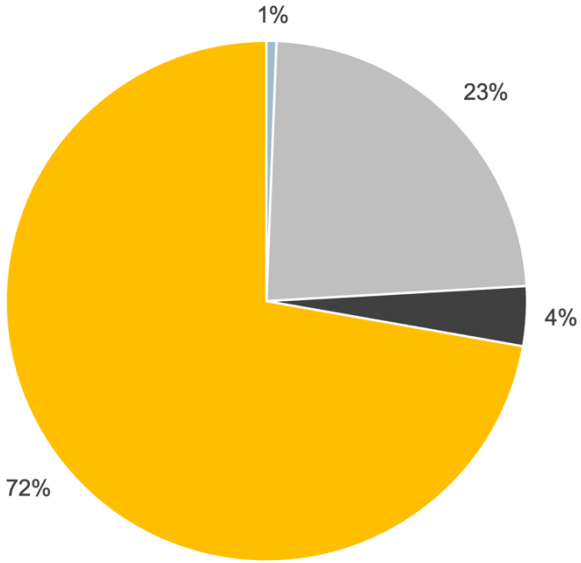
Granollers

Rotterdam

Spatial Justice Overview: Granollers

Image. Balance of Spatial Justice dimensions and components in the analysed document

Legend:
- Distributive
- Procedural
- Recognition

- "Responsive Governance" and "Fair Allocation" are the most frequently mentioned components. This aligns with trends in other urban sustainability transition plans.
- The lack of focus on the Recognition dimension, which includes addressing the needs of disadvantaged groups, raises concerns. Sustainability strategies and energy transitions require systemic changes, and failing to include this dimension risks perpetuating injustices in policy, process, and resource allocation.

Spatial Justice Overview: Budapest

Image. Balance of Spatial Justice dimensions and components in the analysed document

Legend:
- Distributive
- Procedural
- Recognition
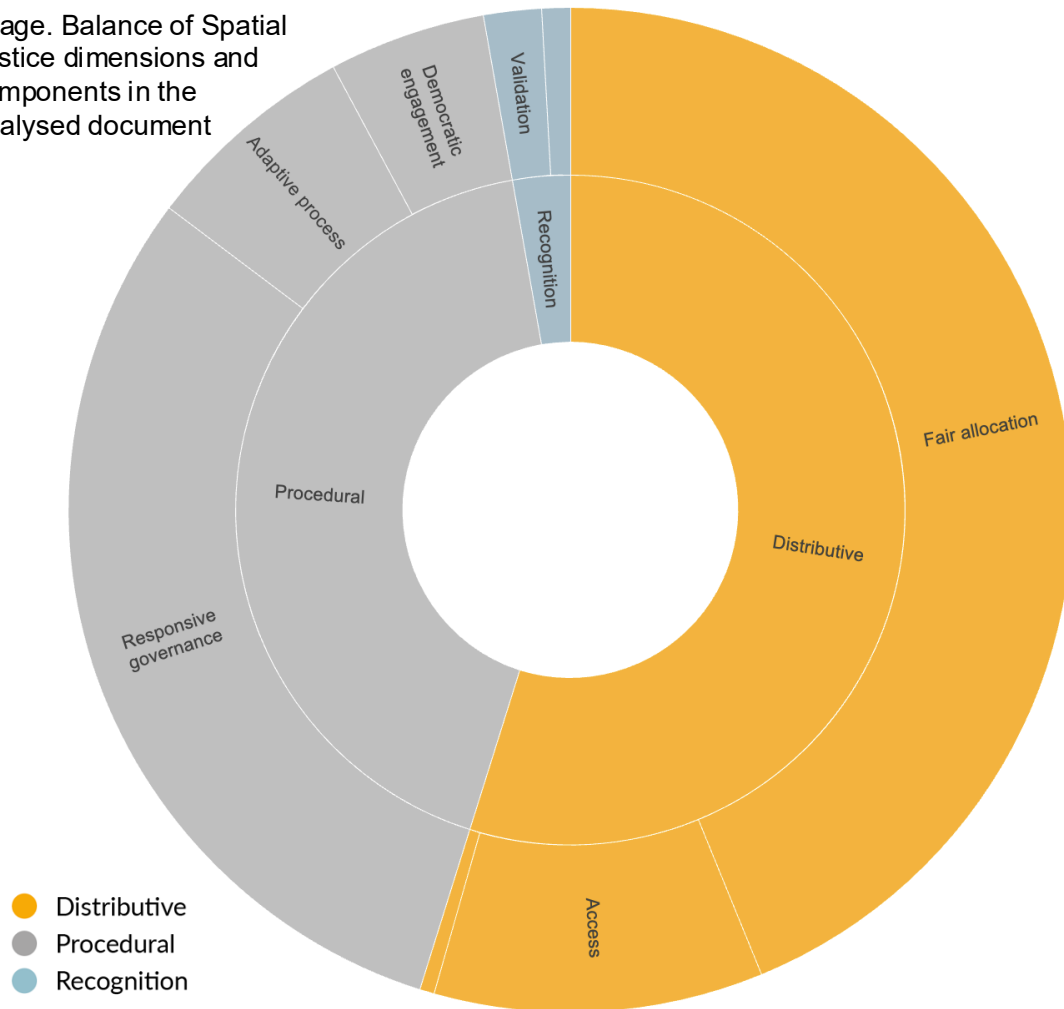
- <u>Focus on "Fair Allocation" and "Responsive Governance":</u> Both graphs show that the plan considers material and service provisions under "Fair Allocation" and just governance processes under "Responsive Governance." However, there is a significant gap in addressing "Access" and "Appropriation," which impacts residents' ability to reach and transform resources into meaningful opportunities. The plan would benefit from focusing on how different groups can convert these goods and services into what they need.

- <u>Underrepresentation of "Democratic Engagement" and "Adaptive Processes":</u> These components receive significantly less attention, highlighting the need for more robust community participation and institutional adaptability. "Democratic Engagement" involves empowering citizens through ongoing interaction, decision-making, and collaboration. At the same time "Adaptive Processes" focus on institutions evolving to become more just, addressing community barriers, and embedding justice in processes and external collaborations. A lack of focus on these areas could undermine efforts to foster inclusive, sustainable urban policies.

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Spatial Justice Overview: Belfast

Image. Balance of Spatial Justice dimensions and components in the analysed document

Legend:
- Distributive
- Procedural
- Recognition

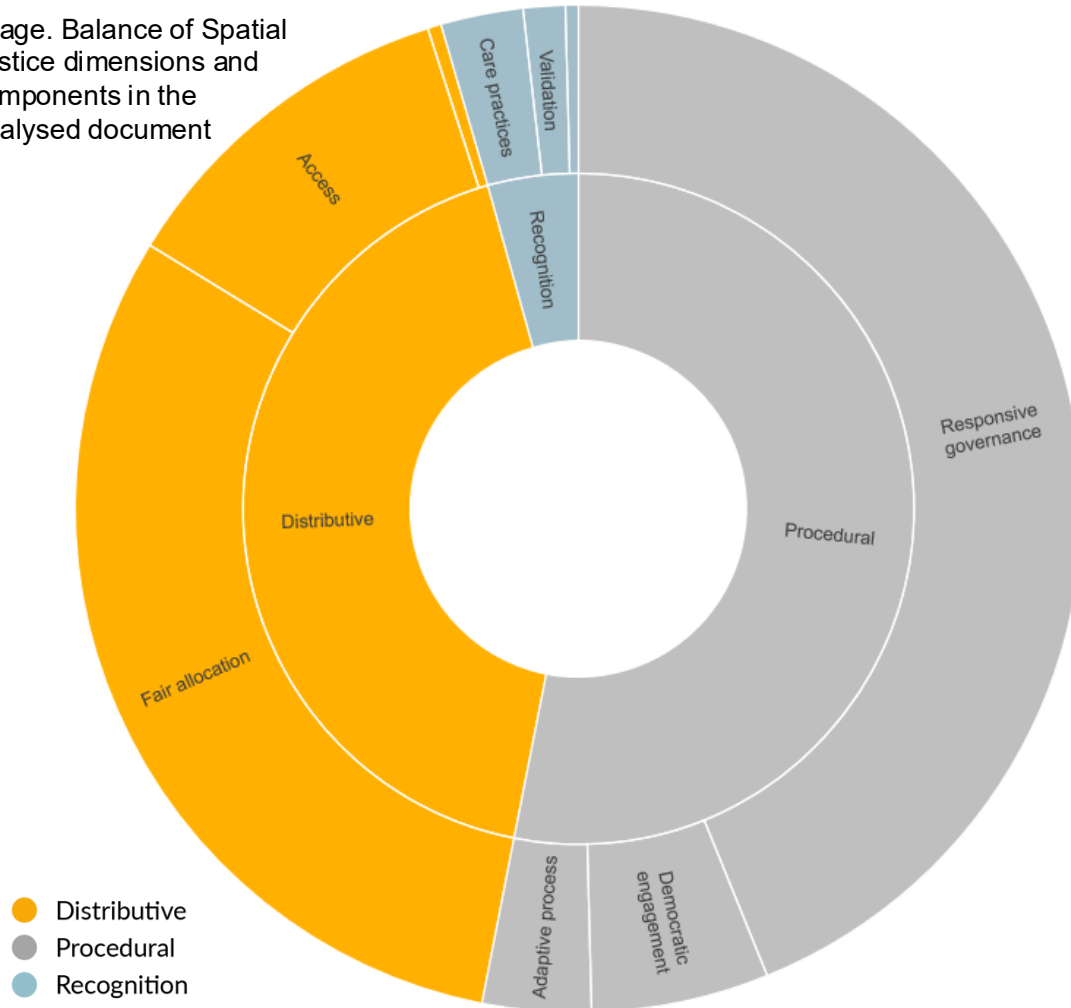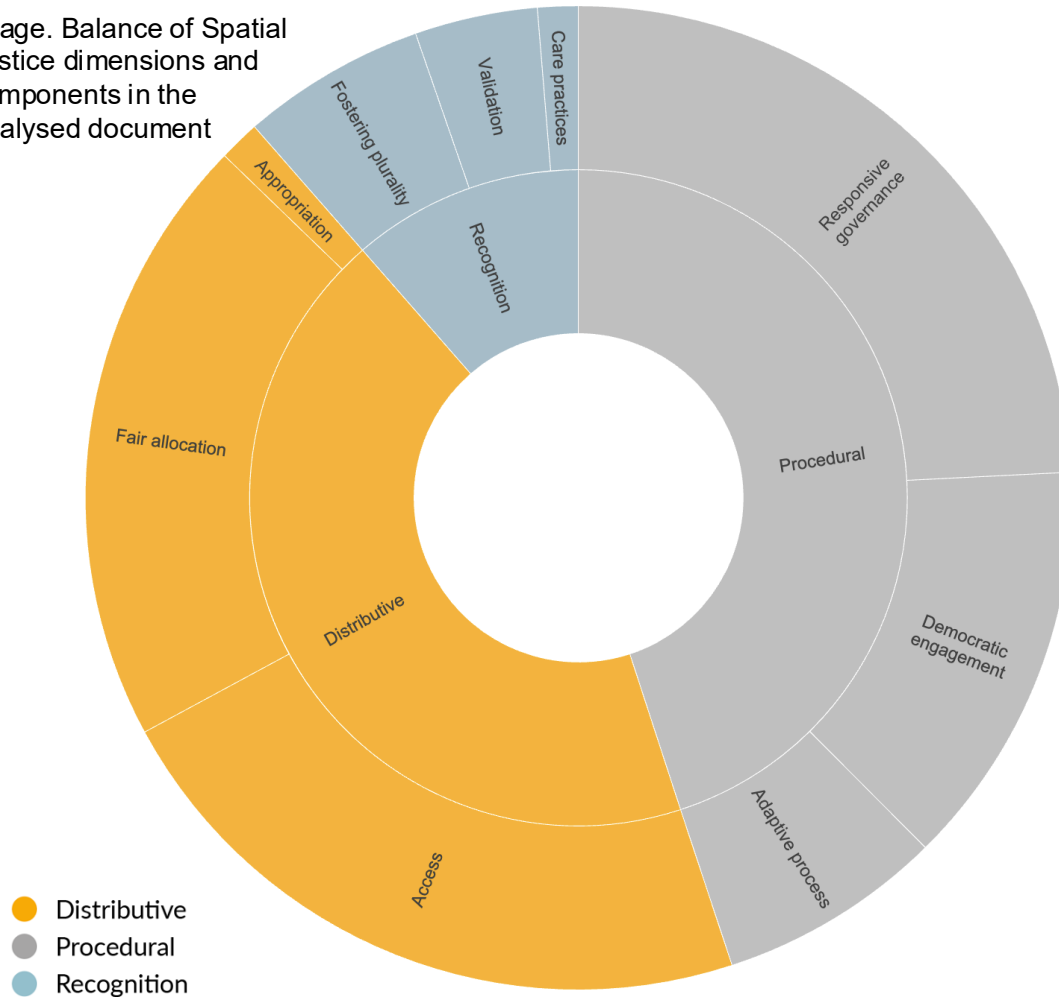- <u>Low emphasis on the Recognition dimension raises concerns</u>. Resilient strategies require comprehensive systemic changes, which include recognising and addressing the needs and aspirations of vulnerable and marginalised groups. The plan does a commendable job of <u>focusing on children and young people, acknowledging that everyone benefits when the most vulnerable are protected.</u>

- There is a balance between "Fair allocation", "Access", and "Responsive Governance", with "Democratic engagement" just behind. It shows that those themes are discussed with relatively similar frequency, while "Appropriation" receive comparatively low attention. It shows not enough attention on how people could make use, programme, and transform what is being provided, be it a material (like a public square in an area with few squares) or a service (like subsidies for solar panels).

Spatial Justice Overview

Belfast

Budapest

Granollers

Rotterdam

Spatial Justice Score

Belfast

Low	Starting	Basic	Growing	Embedded
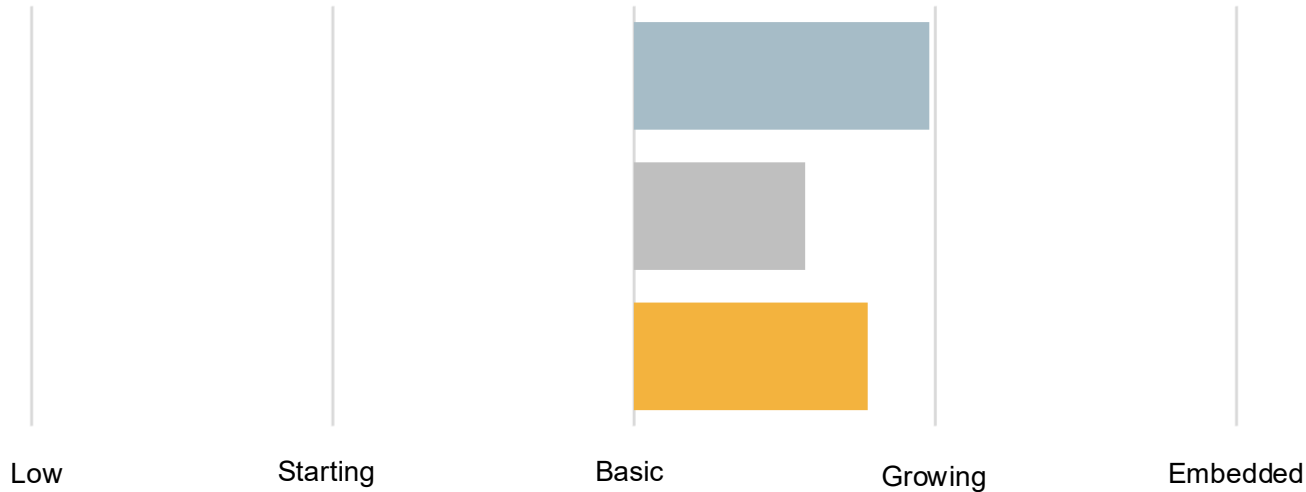
In the analysed document, the Recognition dimension, particularly driven by the "Validation" component, received the highest score, translating the plan's strong emphasis on involving children and young people as active participants into actionable items. However the score is close to "Growing".

Rotterdam

Low	Starting	Basic	Growing	Embedded
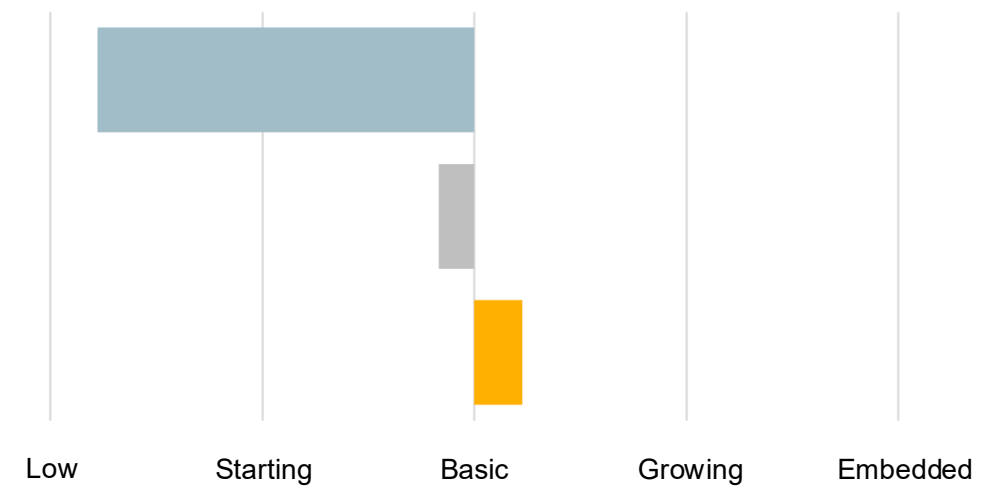
A negative point is the low levels for Recognition dimension (close to "Low"), which should form the basis for transformative and just processes and provisions during urban sustainability transitions.

Spatial Justice Score
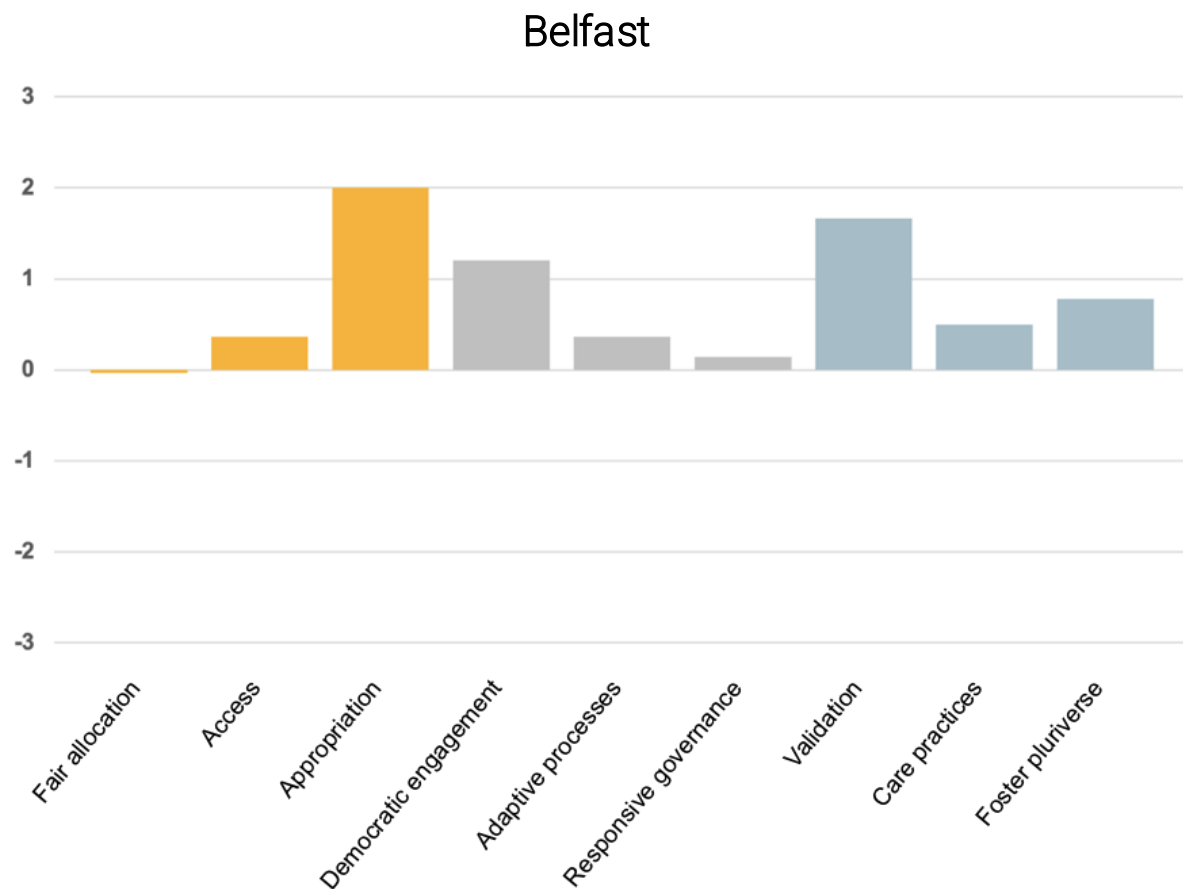
Belfast

Image. Final median score per component for the "Ambitions Document: A Climate Plan for Belfast"

Rotterdam

Image. Final median score per component for the "Climate Action plan of the Rotterdams Weerwoord 2023-2026"

Spatial Justice Score

Image. Final median score per component for the "Sustainable Energy and Climate Action Plan of Granollers"

Image. Final median score per component for the "Sustainable Energy and Climate Plan of Budapest"

JRLs

Belfast

Budapest

Granollers

Rotterdam

Embedded

Growing

Basic

Starting

Low

Potential areas for improvement

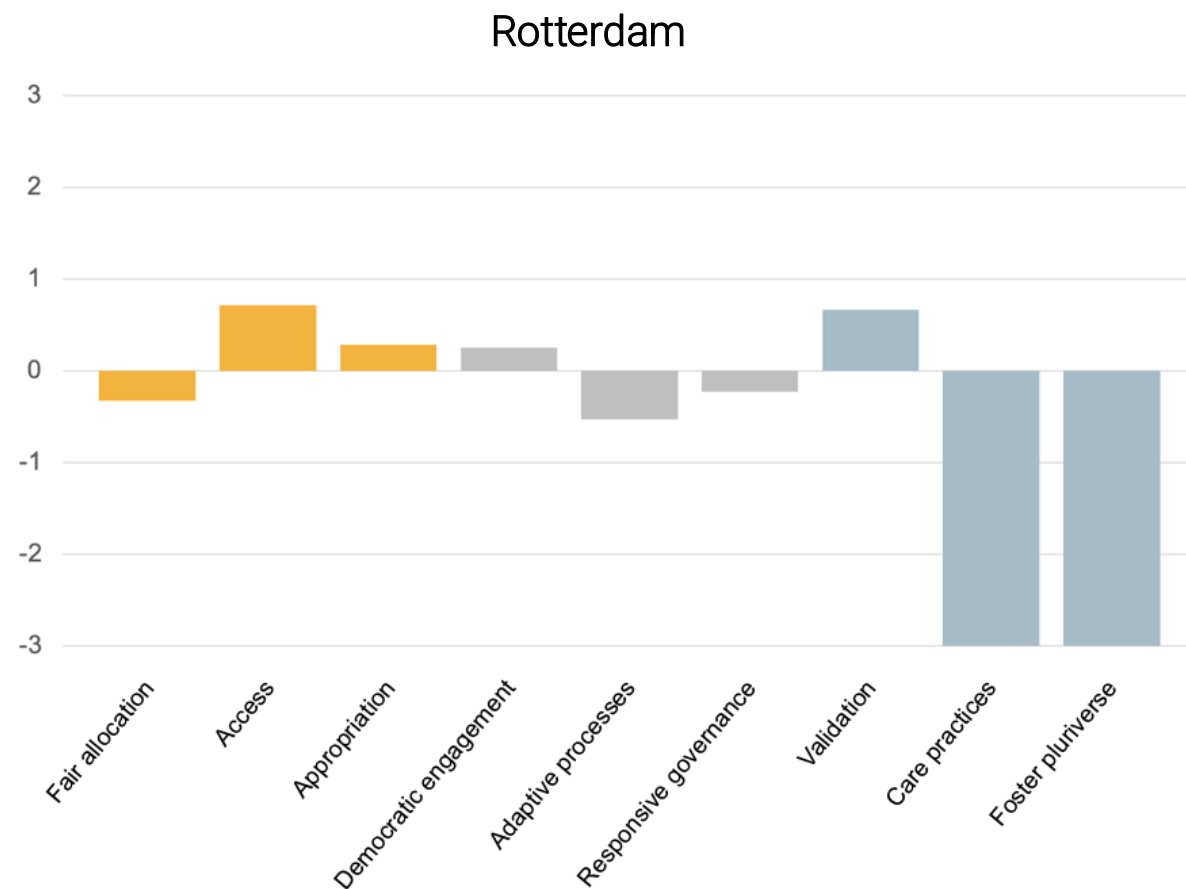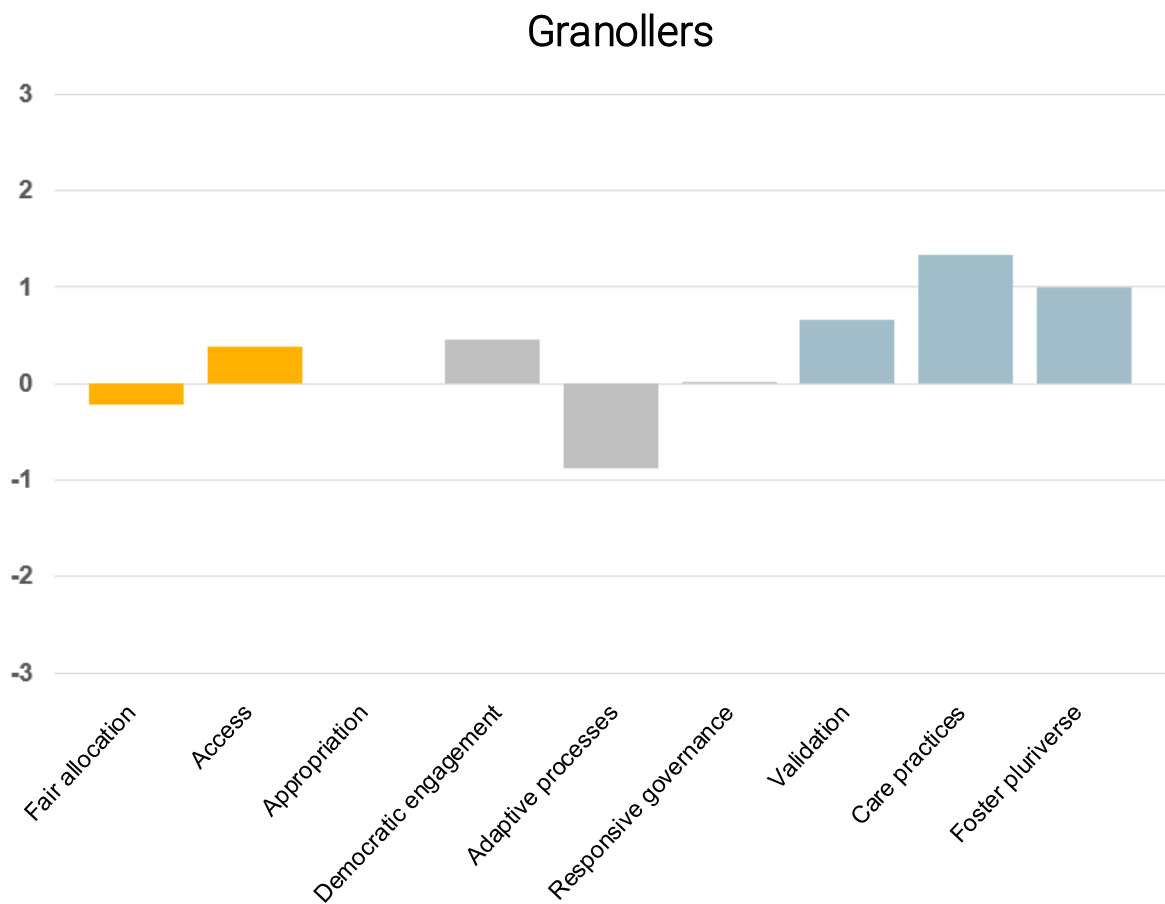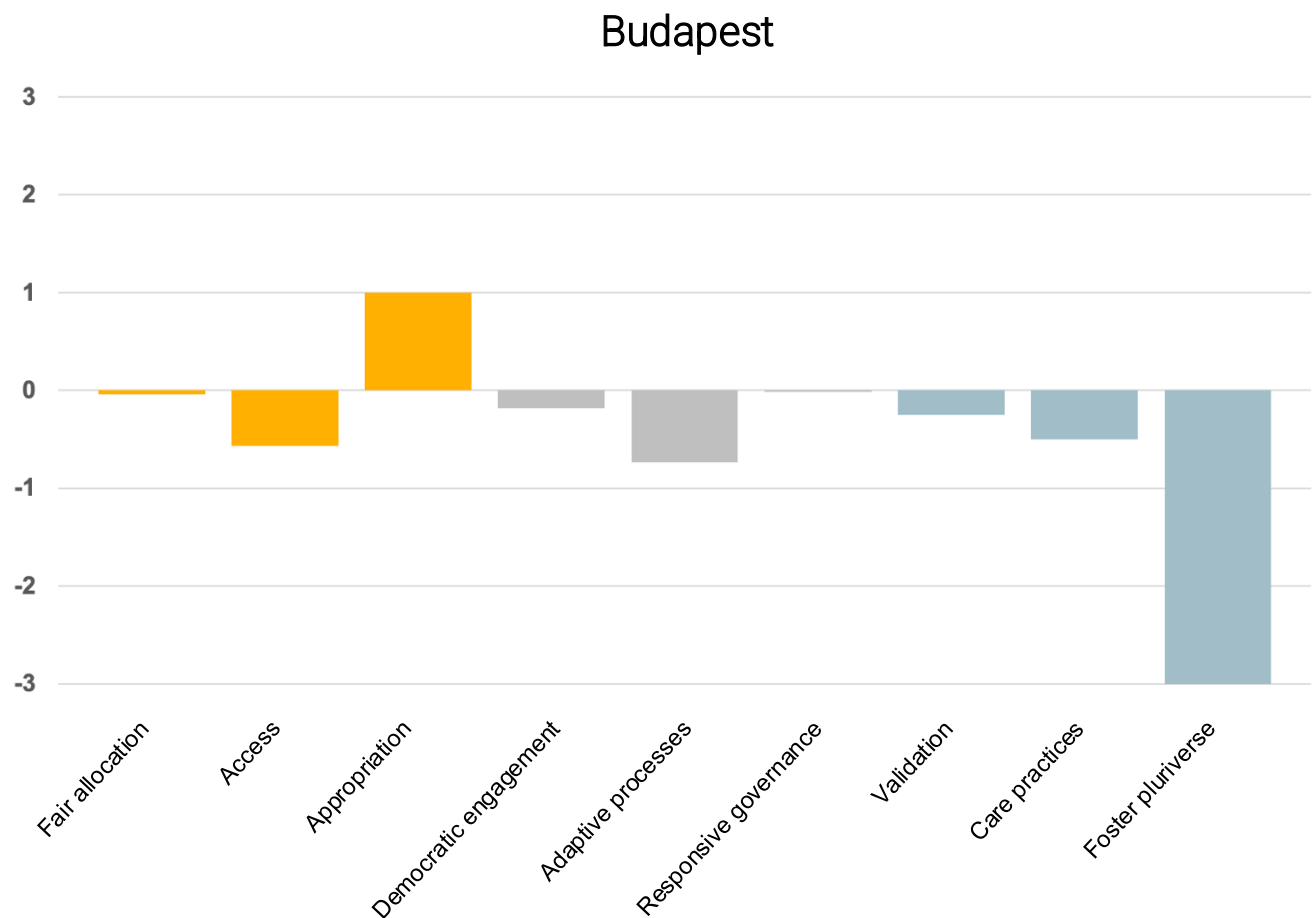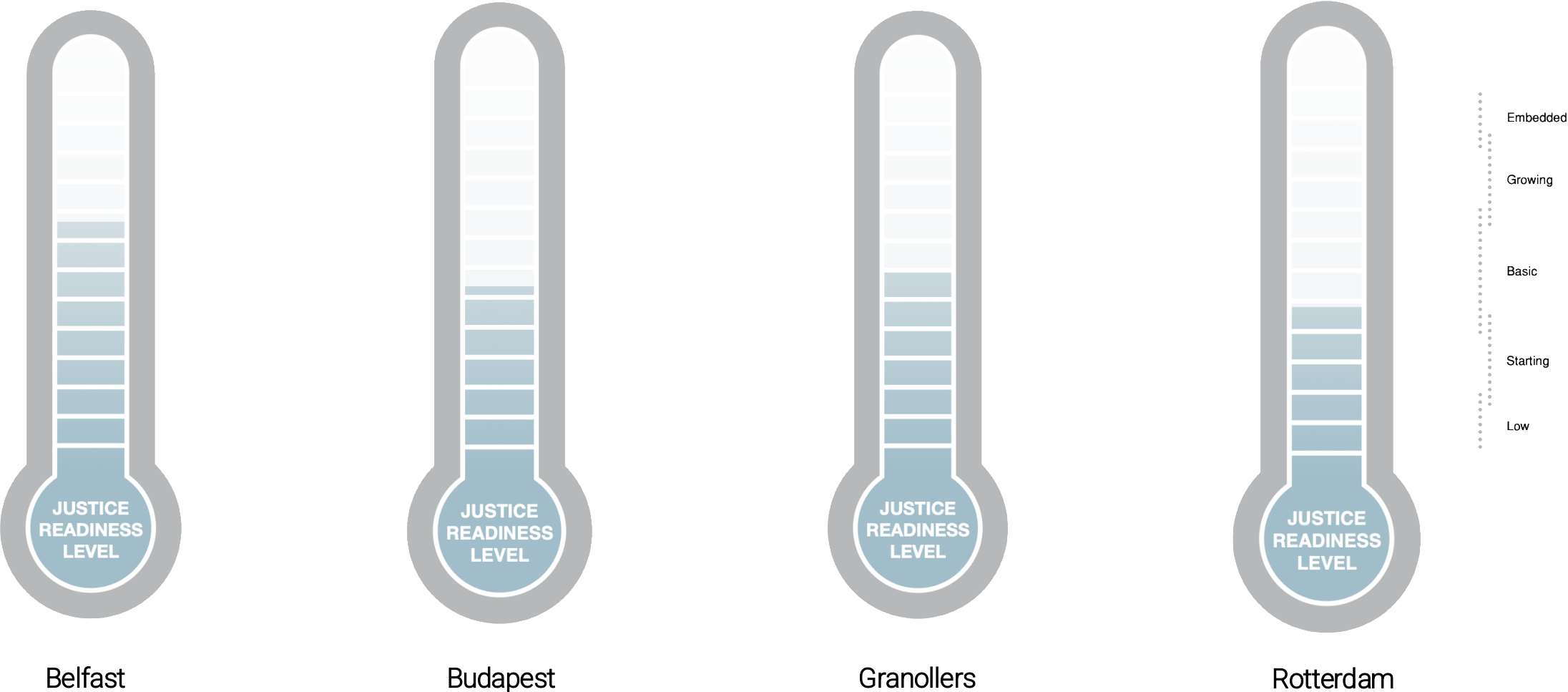- <u>Lower Emphasis on Objectives</u>: The limited number of SMART (specific, measurable, achievable, relevant, and time-bound) objectives indicates a potential gap in the future ability to measure and monitor the effectiveness of the strategies and actions implemented.
- The <u>Recognition dimension remains to be detailed</u> in how to address the needs of its focus group and of a broader range of groups.

- <u>Strengthening the Vision with Spatial Justice</u>: The main vision is comprehensive for emission reduction and energy transition. However, it could be further strengthened by incorporating Spatial Justice aspects.
- Missed Opportunity with "Foster Pluriverse": It indicates <u>a missed opportunity to include a variety of community perspectives</u> and values in the planning process. The plan risks maintaining existing inequalities and injustices in mitigation and adaptation strategies.

- Low Scores in Key Components: <u>While "Responsive Governance" and "Fair Allocation" were frequently mentioned, they received low scores due to limited attention to correcting spatial disparities at their root.</u> The focus should be on empowering communities to address the underlying causes of inequality and achieve more equitable outcomes.

- Some caveats: A concerning aspect is that while the <u>"Validation" component scored well, this was due to a low number of mentions</u> rather than a consistent focus.
- Overall low scores: <u>No mentions in two components. Distributive and Procedural dimensions scored slightly lower than "Basic".</u> There is still significant room for improvement, particularly in acknowledging and integrating diverse collective practices of marginalised groups.

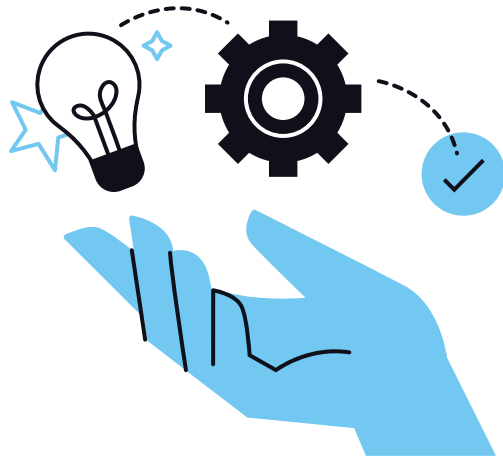|			
Belfast	Budapest	Granollers	Rotterdam

Conclusion

Conclusion

- VSOAs

- Spatial Justice analysis

- Limitations of the tool

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VSOA

- Some plans (SECAPs of Budapest and Granollers) have shared <u>objectives</u>, even though they are in very different contexts.
- Some scholars argue that the <u>focus of cities on strategies and action</u> comes at the expense of efforts in developing coherent long-term city visions. An imbalance between vision, strategy and action leads to the disconnection between short-term action and long-term planning. (Gonçalves, 2023) > Not surprisingly, maladaptation is associated with short-term, fragmented, single-sectoral, and non-inclusive governance.

Spatial Justice Analysis
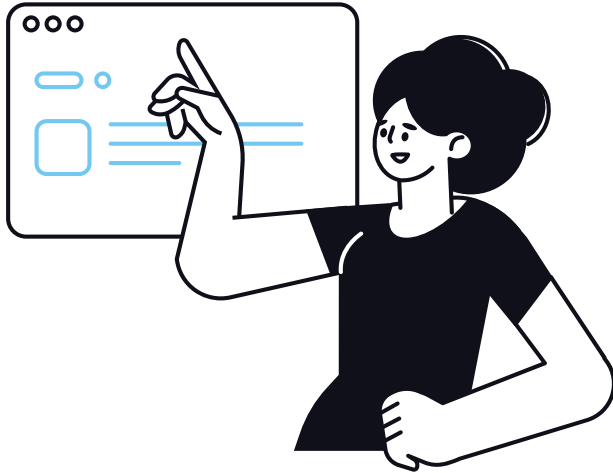
- There is <u>no explicit mention of Spatial Justice</u> considerations being addressed in all plans. However, many aspects were identified. Which point to the provision of public goods and the engagement of the population. Some of them have the potential to lead to a reinvention of relations, and the strengthening of local communities that care for the provision and build solidary networks.

- A negative point is the <u>low percentage and levels for the dimension and components of Recognition</u>, which should form the basis for transformative and just processes and provisions during urban sustainability transitions.

Limitations and further research

Analysis 1: VSOA method
- Further interviews needed. Include discourse analysis to include context & other face-to-face research methods
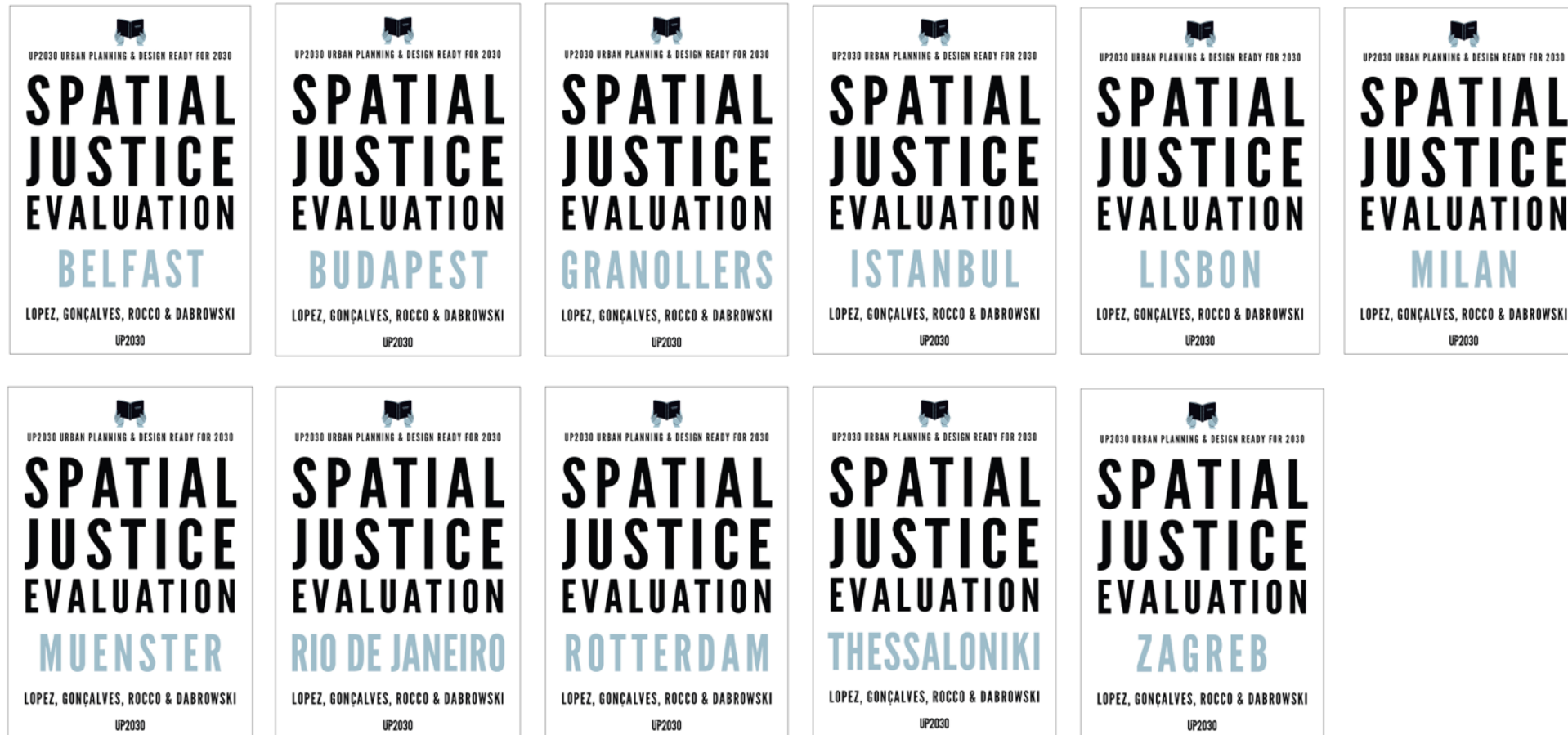
Analysis 2: Spatial Justice Analysis
- Recommendations are being provided, tailored to the scores of each plan. However, they will need a next step to become contextualised.

Recognition dimension
- Low scores in recognition may also reflect the need to supplement this data with interviews – since this dimension is more related with a symbolic aspect.

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Communicated evaluations

Questions

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Thank you!